

Workers' Compensation Oversight Commission

OVERSIGHT COMMISSION

Agenda

Date: June 14, 2007
Time: 10:00 a.m.
Location: William Green Building, Second Floor, Room 3

Oversight Commission

William E. Sopko, Chairman
President,
STAMCO Industries
representing state-fund employers

William A. Burga
President
Ohio AFL-CIO
representing organized labor

Mary Beth Carroll
Vice President,
FirstEnergy
representing self-insured

Michael C. Koettters
Managing Director
Strategic Asset Alliance
representing the public

Denise M. Farkas, CFA
Chief Investment Officer
Sigma Investments
representing investments

Edwin McCausland, CFA
President,
Investment Perspectives, LLC
representing investments

Charles W. Kranstuber, LPA
President,
The Law Offices of Kranstuber
representing injured workers

The next WCO
Oversight Commission meeting is scheduled
for:

Date: July 26, 2007
Time: 11 a.m.
Location: William Green Building,
Second Floor, Room 3

Approval of the May 24, 2007 meeting minutes..... William Sopko
Chairman's comments..... William Sopko
Administrator's comments Marsha Ryan

Rules

1. Administrative Cost Contribution, Rule 4123-17-36, *first consideration, possible vote* Tracy Valentino
2. Public Employer State Agency - MCO assessments, Rule 4123-17-35, *first consideration, possible vote*Liz Bravender
3. Private Employer Rates, Rule 4123-17-05 & 4123-17-06, *first consideration, possible vote*Liz Bravender
4. Coal Worker's Pneumoconiosis Fund Rates, Rule 4123-17-20, *first consideration, possible vote*Liz Bravender
5. Marine Industry Fund Rates, Rule 4123-17-19, *first consideration, possible vote*Liz Bravender
6. Disabled Workers' Relief Fund (DWRF 1) and Additional Disabled Workers' Relief Fund (DWRF 2), Rule 4123-17-29, *first consideration, possible vote*Liz Bravender
7. Self-Insured Assessment Rates, Rule 4123-17-32, *first consideration, possible vote*Liz Bravender
8. Hospital Outpatient, Rule 4123-6-37.2, *first consideration, possible vote* Dr. Greg Jewell

New business

AON Actuarial presentation AON Actuarial Consultants

Adjourn William Sopko

WORKERS' COMPENSATION OVERSIGHT COMMISSION

**THURSDAY MAY 24, 2007, 11:00 A.M.
WILLIAM GREEN BUILDING
THE NEIL SCHULTZ CONFERENCE CENTER
30 WEST SPRING ST., 2nd FLOOR (MEZZANINE)
COLUMBUS, OHIO 43215**

Members Present: Bill Sopko, Chairman
Michael Koettters
Mary Beth Carroll
Charles Kranstuber
William Burga
Denise Farkas
Edwin McCausland

Members Absent: Senator Steve Stivers
Senator Eric Kearney
Representative Tom Brinkman
Representative Kenny Yuko

ROLL CALL

Mr. Sopko called the meeting to order at 11:00 a.m. and the roll call was taken.

OPENING REMARKS

Mr. Sopko welcomed Marsha Ryan as the new BWC Administrator.

Mr. Sopko reported that Mr. Burga will remain on the Oversight Commission until it is replaced by the Workers' Compensation Board of Directors.

The Oversight Commission annual report is available as a draft. Mr. Sopko requested that changes be submitted by June 1 to Valerie Sansom-Davy, Oversight Commission Liaison. It will be submitted at the June meeting.

OLD BUSINESS

MINUTES OF APRIL 26, 2007

Mr. Sopko requested that the minutes be corrected to show the meeting occurred on April 26, not April 29. Ms. Carroll moved that the minutes of April 26, 2007, be approved as corrected. Mr. Burga seconded and the minutes were approved by a unanimous roll call vote.

REVIEW SCHEDULE OF PROJECTS

Mr. Sopko noted that all projects on the Oversight Commission schedule are completed.

NEW BUSINESS

ADMINISTRATOR'S REMARKS

Marsha Ryan, Administrator, reported that she is impressed with the improvements in governance in the past two years. She will evaluate staff and will have recommendations for new hires by the next meeting. She is evaluating the legislation of the budget bill and will focus on simplifying management processes. BWC needs predictability and stability in rates and BWC processes.

Ms. Ryan reviewed highlights from the Substitute House Bill 100. The office of Deputy Inspector General has been created as a position within BWC. The deputy replaces a joint committee of BWC and the Industrial Commission. She will be meeting with Ohio Inspector General Thomas Charles to set up facilities for the deputy.

The new Workers' Compensation Board of Directors replaces the Oversight Commission. It will consist of eleven members, consisting of representatives of injured workers, employers, and financial specialties. The Board will have fiduciary responsibility with the Administrator and will have three committees.

The provisions regarding the board go into effect as soon as Governor Strickland signs the bill. The Workers' Compensation Board of Directors Nominating Committee will submit a list of nominees within thirty days; the Governor has fourteen to twenty days to appoint members. The Oversight Commission sits until the last member of the Workers' Compensation Board is appointed.

HB 100 also creates the Workers' Compensation Council. It will consist of members of the General Assembly, the Administrator, and the chair of the Industrial Commission.

HB 100 requires a Chief Operating Officer and a Chief Actuary. Ms. Ryan may be in a position to announce the selection of a Chief Actuary at the June meeting.

HB 100 directs a study of premium equity. The study will include the reports from Aon Risk Consultants and Pinnacle Actuarial Resources, Inc. It directs transition from the Micro Insurance Risk Analysis (MIRA) to a more transparent reserve system. The General Assembly approved BWC requests to amend the Ohio Revised Code.

Ms. Ryan thanked Senator Stivers for his help in the confirmation process. The assistance permitted her to focus attention on assuming her position.

CFO FINANCIAL STATEMENT PACKAGE

Ms. Valentino reported on financial statements for April 2007. The report adds a chart on the growth of net assets for the fiscal year through April. The change in fair value of the portfolio is the biggest factor. In accordance with Generally Accepted Accounting Principles (GAAP), BWC is required to value the assets each month. As of April 30, 2007, net assets are \$786 million, an increase over the net deficit of (\$931 million) as of June 30, 2006.

Premium collections are less than predicted because of underpayment of public employer taxing district premiums, self-insured assessments, and safety and Premium Discount Program incentives. BWC paid \$247 million less in compensation expense in fiscal year 2007 through April, versus last year, because of lower medical and temporary total disability payments. The net operating loss is \$276 million. Net interest income was \$1.189 million, which is \$425 million more than the comparable first ten months of fiscal year 2006.

The combined funds schedule shows the State Insurance Fund increases were offset by deficit for the Disabled Workers Relief Fund (DWRP). HB 100 permits recording of DWRP receivable as an asset. Total assets of BWC are at \$20.0 billion as of April 30, 2007. This reflects the completion of employer payments in the 50/50 program and the first payment of premiums for public employer taxing districts. These two events have created a higher than normal cash balance. Also Mercer Oliver Wyman has restated the reserve, as it does now each quarter. BWC has expended \$97 million more expected because of disbursements in the *Santos* case and safety council incentives. The cash balance is \$604 million. BWC now projects \$775 million in net assets. For ratios, the trade combined ratio is 78.7%; the projected ratio was 85.7%. BWC projects the trade combined ratio for fiscal year-end 2007 of 81.3%.

Ms. Carroll asked what the significance was of the equity to surplus ratio that ranged from positive 329% to negative 1321%. Ms. Valentino replied that BWC had few equities in its portfolio in 2006. It was hard to compare performance with other insurance operations because they use statutory accounting.

Mr. McCausland asked how much of payment of compensation is payment of accrual on discount. Ms. Valentino replied that Mercer has provided that information and she will research it.

Mr. McCausland observed the ratio of invested assets to reserves at 99% shows significant improvement in the financial conditions of BWC on an overall basis.

Mr. Sopko reported that financial statements will not be available at the June 14 meeting because of the short time from the end of the month. Ms. Valentino stated she would release them as soon as available.

AUDIT COMMITTEE

Ms. Farkas reported that the Audit Committee had met this morning and received several reports. The Request for Proposal (RFP) for the external audit for FY 2007 resulted in selection of Schneider Downs & Co., Inc., for a five-year term. Ms. Carroll stated that the Audit Committee endorses the recommendation of BWC staff and requests that the recommendation be transmitted to the Auditor of State. Mr. Sopko requested that Joe Bell, Chief, Internal Audit, communicate the endorsement.

Ms. Farkas further reported that the Audit Committee received a quarterly executive summary of Internal Audit projects. The most important is the Information Technology audit for which BWC received assistance from Crowe Chizek. The results are similar to those of public companies immediately following passage of the Sarbanes Oxley Act. There was also a report on the Managed Care Organization (MCO) audit.

Ms. Farkas stated that the Audit Committee believes Internal Audit should not be taken out of BWC as is proposed in pending legislation because of the complexity and size of BWC.

INVESTMENT COMMITTEE

Mr. Koetters reported that the Investment Committee had also met earlier in the day and received several reports on the first quarter performance of the investment portfolio.

Mr. Brubaker reported on first quarter investment performance. This is the first quarter that there is equity investment performance to report since the first quarter of 2006. In the State Insurance Fund, BWC is complete in the fixed income and equity asset allocation. The ancillary funds awaiting reallocation. Mr. Brubaker reported that February experienced the most significant market correction in the past four years. However, as of May 23, the S & P 500 had increased by 8%, so there has been significant recovery. The BWC assets are now valued at \$17.1 billion and grew by 0.6% for the quarter and 5.4% for the trailing twelve months. The Passive Long Duration Fixed Income Managers (State Street Global Advisors and Barclays Global Investors) as well as the Treasury Inflation Protected Securities (TIPS) manager (State Street) are fully-funded. Northern Trust Corporation will soon manage the S & P 500 Index Fund. The private equities are valued at \$437 million. The final evaluation of the private equity partnerships will be done after their liquidation.

Mr. Dunn reported that much progress has been made in the sale of the private equity partnerships. BWC expects that all will be sold by August or September. UBS Securities has performed well. He recommended that the UBS contract be renewed for one year in order to

complete sales. This will not affect the fee being paid. Mr. Koettters stated that the Investment Committee supported the recommendation.

Mr. McCausland moved that the Workers' Compensation Oversight Commission approve WCOC Resolution 07-17 to extend the contract with UBS Securities LLC as the private equity investment agent for BWC and direct BWC staff to enter into such contractual revisions with UBS securities as they deem necessary to implement the contract extension. Ms. Farkas seconded and the motion was approved by a roll call vote of seven ayes and no nays.

ANNUAL BWC INVESTMENT POLICY REVIEW AND UPDATE

Mr. Dunn reported that the Ohio Revised Code requires a formal Oversight Commission review of the Investment Policy Statement (IPS). He has submitted a memorandum to the Investment Committee which reviews the IPS and the revisions made since the new asset allocation strategy was approved in July 2006. Mr Dunn recommended no further changes at this time. Wilshire Consulting also supports this conclusion. Revisions may be done after HB 100 takes effect. Mr. Dunn's review was accepted.

RULES/RESOLUTIONS FOR SECOND CONSIDERATION: PAYMENT OF CHILD SUPPORT AND PROVISION OF ADDITIONAL SECURITY BY SELF-INSURING EMPLOYERS, OHIO ADMINISTRATIVE CODE RULE 4123-19-03

Dave Boyd, Director, Self-Insured Department, recommended amendment of Ohio Administrative Code Rule 4123-19-03 regarding inclusion of Senate Bill 7 requirements on payment of child support. SB 7 contains provisions that conflict with existing provisions of paragraph (K)(5) of the rule, so the rule will be changed. Mr. Boyd also recommended amendment of paragraph (A)(1) based on a case involving obtaining additional security for an applicant for self-insurance. The court held that BWC could not obtain a personal guaranty from the principals of the employer because the rule required that it be "paid." The amendment changes "paid" to "provided" because the court's ruling could be applied to other forms of security.

Mr. Boyd also reported that BWC had been contacted by stakeholders on amending paragraph (H) on parent guaranties. Ms. Ryan has asked BWC staff to look at this specific issue and to report back.

Ms. Carroll stated that several paragraphs of Administrative Code Rule 4123-19-03 address the provision of security. There is a need to look at the whole rule to reflect the changes in business organization and the rise of private equity ownership.

Ms. Carroll moved that the Workers' Compensation Oversight Commission approve WCOC Resolution 07-12 relating to a rule on the payment of attorney fees for a lump sum payment in a self-insured employer claim in which there is a child support order, as required Senate Bill 7. The resolution consents to the Administrator amending Rule 4123-19-03 of the

Administrative Code as presented here today. Mr. Burga seconded and the motion was approved by a roll call vote of five ayes and no nays.

ADJOURNMENT

Mr. Sopko requested clarification on eligibility for membership on the Workers' Compensation Board of Directors. Ms. Ryan replied that HB 100 requires that current members of the Oversight Commission are not eligible to be members of the Workers' Compensation Board.

Mr. Sopko requested that there be a July meeting because there are many items on the agenda and need approval before the work of the Oversight Commission is finished.

Mr. Burga moved to adjourn and Mr. Sopko adjourned the meeting.

Prepared by: Larry Rhodebeck, BWC Attorney
H:\Word\ldr\WCOC0407.doc
June 6, 2007

Workers' Compensation Oversight Commission
7/1/07 Administrative Assessments
Executive Summary

The agenda for the June meeting of the Bureau of Workers' Compensation Oversight Committee includes the rules for the administrative assessments. The rates presented will be those recommended by the Administrator and the Chairman of the Ohio Industrial Commission for the consent of the Workers' Compensation Oversight Commission. If consent is obtained, the rules will be filed with the Legislative Services Commission and the Secretary of State and will become effective July 1, 2007.

Employers in the State of Ohio pay annual assessments that are used to fund the operating expenditures of BWC and the Industrial Commission. Assessments for administrative rates are authorized by the Ohio Revised Code, which requires periodic studies and calculations in order to establish an assessment. The Ohio Revised Code establishes that a separate rate be calculated for BWC and the Industrial Commission.

The rates were calculated based on the results of the annual administrative cost allocation study. The principle followed in the cost allocation study was that administrative costs allocated to each employer group should be related to the level and type of service provided to that group by BWC and the Industrial Commission. In the course of the study, types of services provided were identified, service levels were measured, and costs were distributed using available workload statistics. Each state fund employer group's rate is calculated as a percentage of that group's projected premium base. Self-insured employer's rate is calculated as a percentage of paid compensation.

Rule 4123-17-36 establishes the actual Administrative Cost Assessments for state-fund employers for rating year beginning July 1, 2007. The rule reflects separate rates for BWC and the Industrial Commission. Please note that the Self-Insured administrative assessment is not included in this rule but is included in Rule 4123-17-32 which is on the agenda for this meeting.

**Administrative Cost Fund
Historical Information
BWC**

Rate History- BWC

| Employer Group | 7/1/03 | 7/1/04 | 7/1/05 | 7/1/06 | 7/1/07 |
|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Private | 15.78% | 13.55% | 13.55% | 14.09% | 14.09% |
| Public - State | 15.53% | 11.95% | 11.95% | 12.43% | 12.43% |
| Public Taxing Districts | 12.65% | 7.84% | 7.84% | 8.15% | 8.15% |
| Self - Insured | 8.05% | 7.90% | 7.90% | 8.22% | 8.22% |

Estimated Costs by Employer Group (before adjustment) -BWC

| Employer Group | 2004 | 2005 | 2006 | 2007 | 2008 |
|-------------------------|-------------|-------------|-------------|-------------|-------------|
| Private | 228,428,149 | 226,891,655 | 222,566,317 | 224,978,328 | 229,631,037 |
| Public - State | 6,890,936 | 7,180,116 | 10,116,651 | 12,949,918 | 10,220,182 |
| Public Taxing Districts | 36,134,932 | 33,028,532 | 33,240,424 | 32,672,554 | 32,158,330 |
| Self-Insured | 18,479,640 | 20,104,324 | 23,123,773 | 24,852,131 | 21,673,834 |
| Total | 289,933,658 | 287,204,626 | 289,047,165 | 295,452,931 | 293,683,383 |

Allocation Base

| Employer Group | 2004 | 2005 | 2006 | 2007 | 2008 |
|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Private | 1,600,000,000 | 1,600,000,000 | 1,400,000,000 | 1,520,000,000 | 1,600,000,000 |
| Public - State | 50,000,000 | 56,000,000 | 60,000,000 | 68,500,000 | 70,800,000 |
| Public Taxing Districts | 315,000,000 | 323,000,000 | 348,000,000 | 361,800,000 | 363,000,000 |
| Self - Insured | 241,000,000 | 240,000,000 | 235,000,000 | 227,000,000 | 218,000,000 |

**Administrative Cost Fund
Historical Information
Industrial Commission**

Rate History- IC

| Employer Group | 7/1/03 | 7/1/04 | 7/1/05 | 7/1/06 | 7/1/07 |
|-------------------------|---------------|---------------|---------------|---------------|---------------|
| Private | 2.24% | 1.71% | 1.71% | 2.27% | 2.25% |
| Public - State | 3.54% | 1.97% | 1.97% | 3.28% | 3.14% |
| Public Taxing Districts | 1.82% | 1.13% | 1.13% | 1.90% | 1.77% |
| Self - Insured | 8.89% | 6.66% | 6.66% | 7.26% | 7.90% |

Estimated Costs by Employer Group (before adjustment) -IC

| Employer Group | 2004 | 2005 | 2006 | 2007 | 2008 |
|-------------------------|-------------|-------------|-------------|-------------|-------------|
| Private | 31,677,623 | 29,371,464 | 33,258,511 | 34,002,366 | 33,148,265 |
| Public - State | 1,620,246 | 1,496,664 | 1,792,268 | 1,938,889 | 2,012,677 |
| Public Taxing Districts | 5,092,068 | 5,044,410 | 5,693,436 | 5,816,667 | 5,765,420 |
| Self-Insured | 21,452,313 | 18,087,462 | 18,998,035 | 18,084,328 | 17,075,852 |
| Total | 59,842,250 | 54,000,000 | 59,742,250 | 59,842,250 | 58,002,213 |

State of Ohio
Ohio Bureau of Workers' Compensation
Administrative Cost Fund (ACF) Model
Fiscal Year 2008 Rates

| Employer Group | FY 2008 Estimated Costs | Annual Adjustment | Net FY 2008 Estimated Costs | Rate Allocation Base | FY 2008 Recommended Rate | FY 2007 Rates |
|------------------------------|-------------------------------|----------------------|-----------------------------------|----------------------------|--------------------------------|------------------|
| Private (PA) | 229,631,037 | 4,904,713 | \$234,535,750 | 1,600,000,000 | 14.09% | 14.09% |
| Public State (PS) | 10,220,182 | 5,889,989 | 16,110,171 | 70,800,000 | 12.43% | 12.43% |
| Public Taxing Districts (PC) | 32,158,330 | 2,534,921 | 34,693,251 | 363,000,000 | 8.15% | 8.15% |
| Self-Insured (SI) | 21,673,834 | 4,070,385 | 25,744,219 | 218,000,000 | 8.22% | 8.22% |
| Total | <u>\$293,683,383</u> | <u>\$17,400,008</u> | <u>\$311,083,391</u> | | | |

NOTES:

- 1) Premium is the allocation base for PA, PS, and PC employers. Paid Compensation is the allocation base for SI employers.
- 2) The rates for PA, PS, and PC employers are a percentage of premium. SI employers are a percentage of paid compensation.

Ohio Industrial Commission

Administrative Fund Model

Fiscal Year 2008 Rates

| <u>Employer Group</u> | FY 2008 Estimated <u>Costs</u> | Annual Adjustment | Net FY 2008 Estimated <u>Costs</u> | Rate Allocation <u>Base</u> | FY 2008 Recommended <u>Rate</u> | FY 2007 <u>Rates</u> |
|------------------------------|--------------------------------------|----------------------|--|-----------------------------------|---------------------------------------|-------------------------|
| Private (PA) | 33148265 | 2,772,775 | \$35,921,040 | 1,600,000,000 | 2.25% | 2.27% |
| Public State (PS) | 2012677 | 210,849 | \$2,223,526 | 70,800,000 | 3.14% | 3.28% |
| Public Taxing Districts (PC) | 5765420 | 673,452 | \$6,438,872 | 363,000,000 | 1.77% | 1.90% |
| Self-Insured (SI) | 17075852 | 140,076 | \$17,215,928 | 218,000,000 | 7.90% | 7.26% |
| Total | <u>\$58,002,214</u> | | <u>\$61,799,366</u> | | | |

NOTES:

- 1) Allocation of costs based upon information provided by Randy Weber, IC, Chief Fiscal Officer
- 2) Premium is the allocation base for PA, PS, and PC employers. Paid Compensation is the allocation base for SI employers.
- 3) The rates for PA, PS, and PC employers are a percentage of premium. SI employers are a percentage of paid compensation.

4123-17-36 Administrative cost contribution.

(A) The administrator of workers' compensation, with the advice and consent of the workers' compensation oversight commission, has authority to calculate contributions to the administrative cost fund by employers pursuant to sections 4121.121, 4123.341, and 4123.342 of the Revised Code. The administrator hereby sets administrative cost rates as indicated in paragraph (D) of this rule for the bureau of workers' compensation and the workers' compensation oversight commission. Based upon the information provided to the administrator by the industrial commission pursuant to section 4123.342 of the Revised Code, the administrator, with the approval of the chairperson of the industrial commission, hereby sets administrative cost rates as indicated in paragraph (E) of this rule for the industrial commission.

(B) The administrative cost rate for each employer's assessment, except for self-insuring employers, is calculated as follows:

(1) If the employer qualifies for experience rating, either as an individual or through participation in group rating, the assessment is calculated based on a percentage of the employer's experience rated premium.

(2) If the employer is not experience rated, the assessment is calculated based on a percentage of the employer's base rate premium.

(3) If the employer is retrospectively rated, the assessment is calculated based on a percentage of the employer's experience rated premium or base rated premium (but not the minimum premium percentage from the retrospective rating plan) that the employer would have paid if the employer were not participating in retrospective rating.

(4) For state agencies, including state universities and state university hospitals, the assessment is calculated based on a percentage of the employer's premium.

(C) Whenever administrative cost rates established under this rule and rule 4123-17-32 of the Administrative Code prove inadequate or excessive, the same may be adjusted at any time during the biennial period.

(D) Administrative cost rates for the bureau of workers' compensation and workers' compensation oversight commission.

(1) Private employers: 14.09 per cent of premium effective July 1, ~~2006~~ 2007.

(2) Public employer taxing districts: 8.15 per cent of premium effective January 1, ~~2006~~ 2007.

(3) Public employer state agencies: 12.43 per cent of premium effective July 1, ~~2006~~ 2007.

(E) Administrative cost rates for the industrial commission.

(1) Private employers: ~~2.27~~ 2.25 per cent of premium effective July 1, ~~2006~~ 2007.

(2) Public employer taxing districts: ~~4.90~~ 1.77 per cent of premium effective January 1, ~~2006~~ 2007.

(3) Public employer state agencies: ~~3.28~~ 3.14 per cent of premium effective July 1, ~~2006~~ 2007.

Promulgated Under: 111.15

Statutory Authority: 4121.12, 4121.121

Rule Amplifies: 4123.341, 4123.342

Prior Effective Dates: 7/1/90, 7/1/91, 7/1/91, 7/1/93, 7/1/94, 1/1/95, 7/1/95, 7/1/96, 7/1/97, 7/1/98, 7/1/99, 7/1/00, 7/1/01, 7/1/02, 7/1/03, 7/1/04, 7/1/06

Public Employer State Agency Executive Summary

Public Employer State Agency Rule 4123-17-35

At the April Workers' Compensation Oversight Commission meeting, a 0% overall rate change for public employer state agencies was approved as well as the individual agency rates detailed in appendix A of rule 4123-17-35.

This rule is being presented today to add language that provides the BWC authority to begin assessing managed care organization (MCO) fees to state agencies. MCO fees are paid by the BWC to organizations that provide medical management services on state agency claims.

Effective July 1, 2007 through December 31, 2007 the MCO assessment fee will be seven and twenty-five hundredths per cent (7.25%) of pure premium.

*****Draft – Not for Filing*****

4123-17-35 **Public employer state agency contribution to the state insurance fund.**

The administrator of workers' compensation, with the advice and consent of the workers' compensation oversight commission, has authority to approve contributions made to the state insurance fund by employers pursuant to sections 4121.121, 4123.39, and 4123.40 of the Revised Code. The administrator hereby sets rates per one hundred dollar unit of payroll to be effective July 1, ~~2006~~ 2007, applicable to the payroll reporting period July 1, ~~2006~~ 2007, through June 30, ~~2007~~ 2008, for public employer state agencies, including state universities and university hospitals, as indicated in the attached appendix A.

For the purpose of the payment of fees to the managed care organizations that manage the claims of state agencies, including state universities and university hospitals, the administrator hereby sets an additional contribution to the state insurance fund applicable to the payroll reporting period July 1, 2007, through December 31, 2007, for public employer state agencies, including state universities and university hospitals, at seven and twenty-five hundredths per cent of the premium as indicated in the attached appendix A.

For policy years following the effective date of this rule, a public employer state (PES) agency that is not currently participating in a settlement payment program may enter into the following lump sum settlement (LSS) payment option.

(A) A PES agency that is not currently participating in a settlement payment program may participate in the lump sum settlement (LSS) direct reimbursement rating and payment program. A PES agency participating in this program will have the LSS payments excluded from the bureau's rate calculation process.

(1) Requirements.

- (a) A PES agency shall make a three-year minimum commitment to the LSS direct reimbursement payment and rating program.
- (b) The earliest beginning date of the LSS program is July 1, 2004.
- (c) A PES agency shall notify the bureau of its desire to participate in the LSS direct reimbursement and payment program before the first day of January immediately preceding the policy year in which the agency wishes to participate in the program. The notification shall be made on the form provided by the bureau and signed by the PES agency's designee.
- (d) A PES agency currently participating in a settlement program is not eligible to participate in the LSS direct reimbursement payment and rating program.

(2) Lump sum settlement (LSS) rate calculation rules.

*****Draft – Not for Filing*****

- (a) All LSS payments will be treated the same whether the result of a court-ordered settlement, an agency-negotiated settlement or any other type of settlement.
 - (b) Once a PES agency begins participating in the LSS direct reimbursement and rating program, all LSS payments will be excluded from the five year losses used to calculate the "pure premium rate" for future policy year rate calculations. The pure premium rate is defined as the rate that is the actual five year losses divided by the five year reported payroll used to project the rate needed to be collected for the next policy year. The calculation of the "overage and shortage rate" will include the LSS payments paid by the bureau and not reimbursed by the PES agency. The calculation will exclude the LSS payments paid by the bureau and reimbursed by the PES agency. The overage and shortage rate is defined as the rate at which the agency must pay any past shortage in rates or the reduction in rate of any past overage in premium paid.
 - (c) When an agency terminates a LSS direct reimbursement and rating program, the pure premium rate will include all LSS payments. The calculation of the overage and shortage rate will only include the LSS payments that were made by the bureau and not reimbursed by the PES agency.
- (3) Lump sum settlement (LSS) reimbursement payments.
- (a) A lump sum settlement will be billed in the next quarter following the date the LSS warrant was cashed. The October billing will include any lump sum settlement where the warrant was cashed in July, August or September; the January billing where the warrant was cashed in October, November or December; the April billing where the warrant was cashed in January, February or March; and the July billing where the warrant was cashed in April, May or June.
 - (b) The bureau will bill a structured settlement to the PES agency as the warrant is cashed.
 - (c) The PES agency shall pay the LSS quarterly bill within thirty days of the billing date.
 - (d) If the PES agency fails to pay a LSS quarterly bill within thirty days, the bureau will remove the PES agency from the LSS direct reimbursement rating and payment program and the bureau will include the outstanding LSS payments in the rate calculation.
 - (e) A PES agency may settle permanent total disability and death claims in which the present value was used in rate calculations for five years. The settlement amount will be included in the quarterly billings. In addition,

*****Draft – Not for Filing*****

there will be no substitution of the permanent total disability or death benefits paid to date for the present value.

- (f) Settlements on permanent total disability and death claims where the present value of the claim is currently in the five-year experience period will be processed by substituting the permanent total disability or death benefits paid to date (not including the LSS) for the present value. The substitution would occur in the calendar year in which the settlement was made. The settlement amount will also be included in the quarterly billings.
 - (g) A PES agency shall file any dispute in writing, specifying the agency's objections to the billing, with the bureau's direct billing department. The filing of a dispute does not relieve or suspend the agency's obligation to pay the obligation. Questions concerning the rate calculations should be directed to the bureau's actuarial department.
- (4) Change in status.
- (a) When a PES agency combines with another PES agency, the choice that the agency that is determined to be the succeeding agency made in respect to participating in this program controls.
 - (b) A PES agency that is participating in a program and transfers a portion of its operations to another agency shall continue to participate in the program. The choice made in respect to participating in this program by the agency to which the operations were transferred will not be affected.
 - (c) Where a PES agency participating in a LSS direct reimbursement rating and payment program becomes self-insured, the bureau will calculate a buyout and any obligations owed by the PES agency under the program will be included in the buyout.
- (5) Terminating a program.
- (a) A PES agency may request, in writing, to terminate a program after the three year minimum commitment period has been completed. The agency's participation in the program will automatically be renewed for another three years unless the written request is submitted.
 - (b) A PES agency shall submit a request to terminate a program before the first day of January of the year the three year commitment ends. For example, if the PES agency starts participating in the LSS program or its participation is renewed for the policy year beginning July 1, 2004, the request must be submitted before January 1, 2007.
 - (c) Once a PES agency terminates a LSS program, the agency is no longer eligible to participate in a program.

Table from Rule 4123-17-35 to be enacted

APPENDIX A

**STATE AGENCY
RATES EFFECTIVE JULY 1, 2007**

| MANUAL | AGENCY | RATE |
|---------------|--|-------------|
| 3100 | General Revenue (Sch.) Commissions, Boards and Departments not otherwise classified | 0.27 |
| 3101 | Judiciary - Supreme Court, Judicial Conference | 0.07 |
| 3102 | Ohio Senate (Sch.) | 0.27 |
| 3103 | Ohio House of Representatives (Sch.) | 0.27 |
| 3105 | Legislative Service Commission (Sch.) | 0.27 |
| 3106 | Office of the Governor (Sch.) | 0.27 |
| 3109 | Secretary of State | 0.12 |
| 3110 | Attorney General | 0.24 |
| 3111 | Department of Agriculture | 0.73 |
| 3112 | Department of Commerce | 0.70 |
| 3113 | Department of Education | 0.37 |
| 3114 | Department of Health | 0.64 |
| 3115 | Industrial Commission of Ohio | 0.67 |
| 3117 | Public Utilities Commission of Ohio | 0.43 |
| 3120 | Department of Taxation | 0.58 |
| 3121 | Bureau of Workers' Compensation | 0.71 |
| 3122 | Auditor of State | 0.93 |
| 3123 | Civil Defense (Volunteer) (Sch.) | 0.27 |
| 3124 | Treasurer of Ohio | 0.51 |
| 3125 | Department of Administrative Services | 1.04 |
| 3127 | Ohio Board of Regents (Sch.) | 0.27 |
| 3130 | State Library Board | 0.17 |
| 3136 | Ohio Veterans Home Agency | 3.21 |
| 3137 | Department of Youth Services | 5.48 |
| 3139 | Ohio Arts Council (Sch.) | 0.27 |
| 3150 | Department of Mental Health | 2.43 |
| 3152 | Ohio Expositions Commission | 3.50 |
| 3154 | Department of Natural Resources | 1.50 |
| 3156 | Adjutant General | 1.10 |
| 3160 | Ohio National Guard | 0.05 |

*****Draft – Not for Filing*****

**STATE AGENCY
RATES EFFECTIVE JULY 1, 2007**

| MANUAL | AGENCY | RATE |
|---------------|--|-------------|
| 3166 | Department of Development | 0.10 |
| 3167 | Department of Insurance | 0.72 |
| 3169 | Racing Commission of Ohio (Sch.) | 0.27 |
| 3170 | Ohio Civil Rights Commission | 0.07 |
| 3171 | Board of Barber Examiners (Sch.) | 0.27 |
| 3172 | State Board of Cosmetology (Sch.) | 0.27 |
| 3173 | State Dental Board (Sch.) | 0.27 |
| 3174 | State Board of Embalmers & Funeral Directors (Sch.) | 0.27 |
| 3175 | State Medical Board (Sch.) | 0.27 |
| 3176 | State Board of Nursing Education and Nurse Registration (Sch.) | 0.27 |
| 3177 | State Board of Optometry (Sch.) | 0.27 |
| 3178 | State Board of Pharmacy (Sch.) | 0.27 |
| 3179 | State Veterinary Medical Board (Sch.) | 0.27 |
| 3180 | State Board of Accountancy (Sch.) | 0.27 |
| 3181 | State Board of Architects (Sch.) | 0.27 |
| 3183 | State Board of Engineers & Surveyors (Sch.) | 0.27 |
| 3186 | Ohio Water Development Authority (Sch.) | 0.27 |
| 3187 | Rehabilitation Services Commission | 0.63 |
| 3188 | Department of Rehabilitation and Correction | 2.45 |
| 3190 | Environmental Protection Agency | 0.12 |
| 3191 | Office of Budget and Management | 0.12 |
| 3192 | Department of Aging | 0.17 |
| 3193 | Court of Claims (Sch.) | 0.27 |
| 3194 | Ohio Legal Rights Service (Sch.) | 0.27 |
| 3200 | Department of Transportation | 2.15 |
| 3202 | The Petroleum Underground Storage Tank Release Compensation Board (Sch.) | 0.27 |
| 3203 | Office of Inspector General (Sch.) | 0.27 |
| 3204 | Capital Square Review and Advisory Board (Sch.) | 0.27 |
| 3206 | Ohio Medical Transportation Board (Sch.) | 0.27 |
| 3207 | Ohio Cultural Facilities Commission (Sch.) | 0.27 |
| 3208 | Joint Legislative Ethics Commission (Sch.) | 0.27 |
| 3209 | Lake Erie Commission (Sch.) | 0.27 |
| 3210 | Ohio Elections Commission (Sch.) | 0.27 |

*****Draft – Not for Filing*****

**STATE AGENCY
RATES EFFECTIVE JULY 1, 2007**

| MANUAL | AGENCY | RATE |
|---------------|---|-------------|
| 3400 | Department of Public Safety | 0.85 |
| 3501 | Ohio Public Defender Commission (Sch.) | 0.27 |
| 3504 | Office of the Consumers' Counsel (Sch.) | 0.27 |
| 3512 | Commission on Hispanic/Latino Affairs (Sch.) | 0.27 |
| 3516 | Board of Speech Pathology and Audiology (Sch.) | 0.27 |
| 3518 | Board of Dispensing Opticians (Sch.) | 0.27 |
| 3519 | Department of Mental Retardation and Developmental Disabilities | 6.72 |
| 3520 | Board of Chiropractic Examiners (Sch.) | 0.27 |
| 3521 | State Employee Relations Board (Sch.) | 0.27 |
| 3523 | Ohio Ethics Commission (Sch.) | 0.27 |
| 3524 | Ohio Air Quality Development Authority (Sch.) | 0.27 |
| 3525 | Liquor Control Commission (Sch.) | 0.27 |
| 3527 | Psychology Board (Sch.) | 0.27 |
| 3528 | Occupational & Physical Therapy Board (Sch.) | 0.27 |
| 3529 | Counselors and Social Workers Board (Sch.) | 0.27 |
| 3530 | Sanitarian Registration Board (Sch.) | 0.27 |
| 3531 | Athletic Commission (Sch.) | 0.27 |
| 3532 | Commission on Minority Health (Sch.) | 0.27 |
| 3533 | Board of Dietetics (Sch.) | 0.27 |
| 3535 | Department of Alcohol and Drug Addiction | 0.93 |
| 3536 | Commission on Dispute Resolution & Conflict Management (Sch.) | 0.27 |
| 3537 | Ohio Respiratory Care Board (Sch.) | 0.27 |
| 3538 | Public Works Commission (Sch.) | 0.27 |
| 3539 | Ohio Tuition Trust Authority (Sch.) | 0.27 |
| 5600 | Ohio Building Authority | 0.05 |
| 5900 | Lottery Commission | 1.25 |
| 5902 | Ohio Community Service Council (Sch.) | 0.27 |
| 5903 | Joint Commission on Agency Rule Review (Sch.) | 0.27 |
| 5904 | Ohio School Facilities Commission (Sch.) | 0.27 |
| 5906 | Board of Motor Vehicle Collision Repair (Sch.) | 0.27 |
| 5909 | Commission of African American Males (Sch.) | 0.27 |
| 5910 | Department of Job & Family Services | 0.37 |
| 5911 | State Board of Career Colleges and Schools (Sch.) | 0.27 |
| 5912 | Board of Tax Appeals (Sch.) | 0.27 |

*****Draft – Not for Filing*****

**STATE AGENCY
RATES EFFECTIVE JULY 1, 2007**

| MANUAL | AGENCY | RATE |
|---------------|--|-------------|
| 5913 | Personnel Board of Review (Sch.) | 0.27 |
| 5914 | Southern Ohio Agricultural & Community Development Foundation (Sch.) | 0.27 |
| 5923 | Tobacco Use & Prevention Control Foundation (Sch.) | 0.27 |
| 5924 | Orthotics, Prosthetics and Pedorthics Board (Sch.) | 0.27 |
| 5928 | Chemical Dependency Professionals Board (Sch.) | 0.27 |
| 5930 | Manufactured Homes Commission (Sch.) | 0.27 |
| 5931 | Ohio Housing Finance Agency (Sch.) | 0.27 |
| 5932 | Etech Ohio Commission (Sch.) | 0.27 |
| 5933 | Environmental Review Appeals Commission (Sch.) | 0.27 |

STATE UNIVERSITIES

| MANUAL | AGENCY | RATE |
|---------------|--|-------------|
| 3128 | Cleveland State University | 0.22 |
| 3141 | Bowling Green State University | 0.60 |
| 3142 | Kent State University | 0.28 |
| 3143 | Miami University | 0.51 |
| 3144 | Ohio University | 0.57 |
| 3145 | Ohio State University, Ohio Agricultural Center | 0.37 |
| 3146 | Central State University | 1.13 |
| 3148 | University of Toledo Health Science Campus | 0.06 |
| 3149 | University of Toledo | 0.49 |
| 3151 | OSU Cooperative Extension | 0.53 |
| 3157 | Youngstown State University | 0.30 |
| 3158 | Wright State University | 0.13 |
| 3159 | University of Akron | 0.17 |
| 3505 | University of Cincinnati | 0.20 |
| 3526 | Shawnee State University | 0.69 |
| 5905 | Northeastern Ohio Universities College of Medicine | 0.13 |

*****Draft – Not for Filing*****

**STATE AGENCY
RATES EFFECTIVE JULY 1, 2007**

STATE UNIVERSITY HOSPITALS

| MANUAL | AGENCY | RATE |
|---------------|--|-------------|
| 3131 | Ohio State University Hospital | 0.74 |
| 3161 | University Medical Center | 0.45 |
| 3201 | OSU Cancer Research Hospital | 0.73 |
| 5907 | The Ohio State University Hospitals East | 1.46 |

Private Employers Premium Rates Executive Summary

Employer Group: Private Employers

Policy Year: 7-1-2007 through 6-30-2008

Rate Method: Calculate and apply premium rates designed to provide premiums to equal the cost of all injuries/occupational diseases that have injury dates during the policy year. Attached on page 12, is a table showing the rate changes over the past several years.

Rate Rule Process:

- The Administrator of Ohio Bureau of Workers' Compensation recommends to the Workers' Compensation Oversight Commission an overall rate change based upon a rate indication recommendation from the BWC's consulting actuary, Oliver Wyman.
- The Workers' Compensation Oversight Commission provided advice and consent to the overall rate change of zero percent by resolution in the April 2007 meeting.
- The Administrator provides specific rules that are necessary to implement the approved rate change (Rules 4123-17-05 and 4123-17-06) at the June 2007 WCOC meeting using the approved rate recommendation.
- Workers' Compensation Oversight Commission provides advice and consent to the rules by resolution.
- Rules are filed with Legislative Services Commission and Secretary of State by June 20, 2007.
- Rules become effective July 1, 2007.

4123-17-05 **Private employer credibility table used for experience rating.**

The administrator of workers' compensation, with the advice and consent of the workers' compensation oversight commission, has authority to approve contributions made to the state insurance fund by employers pursuant to sections 4121.121, 4123.29, and 4123.34 of the Revised Code. The administrator hereby sets the credibility table parts A, B, and C to be effective July 1, ~~2006~~ 2007, applicable to the payroll reporting period July 1, ~~2006-2007~~, through June 30, ~~2007~~ 2008, for private employers as indicated in the attached appendixes A, B, and C.

TABLE 1

PART A

Credibility and Maximum Value of a Loss

| Credibility Group | Expected Losses* | Credibility Percent | Group Maximum Value |
|-------------------|------------------|---------------------|---------------------|
| 1 | 8,000 | 05 | 12,500 |
| 2 | 15,000 | 09 | 12,500 |
| 3 | 27,000 | 14 | 25,000 |
| 4 | 45,000 | 18 | 37,500 |
| 5 | 62,500 | 23 | 55,000 |
| 6 | 90,000 | 27 | 75,000 |
| 7 | 122,500 | 32 | 87,500 |
| 8 | 160,000 | 36 | 100,000 |
| 9 | 202,500 | 41 | 112,500 |
| 10 | 250,000 | 45 | 125,000 |
| 11 | 302,500 | 50 | 137,500 |
| 12 | 360,000 | 54 | 150,000 |
| 13 | 422,500 | 59 | 162,500 |
| 14 | 490,000 | 63 | 175,000 |
| 15 | 562,500 | 68 | 187,500 |
| 16 | 640,000 | 72 | 200,000 |
| 17 | 722,500 | 77 | 212,500 |
| 18 | 810,000 | 81 | 225,000 |
| 19 | 902,500 | 86 | 237,500 |
| 20 | 1,000,000 | 90 | 250,000 |

Catastrophe value equals \$250,000

*Expected losses are lower limits of credibility groups

Revised 7-1-2007

TABLE 1

PART B

| Industry Group | NCCI Manual Classifications |
|-----------------------|--|
| 1 | 0005, 0008, 0016, 0034, 0035, 0036, 0037, 0079, 0083, 0113, 0170, 0251, 2702, 2709 |
| 2 | 1005, 1016, 1164, 1165, 1320, 1430, 1438, 1452, 1624, 1654, 1655, 1710, 4000 |
| 3 | 1463, 1472, 1642, 1699, 1701, 1741, 1747, 1748, 1803, 1852, 1853, 1860, 1924, 1925, 2001, 2002, 2003, 2014, 2016, 2021, 2039, 2041, 2065, 2070, 2081, 2089, 2095, 2110, 2111, 2112, 2114, 2121, 2130, 2143, 2172, 2174, 2211, 2220, 2286, 2288, 2300, 2302, 2305, 2361, 2362, 2380, 2386, 2388, 2402, 2413, 2416, 2417, 2501, 2503, 2534, 2570, 2600, 2623, 2651, 2660, 2670, 2683, 2688, 2710, 2714, 2731, 2735, 2759, 2790, 2802, 2812, 2835, 2836, 2841, 2881, 2883, 2913, 2915, 2916, 2923, 2942, 2960, 3004, 3018, 3022, 3027, 3028, 3030, 3040, 3041, 3042, 3064, 3076, 3081, 3082, 3085, 3110, 3111, 3113, 3114, 3118, 3119, 3122, 3126, 3131, 3132, 3145, 3146, 3169, 3175, 3179, 3180, 3188, 3220, 3223, 3224, 3227, 3240, 3241, 3255, 3257, 3270, 3300, 3303, 3307, 3315, 3334, 3336, 3372, 3373, 3383, 3385, 3400, 3507, 3515, 3548, 3559, 3574, 3581, 3612, 3620, 3629, 3632, 3634, 3635, 3638, 3642, 3643, 3647, 3648, 3681, 3685, 3803, 3807, 3808, 3821, 3822, 3824, 3826, 3827, 3830, 3851, 3865, 3881, 4021, 4024, 4034, 4036, 4038, 4053, 4061, 4062, 4101, 4111, 4112, 4113, 4114, 4130, 4131, 4133, 4150, 4206, 4207, 4239, 4240, 4243, 4244, 4250, 4251, 4263, 4273, 4279, 4282, 4283, 4299, 4304, 4307, 4351, 4352, 4360, 4410, 4420, 4431, 4432, 4439, 4452, 4459, 4470, 4484, 4493, 4557, 4558, 4561, 4568, 4581, 4583, 4611, 4635, 4653, 4665, 4670, 4683, 4686, 4692, 4693, 4703, 4717, 4720, 4740, 4741, 4751, 4771, 4825, 4828, 4829, 4902, 4923, 5951, 6504, 6811, 6834, 6854, 6882, 6884, 9501, 9505, 9522 |
| 4 | 0042, 0050, 0106, 1322, 3069, 3365, 3719, 3724, 3726, 5020, 5022, 5037, 5040, 5057, 5059, 5069, 5102, 5146, 5160, 5183, 5188, 5190, 5213, 5215, 5221, 5222, 5223, 5348, 5402, 5403, 5437, 5443, 5445, 5462, 5472, 5473, 5474, 5478, 5479, 5480, 5491, 5506, 5507, 5508, 5535, 5537, 5551, 5605, 5606, 5610, 5645, 5651, 5703, 5705, 6003, 6005, 6017, 6018, 6045, 6204, 6206, 6213, 6214, 6216, 6217, 6229, 6233, 6235, 6236, 6237, 6251, 6252, 6260, 6306, 6319, 6325, 6400, 7538, 7601, 7605, 7611, 7612, 7613, 7855, 8227, 9534, 9554 |
| 5 | 2701, 6704, 7133, 7222, 7228, 7229, 7230, 7231, 7232, 7370, 7380, 7382, 7403, 7405, 7420, 7421, 7422, 7425, 7431, 7705, 8385 |
| 6 | 7502, 7515, 7520, 7539, 7540, 7580, 7600, 8901 |
| 7 | 0400, 0401, 2105, 2131, 2156, 2157, 4361, 7390, 8001, 8002, 8006, 8008, 8010, 8013, 8015, 8017, 8018, 8021, 8031, 8032, 8033, 8039, 8044, 8045, 8046, 8047, 8058, 8072, 8102, 8103, 8105, 8106, 8107, 8111, 8116, 8203, 8204, 8209, 8215, 8232, 8233, 8235, 8263, 8264, 8265, 8288, 8304, 8350, 8380, 8381, 8393, 8500, 8745 |
| 8 | 0917, 2585, 2586, 2587, 2589, 4362, 5191, 5192, 6836, 7360, 7610, 8279, 8291, 8292, 8293, 8392, 8601, 8720, 8799, 8800, 8824, 8825, 8826, 8829, 8831, 8832, 8833, 8835, 8861, 8868, 8869, 8989, 9012, 9014, 9015, 9016, 9019, 9033, 9040, 9044, 9052, 9058, 9059, 9060, 9061, 9062, 9063, 9082, 9083, 9084, 9089, 9093, 9101, 9102, 9110, 9154, 9156, 9170, 9178, 9179, 9180, 9182, 9186, 9220, 9516, 9519, 9521, 9586, 9600, 9620 |
| 9 | 4511, 4777, 7590, 7710, 7711, 7720, 7772, 8606, 9088, 9402, 9403, 9984, 9985 |
| 10 | 8721, 8742, 8748, 8755, 8803, 8810, 8820, 8871 |

Revised 7-1-2007

TABLE 1
PART C
INDUSTRY GROUP
(LLR)

| Credibility Group | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|--------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| 1 | 0.3543 | 0.2913 | 0.3617 | 0.2694 | 0.2585 | 0.3468 | 0.3362 | 0.3583 | 0.2930 | 0.3284 |
| 2 | 0.3543 | 0.2913 | 0.3617 | 0.2694 | 0.2585 | 0.3468 | 0.3362 | 0.3583 | 0.2930 | 0.3284 |
| 3 | 0.4730 | 0.4040 | 0.4940 | 0.3879 | 0.3830 | 0.4810 | 0.4652 | 0.4953 | 0.4221 | 0.4594 |
| 4 | 0.5557 | 0.4868 | 0.5856 | 0.4752 | 0.4747 | 0.5664 | 0.5563 | 0.5912 | 0.5156 | 0.5494 |
| 5 | 0.6448 | 0.5793 | 0.6787 | 0.5704 | 0.5739 | 0.6534 | 0.6512 | 0.6884 | 0.6132 | 0.6401 |
| 6 | 0.7204 | 0.6623 | 0.7530 | 0.6545 | 0.6601 | 0.7255 | 0.7298 | 0.7649 | 0.6941 | 0.7163 |
| 7 | 0.7571 | 0.7047 | 0.7888 | 0.6980 | 0.7037 | 0.7619 | 0.7684 | 0.8013 | 0.7344 | 0.7545 |
| 8 | 0.7901 | 0.7416 | 0.8192 | 0.7359 | 0.7414 | 0.7968 | 0.8019 | 0.8322 | 0.7702 | 0.7879 |
| 9 | 0.8196 | 0.7750 | 0.8456 | 0.7697 | 0.7744 | 0.8284 | 0.8309 | 0.8584 | 0.8025 | 0.8172 |
| 10 | 0.8474 | 0.8050 | 0.8688 | 0.8002 | 0.8045 | 0.8563 | 0.8561 | 0.8809 | 0.8314 | 0.8434 |
| 11 | 0.8737 | 0.8319 | 0.8893 | 0.8282 | 0.8319 | 0.8805 | 0.8787 | 0.9008 | 0.8578 | 0.8668 |
| 12 | 0.8960 | 0.8562 | 0.9073 | 0.8539 | 0.8571 | 0.9018 | 0.8991 | 0.9180 | 0.8812 | 0.8874 |
| 13 | 0.9154 | 0.8791 | 0.9236 | 0.8776 | 0.8806 | 0.9196 | 0.9170 | 0.9330 | 0.9015 | 0.9064 |
| 14 | 0.9325 | 0.9010 | 0.9382 | 0.8993 | 0.9021 | 0.9353 | 0.9329 | 0.9461 | 0.9195 | 0.9237 |
| 15 | 0.9477 | 0.9213 | 0.9512 | 0.9194 | 0.9218 | 0.9482 | 0.9471 | 0.9578 | 0.9361 | 0.9394 |
| 16 | 0.9601 | 0.9393 | 0.9629 | 0.9381 | 0.9398 | 0.9597 | 0.9599 | 0.9681 | 0.9515 | 0.9542 |
| 17 | 0.9711 | 0.9563 | 0.9736 | 0.9555 | 0.9565 | 0.9702 | 0.9714 | 0.9774 | 0.9653 | 0.9676 |
| 18 | 0.9812 | 0.9714 | 0.9832 | 0.9716 | 0.9721 | 0.9802 | 0.9819 | 0.9857 | 0.9778 | 0.9799 |
| 19 | 0.9907 | 0.9859 | 0.9920 | 0.9864 | 0.9866 | 0.9901 | 0.9914 | 0.9932 | 0.9894 | 0.9906 |
| 20 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 | 1.0000 |

Revised 7-1-2007

4123-17-06 **Private employer contributions to the state insurance fund.**

The administrator of workers' compensation, with the advice and consent of the workers' compensation oversight commission, has authority to approve contributions made to the state insurance fund by employers pursuant to sections 4121.121, 4123.29, and 4123.34 of the Revised Code. The administrator hereby sets the NCCI manual classification base rates, and NCCI manual classification expected loss rates per one hundred dollar unit of payroll to be effective July 1, ~~2006~~ 2007, applicable to the payroll reporting period July 1, ~~2006~~ 2007, through June 30, ~~2007~~ 2008, for private employers as indicated in the attached appendix A.

~~Effective July 1, 2005-2006, an employer that is not participating in the group rating program will receive a discount of 7.0 2.5 per cent from its pure premium rate. This discount is applied before the administrative cost, DWRF and additional DWRF assessments. Note that the base rates filed in the attached appendix A have been decreased by 5.4 3.3 per cent to support this reduced non-group discount.~~

To Be Enacted

Appendix A

BUREAU OF WORKERS' COMPENSATION

NCCI BASE RATES AND EXPECTED LOSS RATES

EFFECTIVE JULY 1, 2007

Base Rates and Expected Loss Rates are for each \$100 Unit of Payroll

RATES DO NOT INCLUDE ADMINISTRATIVE COST,

DWRF, OR ADDITIONAL DWRF ASSESSMENTS

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #0005 | \$5.89 | \$1.32 |
| #0008 | \$5.06 | \$1.06 |
| #0016 | \$35.91 | \$5.28 |
| #0034 | \$5.12 | \$1.87 |
| #0035 | \$6.33 | \$1.39 |
| #0036 | \$12.35 | \$1.33 |
| #0037 | \$13.76 | \$2.11 |
| #0042 | \$14.66 | \$3.07 |
| #0050 | \$13.10 | \$3.21 |
| #0079 | \$6.53 | \$0.46 |
| #0083 | \$12.38 | \$2.60 |
| #0106 | \$50.65 | \$11.13 |
| #0113 | \$3.63 | \$0.08 |
| #0170 | \$7.30 | \$0.29 |
| #0251 | \$8.54 | \$1.03 |
| #0400 | \$4.49 | \$1.42 |
| #0401 | \$4.49 | \$1.42 |
| #0917 | \$16.79 | \$3.46 |
| #1005 | \$4.15 | \$1.22 |
| #1016 | \$5.60 | \$2.09 |
| #1164 | \$50.94 | \$0.57 |
| #1165 | \$19.50 | \$4.71 |
| #1320 | \$10.30 | \$2.47 |
| #1322 | \$40.09 | \$2.98 |
| #1430 | \$37.28 | \$63.03 |
| #1438 | \$10.54 | \$3.23 |
| #1452 | \$7.23 | \$0.00 |
| #1463 | \$11.25 | \$2.27 |
| #1472 | \$9.81 | \$2.09 |
| #1624 | \$7.06 | \$1.83 |
| #1642 | \$2.64 | \$0.93 |
| #1654 | \$7.96 | \$0.90 |
| #1655 | \$2.61 | \$0.05 |
| #1699 | \$8.80 | \$2.26 |
| #1701 | \$9.90 | \$2.43 |
| #1710 | \$15.72 | \$5.79 |
| #1741 | \$13.94 | \$4.54 |
| #1747 | \$4.70 | \$1.38 |
| #1748 | \$12.19 | \$2.07 |
| #1803 | \$12.34 | \$3.04 |
| #1852 | \$5.50 | \$1.79 |

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #1853 | \$8.34 | \$1.58 |
| #1860 | \$5.17 | \$1.83 |
| #1924 | \$6.44 | \$1.58 |
| #1925 | \$7.83 | \$2.29 |
| #2001 | \$6.34 | \$2.72 |
| #2002 | \$13.54 | \$3.04 |
| #2003 | \$8.37 | \$2.62 |
| #2014 | \$11.52 | \$2.56 |
| #2016 | \$13.10 | \$7.30 |
| #2021 | \$4.94 | \$3.62 |
| #2039 | \$12.76 | \$4.45 |
| #2041 | \$9.64 | \$2.87 |
| #2065 | \$3.23 | \$1.39 |
| #2070 | \$7.53 | \$2.51 |
| #2081 | \$13.26 | \$4.50 |
| #2089 | \$19.96 | \$3.80 |
| #2095 | \$7.35 | \$2.46 |
| #2105 | \$6.07 | \$2.03 |
| #2110 | \$5.98 | \$2.38 |
| #2111 | \$5.44 | \$1.78 |
| #2112 | \$3.42 | \$1.00 |
| #2114 | \$5.50 | \$1.79 |
| #2121 | \$12.62 | \$2.73 |
| #2130 | \$3.40 | \$1.42 |
| #2131 | \$3.03 | \$0.65 |
| #2143 | \$5.97 | \$2.88 |
| #2156 | \$6.08 | \$2.41 |
| #2157 | \$7.83 | \$3.86 |
| #2172 | \$5.50 | \$1.79 |
| #2174 | \$64.23 | \$0.00 |
| #2211 | \$5.04 | \$1.90 |
| #2220 | \$8.18 | \$3.92 |
| #2286 | \$35.45 | \$0.26 |
| #2288 | \$4.87 | \$2.23 |
| #2300 | \$5.50 | \$1.79 |
| #2302 | \$11.36 | \$0.89 |
| #2305 | \$5.99 | \$4.40 |
| #2361 | \$15.04 | \$0.12 |
| #2362 | \$11.89 | \$0.50 |
| #2380 | \$4.85 | \$4.28 |
| #2386 | \$3.60 | \$0.00 |

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #2388 | \$4.79 | \$1.32 |
| #2402 | \$8.42 | \$0.55 |
| #2413 | \$7.01 | \$1.77 |
| #2416 | \$5.14 | \$0.77 |
| #2417 | \$7.44 | \$6.27 |
| #2501 | \$5.58 | \$1.91 |
| #2503 | \$6.24 | \$1.44 |
| #2534 | \$10.73 | \$0.27 |
| #2570 | \$10.84 | \$3.75 |
| #2585 | \$8.27 | \$2.65 |
| #2586 | \$4.83 | \$1.61 |
| #2587 | \$11.81 | \$3.35 |
| #2589 | \$6.32 | \$1.52 |
| #2600 | \$5.50 | \$1.79 |
| #2623 | \$28.57 | \$0.03 |
| #2651 | \$4.22 | \$1.03 |
| #2660 | \$26.26 | \$0.67 |
| #2670 | \$6.23 | \$9.87 |
| #2683 | \$6.89 | \$4.51 |
| #2688 | \$3.48 | \$0.56 |
| #2701 | \$21.32 | \$4.84 |
| #2702 | \$47.15 | \$8.19 |
| #2709 | \$47.15 | \$8.19 |
| #2710 | \$19.02 | \$3.97 |
| #2714 | \$5.88 | \$2.26 |
| #2731 | \$10.61 | \$2.74 |
| #2735 | \$2.80 | \$0.89 |
| #2759 | \$13.92 | \$4.24 |
| #2790 | \$4.43 | \$1.44 |
| #2802 | \$8.91 | \$2.66 |
| #2812 | \$6.86 | \$1.85 |
| #2835 | \$6.18 | \$5.02 |
| #2836 | \$3.85 | \$1.00 |
| #2841 | \$8.77 | \$1.61 |
| #2881 | \$4.08 | \$1.18 |
| #2883 | \$7.49 | \$1.79 |
| #2913 | \$8.03 | \$3.13 |
| #2915 | \$10.35 | \$0.07 |
| #2916 | \$7.00 | \$2.07 |
| #2923 | \$2.91 | \$1.02 |
| #2942 | \$23.67 | \$1.40 |

*** DRAFT – NOT FOR FILING ***

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #2960 | \$7.88 | \$1.82 |
| #3004 | \$6.64 | \$2.26 |
| #3018 | \$7.72 | \$3.27 |
| #3022 | \$8.67 | \$3.73 |
| #3027 | \$3.38 | \$1.41 |
| #3028 | \$6.10 | \$2.08 |
| #3030 | \$10.73 | \$3.27 |
| #3040 | \$8.21 | \$2.74 |
| #3041 | \$5.99 | \$2.05 |
| #3042 | \$5.65 | \$0.62 |
| #3064 | \$6.46 | \$1.99 |
| #3069 | \$10.69 | \$3.17 |
| #3076 | \$7.36 | \$2.43 |
| #3081 | \$11.34 | \$4.28 |
| #3082 | \$18.00 | \$7.02 |
| #3085 | \$8.40 | \$2.91 |
| #3110 | \$10.73 | \$3.95 |
| #3111 | \$6.84 | \$2.38 |
| #3113 | \$4.10 | \$0.98 |
| #3114 | \$5.00 | \$1.66 |
| #3118 | \$4.57 | \$1.63 |
| #3119 | \$5.50 | \$1.79 |
| #3122 | \$4.36 | \$1.58 |
| #3126 | \$5.16 | \$2.03 |
| #3131 | \$1.50 | \$1.07 |
| #3132 | \$6.90 | \$2.23 |
| #3145 | \$4.71 | \$1.47 |
| #3146 | \$4.95 | \$2.12 |
| #3169 | \$4.63 | \$1.98 |
| #3175 | \$2.88 | \$1.76 |
| #3179 | \$3.34 | \$1.15 |
| #3180 | \$12.55 | \$5.74 |
| #3188 | \$6.45 | \$2.57 |
| #3220 | \$4.87 | \$2.03 |
| #3223 | \$11.44 | \$0.00 |
| #3224 | \$3.86 | \$0.81 |
| #3227 | \$8.43 | \$3.46 |
| #3240 | \$8.15 | \$0.79 |
| #3241 | \$14.25 | \$3.76 |
| #3255 | \$8.22 | \$0.51 |
| #3257 | \$4.53 | \$1.77 |
| #3270 | \$9.98 | \$2.92 |
| #3300 | \$6.20 | \$2.71 |
| #3303 | \$8.22 | \$3.42 |
| #3307 | \$5.85 | \$2.01 |
| #3315 | \$5.83 | \$1.60 |
| #3334 | \$3.45 | \$0.00 |
| #3336 | \$5.21 | \$1.47 |
| #3365 | \$15.01 | \$3.67 |
| #3372 | \$5.56 | \$1.97 |
| #3373 | \$5.72 | \$1.62 |
| #3383 | \$3.35 | \$1.68 |

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #3385 | \$3.46 | \$0.42 |
| #3400 | \$5.49 | \$2.04 |
| #3507 | \$4.58 | \$1.33 |
| #3515 | \$6.96 | \$1.14 |
| #3548 | \$1.66 | \$0.50 |
| #3559 | \$3.51 | \$0.46 |
| #3574 | \$3.00 | \$0.89 |
| #3581 | \$3.14 | \$1.28 |
| #3612 | \$3.17 | \$1.14 |
| #3620 | \$8.97 | \$2.77 |
| #3629 | \$2.64 | \$0.78 |
| #3632 | \$4.78 | \$1.44 |
| #3634 | \$3.42 | \$1.02 |
| #3635 | \$4.59 | \$1.39 |
| #3638 | \$3.47 | \$1.71 |
| #3642 | \$2.44 | \$0.25 |
| #3643 | \$3.82 | \$1.19 |
| #3647 | \$2.80 | \$0.74 |
| #3648 | \$4.09 | \$1.13 |
| #3681 | \$2.63 | \$0.73 |
| #3685 | \$1.68 | \$0.51 |
| #3719 | \$4.00 | \$0.73 |
| #3724 | \$10.81 | \$3.06 |
| #3726 | \$7.48 | \$1.64 |
| #3803 | \$3.64 | \$4.12 |
| #3807 | \$13.75 | \$7.36 |
| #3808 | \$7.88 | \$2.42 |
| #3821 | \$14.26 | \$3.58 |
| #3822 | \$15.86 | \$4.51 |
| #3824 | \$6.82 | \$2.67 |
| #3826 | \$1.11 | \$0.17 |
| #3827 | \$1.20 | \$0.48 |
| #3830 | \$2.35 | \$0.57 |
| #3851 | \$38.10 | \$0.52 |
| #3865 | \$5.51 | \$2.55 |
| #3881 | \$8.11 | \$3.24 |
| #4000 | \$9.59 | \$2.36 |
| #4021 | \$11.52 | \$3.56 |
| #4024 | \$4.79 | \$1.49 |
| #4034 | \$8.35 | \$2.82 |
| #4036 | \$4.26 | \$2.18 |
| #4038 | \$6.20 | \$1.07 |
| #4053 | \$28.23 | \$9.18 |
| #4061 | \$9.30 | \$2.11 |
| #4062 | \$4.28 | \$1.64 |
| #4101 | \$7.79 | \$2.92 |
| #4111 | \$13.39 | \$1.75 |
| #4112 | \$6.48 | \$2.60 |
| #4113 | \$12.04 | \$2.96 |
| #4114 | \$5.17 | \$0.55 |
| #4130 | \$7.73 | \$2.31 |
| #4131 | \$8.24 | \$3.72 |

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #4133 | \$7.32 | \$0.99 |
| #4150 | \$2.90 | \$1.06 |
| #4206 | \$5.50 | \$1.79 |
| #4207 | \$22.13 | \$1.79 |
| #4239 | \$6.08 | \$2.48 |
| #4240 | \$8.02 | \$2.66 |
| #4243 | \$5.26 | \$2.12 |
| #4244 | \$5.13 | \$2.01 |
| #4250 | \$3.70 | \$1.31 |
| #4251 | \$4.65 | \$1.79 |
| #4263 | \$8.00 | \$2.90 |
| #4273 | \$3.85 | \$1.53 |
| #4279 | \$7.45 | \$2.68 |
| #4282 | \$5.50 | \$1.79 |
| #4283 | \$3.17 | \$1.46 |
| #4299 | \$3.61 | \$1.06 |
| #4304 | \$6.09 | \$1.97 |
| #4307 | \$3.83 | \$1.17 |
| #4351 | \$2.49 | \$0.85 |
| #4352 | \$2.74 | \$0.92 |
| #4360 | \$11.62 | \$6.89 |
| #4361 | \$1.99 | \$0.71 |
| #4362 | \$2.56 | \$0.53 |
| #4410 | \$5.63 | \$1.94 |
| #4420 | \$7.99 | \$3.77 |
| #4431 | \$5.50 | \$1.79 |
| #4432 | \$4.55 | \$0.22 |
| #4439 | \$19.50 | \$14.62 |
| #4452 | \$7.07 | \$2.39 |
| #4459 | \$5.42 | \$1.89 |
| #4470 | \$6.83 | \$0.80 |
| #4484 | \$5.51 | \$1.98 |
| #4493 | \$6.66 | \$3.63 |
| #4511 | \$1.41 | \$0.36 |
| #4557 | \$3.64 | \$1.26 |
| #4558 | \$3.40 | \$1.16 |
| #4561 | \$8.74 | \$2.35 |
| #4568 | \$1.11 | \$0.57 |
| #4581 | \$5.50 | \$1.79 |
| #4583 | \$6.03 | \$2.40 |
| #4611 | \$2.05 | \$0.55 |
| #4635 | \$4.27 | \$1.65 |
| #4653 | \$3.80 | \$1.57 |
| #4665 | \$17.08 | \$5.48 |
| #4670 | \$5.50 | \$1.79 |
| #4683 | \$2.77 | \$0.69 |
| #4686 | \$2.39 | \$0.62 |
| #4692 | \$1.40 | \$0.40 |
| #4693 | \$1.97 | \$0.76 |
| #4703 | \$5.50 | \$1.79 |
| #4717 | \$5.50 | \$1.79 |
| #4720 | \$6.88 | \$1.95 |

*** DRAFT – NOT FOR FILING ***

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #4740 | \$5.69 | \$0.46 |
| #4741 | \$8.42 | \$0.34 |
| #4751 | \$2.48 | \$0.46 |
| #4771 | \$2.79 | \$0.72 |
| #4777 | \$11.57 | \$2.19 |
| #4825 | \$1.08 | \$0.38 |
| #4828 | \$5.89 | \$1.46 |
| #4829 | \$2.39 | \$0.76 |
| #4902 | \$4.73 | \$1.65 |
| #4923 | \$4.39 | \$1.23 |
| #5020 | \$14.15 | \$3.81 |
| #5022 | \$12.71 | \$3.41 |
| #5037 | \$35.66 | \$22.39 |
| #5040 | \$29.23 | \$6.51 |
| #5057 | \$16.59 | \$4.25 |
| #5059 | \$12.79 | \$3.45 |
| #5069 | \$49.25 | \$3.20 |
| #5102 | \$7.59 | \$1.81 |
| #5146 | \$11.94 | \$3.17 |
| #5160 | \$3.69 | \$0.97 |
| #5183 | \$6.99 | \$1.65 |
| #5188 | \$5.77 | \$1.57 |
| #5190 | \$6.14 | \$1.56 |
| #5191 | \$2.18 | \$0.68 |
| #5192 | \$9.01 | \$2.79 |
| #5213 | \$12.33 | \$3.34 |
| #5215 | \$13.53 | \$3.30 |
| #5221 | \$9.99 | \$2.43 |
| #5222 | \$9.39 | \$3.75 |
| #5223 | \$10.75 | \$2.45 |
| #5348 | \$9.60 | \$2.44 |
| #5402 | \$30.58 | \$2.57 |
| #5403 | \$11.68 | \$2.77 |
| #5437 | \$8.52 | \$2.00 |
| #5443 | \$45.64 | \$4.85 |
| #5445 | \$8.12 | \$2.20 |
| #5462 | \$7.86 | \$1.81 |
| #5472 | \$12.53 | \$3.10 |
| #5473 | \$12.51 | \$3.35 |
| #5474 | \$12.37 | \$2.53 |
| #5478 | \$12.99 | \$3.11 |
| #5479 | \$16.94 | \$3.54 |
| #5480 | \$3.28 | \$2.14 |
| #5491 | \$25.45 | \$0.06 |
| #5506 | \$8.23 | \$2.27 |
| #5507 | \$5.90 | \$1.73 |
| #5508 | \$31.21 | \$0.40 |
| #5535 | \$10.69 | \$3.17 |
| #5537 | \$6.97 | \$1.74 |
| #5551 | \$31.63 | \$7.10 |
| #5605 | \$2.33 | \$0.14 |
| #5606 | \$0.97 | \$0.31 |

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #5610 | \$34.59 | \$9.32 |
| #5645 | \$21.10 | \$3.99 |
| #5651 | \$11.04 | \$2.60 |
| #5703 | \$17.42 | \$8.78 |
| #5705 | \$65.25 | \$0.78 |
| #5951 | \$5.50 | \$1.79 |
| #6003 | \$19.06 | \$1.76 |
| #6005 | \$31.86 | \$0.13 |
| #6017 | \$9.55 | \$2.43 |
| #6018 | \$9.86 | \$3.08 |
| #6045 | \$9.55 | \$2.43 |
| #6204 | \$13.38 | \$3.42 |
| #6206 | \$7.72 | \$3.20 |
| #6213 | \$9.86 | \$0.00 |
| #6214 | \$7.30 | \$0.69 |
| #6216 | \$10.53 | \$1.98 |
| #6217 | \$8.70 | \$2.23 |
| #6229 | \$17.64 | \$3.20 |
| #6233 | \$9.41 | \$3.01 |
| #6235 | \$27.59 | \$11.84 |
| #6236 | \$6.38 | \$0.63 |
| #6237 | \$3.80 | \$0.02 |
| #6251 | \$19.79 | \$4.57 |
| #6252 | \$5.84 | \$2.91 |
| #6260 | \$69.13 | \$0.08 |
| #6306 | \$5.23 | \$1.77 |
| #6319 | \$5.78 | \$2.61 |
| #6325 | \$5.80 | \$1.87 |
| #6400 | \$11.04 | \$2.55 |
| #6504 | \$5.05 | \$1.91 |
| #6704 | \$10.60 | \$3.32 |
| #6811 | \$3.60 | \$0.36 |
| #6834 | \$9.25 | \$2.00 |
| #6836 | \$9.51 | \$1.92 |
| #6854 | \$38.14 | \$13.71 |
| #6882 | \$8.39 | \$0.53 |
| #6884 | \$5.50 | \$1.79 |
| #7133 | \$4.63 | \$3.20 |
| #7222 | \$10.60 | \$3.32 |
| #7228 | \$21.32 | \$4.84 |
| #7229 | \$8.92 | \$3.17 |
| #7230 | \$21.52 | \$5.12 |
| #7231 | \$16.84 | \$6.01 |
| #7232 | \$8.39 | \$2.87 |
| #7360 | \$13.19 | \$5.04 |
| #7370 | \$11.26 | \$3.73 |
| #7380 | \$9.90 | \$3.22 |
| #7382 | \$8.43 | \$2.91 |
| #7390 | \$7.77 | \$3.37 |
| #7403 | \$4.80 | \$1.74 |
| #7405 | \$2.01 | \$0.92 |
| #7420 | \$2.91 | \$14.90 |

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #7421 | \$11.16 | \$1.00 |
| #7422 | \$5.25 | \$2.07 |
| #7425 | \$4.09 | \$1.00 |
| #7431 | \$3.98 | \$1.22 |
| #7502 | \$2.12 | \$0.47 |
| #7515 | \$2.33 | \$0.51 |
| #7520 | \$6.71 | \$1.71 |
| #7538 | \$14.21 | \$5.53 |
| #7539 | \$2.12 | \$0.92 |
| #7540 | \$4.03 | \$1.29 |
| #7580 | \$2.39 | \$1.09 |
| #7590 | \$8.73 | \$2.82 |
| #7600 | \$3.42 | \$1.06 |
| #7601 | \$9.58 | \$3.19 |
| #7605 | \$4.02 | \$1.33 |
| #7610 | \$0.69 | \$0.22 |
| #7611 | \$13.17 | \$4.19 |
| #7612 | \$10.96 | \$3.27 |
| #7613 | \$15.05 | \$6.32 |
| #7705 | \$11.26 | \$3.73 |
| #7710 | \$38.09 | \$5.73 |
| #7711 | \$38.09 | \$5.73 |
| #7720 | \$5.05 | \$1.78 |
| #7772 | \$7.11 | \$2.49 |
| #7855 | \$14.95 | \$5.58 |
| #8001 | \$4.64 | \$1.15 |
| #8002 | \$3.42 | \$1.83 |
| #8006 | \$5.26 | \$1.71 |
| #8008 | \$2.52 | \$0.98 |
| #8010 | \$3.47 | \$0.99 |
| #8013 | \$0.77 | \$0.19 |
| #8015 | \$1.28 | \$0.39 |
| #8017 | \$2.90 | \$0.97 |
| #8018 | \$4.31 | \$1.67 |
| #8021 | \$5.07 | \$1.63 |
| #8031 | \$6.88 | \$1.86 |
| #8032 | \$2.37 | \$1.27 |
| #8033 | \$4.59 | \$1.44 |
| #8039 | \$5.45 | \$2.29 |
| #8044 | \$6.03 | \$1.82 |
| #8045 | \$1.28 | \$0.23 |
| #8046 | \$3.97 | \$1.37 |
| #8047 | \$4.20 | \$1.14 |
| #8058 | \$4.39 | \$1.50 |
| #8072 | \$1.94 | \$0.61 |
| #8102 | \$1.89 | \$0.58 |
| #8103 | \$29.99 | \$4.58 |
| #8105 | \$12.24 | \$4.18 |
| #8106 | \$6.75 | \$2.29 |
| #8107 | \$4.62 | \$1.55 |
| #8111 | \$6.21 | \$1.86 |
| #8116 | \$2.77 | \$0.52 |

*** DRAFT – NOT FOR FILING ***

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #8203 | \$9.11 | \$2.04 |
| #8204 | \$5.29 | \$1.81 |
| #8209 | \$3.26 | \$1.64 |
| #8215 | \$4.47 | \$1.16 |
| #8227 | \$4.71 | \$1.33 |
| #8232 | \$8.51 | \$2.76 |
| #8233 | \$4.12 | \$2.74 |
| #8235 | \$6.63 | \$2.16 |
| #8263 | \$15.93 | \$8.05 |
| #8264 | \$9.92 | \$3.93 |
| #8265 | \$15.28 | \$4.76 |
| #8279 | \$18.48 | \$3.75 |
| #8288 | \$4.95 | \$1.94 |
| #8291 | \$7.34 | \$2.98 |
| #8292 | \$6.58 | \$2.61 |
| #8293 | \$17.11 | \$5.65 |
| #8304 | \$3.91 | \$1.18 |
| #8350 | \$5.54 | \$2.03 |
| #8380 | \$5.26 | \$1.42 |
| #8381 | \$4.91 | \$1.71 |
| #8385 | \$4.60 | \$2.08 |
| #8392 | \$6.37 | \$2.69 |
| #8393 | \$3.34 | \$0.93 |
| #8500 | \$8.85 | \$3.01 |
| #8601 | \$1.06 | \$0.25 |
| #8606 | \$8.56 | \$0.31 |
| #8720 | \$3.19 | \$1.37 |
| #8721 | \$0.56 | \$0.07 |
| #8742 | \$0.42 | \$0.13 |
| #8745 | \$5.57 | \$2.10 |
| #8748 | \$0.88 | \$0.21 |
| #8755 | \$0.89 | \$0.39 |
| #8799 | \$2.03 | \$0.75 |
| #8800 | \$2.03 | \$0.75 |
| #8803 | \$0.15 | \$0.03 |
| #8810 | \$0.26 | \$0.08 |
| #8820 | \$0.47 | \$0.11 |
| #8824 | \$7.12 | \$2.53 |
| #8825 | \$4.46 | \$1.49 |
| #8826 | \$4.71 | \$1.54 |
| #8829 | \$5.36 | \$2.18 |
| #8831 | \$2.83 | \$0.65 |
| #8832 | \$0.69 | \$0.20 |
| #8833 | \$1.53 | \$0.59 |
| #8835 | \$6.08 | \$2.11 |
| #8861 | \$2.81 | \$1.05 |

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #8868 | \$0.73 | \$0.21 |
| #8869 | \$2.18 | \$0.75 |
| #8871 | \$0.86 | \$0.06 |
| #8901 | \$0.15 | \$0.07 |
| #8989 | \$2.77 | \$1.23 |
| #9012 | \$0.80 | \$0.27 |
| #9014 | \$6.42 | \$2.25 |
| #9015 | \$7.88 | \$2.37 |
| #9016 | \$4.46 | \$1.33 |
| #9019 | \$3.07 | \$0.96 |
| #9033 | \$2.89 | \$1.23 |
| #9040 | \$3.86 | \$1.68 |
| #9044 | \$3.07 | \$0.96 |
| #9052 | \$5.66 | \$1.93 |
| #9058 | \$4.51 | \$1.53 |
| #9059 | \$2.26 | \$0.63 |
| #9060 | \$2.71 | \$0.78 |
| #9061 | \$4.51 | \$1.29 |
| #9062 | \$5.10 | \$0.27 |
| #9063 | \$2.16 | \$0.71 |
| #9082 | \$3.39 | \$1.10 |
| #9083 | \$3.57 | \$1.13 |
| #9084 | \$3.94 | \$1.06 |
| #9088 | \$5.15 | \$1.78 |
| #9089 | \$2.15 | \$0.06 |
| #9093 | \$3.55 | \$1.00 |
| #9101 | \$4.07 | \$1.31 |
| #9102 | \$5.94 | \$1.57 |
| #9110 | \$4.06 | \$1.73 |
| #9154 | \$3.31 | \$1.06 |
| #9156 | \$5.04 | \$0.71 |
| #9170 | \$6.42 | \$2.25 |
| #9178 | \$25.51 | \$10.58 |
| #9179 | \$29.12 | \$15.73 |
| #9180 | \$8.27 | \$2.64 |
| #9182 | \$4.84 | \$1.65 |
| #9186 | \$22.70 | \$6.11 |
| #9220 | \$10.30 | \$3.52 |
| #9402 | \$6.03 | \$2.08 |
| #9403 | \$11.92 | \$4.97 |
| #9501 | \$5.56 | \$1.37 |
| #9505 | \$2.25 | \$0.82 |
| #9516 | \$5.07 | \$2.27 |
| #9519 | \$8.68 | \$2.35 |
| #9521 | \$3.07 | \$1.23 |
| #9522 | \$2.26 | \$1.04 |

| Manual Number | Base Rate | Expected Loss Rate |
|---------------|-----------|--------------------|
| #9534 | \$5.54 | \$1.89 |
| #9554 | \$12.43 | \$3.86 |
| #9586 | \$1.48 | \$0.46 |
| #9600 | \$3.11 | \$0.20 |
| #9620 | \$1.88 | \$0.36 |
| #9984 | \$1.24 | \$0.42 |
| #9985 | \$3.49 | \$0.00 |

Private Employer Average Collectible Rate

| Rating Year | Average Base Rate* | Average Collectible Rate* |
|-------------|--------------------|---------------------------|
| 7-1-75 | \$1.42 | |
| 7-1-76 | \$1.83 | |
| 7-1-77 | \$2.38 | |
| 7-1-78 | \$1.93 | |
| 7-1-79 | \$1.88 | |
| 7-1-80 | \$1.88 | |
| 7-1-81 | \$1.83 | |
| 7-1-82 | \$1.82 | |
| 7-1-83 | \$1.76 | |
| 7-1-84 | \$1.65 | |
| 7-1-85 | \$1.75 | |
| 7-1-86 | \$1.75 | |
| 7-1-87 | \$2.34 | |
| 7-1-88 | \$2.61 | |
| 7-1-89 | \$2.78 | |
| 7-1-90 | \$2.91 | |
| 7-1-91 | | \$2.97 |
| 7-1-92 | | \$3.00 |
| 7-1-93 | | \$2.85 |
| 7-1-94 | | \$2.73 |
| 7-1-95 | | \$2.67 |
| 7-1-96 | | \$2.63 |
| 7-1-97 | | \$2.17 |
| 7-1-98 | | \$2.11 |
| 7-1-99 | | \$2.03 |
| 7-1-2000 | | \$1.93 |
| 7-1-2001 | | \$1.81 |
| 7-1-2002 | | \$1.80 |
| 7-1-2003 | | \$1.94 |
| 7-1-2004 | | \$1.98 |
| 7-1-2005 | | \$1.76 |
| 7-1-2006 | | \$1.85 |
| 7-1-2007 | | \$1.85 |

*Rates have been rounded to the nearest cent

Historical Percent Change in Private Employer Collectible Premium

| Period | Percent Change | Period | Percent Change |
|---------------|-----------------------------|---------------|-----------------------|
| 7-1-60 | 3.7% increase | 7-1-1992 | 3.5% increase |
| 7-1-61 | No Change | 7-1-1993 | No Change |
| 7-1-62 | 6.4% increase | 7-1-1994 | No Change |
| 7-1-63 | 2.1% increase | 7-1-1995 | 7.3% decrease |
| 7-1-64 | 1.5% increase | 7-1-1996 | 6% decrease |
| 7-1-65 | .6% decrease | 7-1-1997 | 15% decrease |
| 7-1-66 | 4.9% decrease | 7-1-1998 | 6% decrease |
| 7-1-67 | 1.9% increase | 7-1-1999 | 3% decrease |
| 7-1-68 | .2% decrease (no change) | 7-1-2000 | 5% decrease |
| 7-1-69 | 2.2% decrease | 7-1-2001 | 5% decrease |
| 7-1-70 | 5.6% decrease | 7-1-2002 | No Change |
| 7-1-71 | 12.5% increase | 7-1-2003 | 9% increase |
| 7-1-72 | 13.1% increase | 7-1-2004 | 2% increase |
| 7-1-73 | 17.3% increase | 7-1-2005 | 4.4% increase |
| 7-1-74 | 7.8% decrease | 7-1-2006 | 3.9% increase |
| 7-1-75 | 10.5% increase | 7-1-2007 | No Change |
| 7-1-76 | 28.8% increase | | |
| 7-1-77 | 29.7% increase | | |
| 7-1-78 | 19.4% decrease | | |
| 7-1-79 | 3% decrease | | |
| 7-1-80 | No Change | | |
| 7-1-81 | 3% decrease | | |
| 7-1-82 | 1% decrease | | |
| 7-1-83 | 3% decrease | | |
| 7-1-84 | 6% decrease | | |
| 7-1-85 | 6% increase | | |
| 7-1-86 | 6% decrease | | |
| 7-1-87 | 30% increase | | |
| 7-1-88 | 15% increase | | |
| 7-1-89 | 9.5% increase | | |
| 7-1-90 | No Change | | |
| 7-1-91 | 4.5% increase | | |

7-1-2007 Rate Summary

Private Employer Premium Rates

1. Change in private employer premium rates at the industry level:

| Industry Group | Name | Percent Change | Average Collectible Rate per \$100 Unit of Payroll |
|----------------|------------------------------|----------------|--|
| 1 | Agriculture | -9% | \$3.75 |
| 2 | Extraction | -2% | \$4.37 |
| 3 | Manufacturing | 1% | \$3.38 |
| 4 | Construction | 2% | \$4.85 |
| 5 | Transportation | 9% | \$6.70 |
| 6 | Utility | 4% | \$1.11 |
| 7 | Commercial | 0% | \$2.69 |
| 8 | Service | 2% | \$1.78 |
| 9 | High Risk Commercial/Service | 5% | \$3.41 |
| 10 | Office Work/Miscellaneous | -8% | \$0.19 |
| | Total | 0% | \$1.85 |

2. Projected payroll is \$92.1 billion. Estimated premium is \$1.706 billion.

3. Average assessment for a private employer per \$100 of reported payroll:

| | |
|--|--------|
| Premium (average collectible base rate) | \$1.85 |
| Administrative Cost (BWC) 14.09% | .2607 |
| Administrative Cost (IC) 2.25% | .0416 |
| Disabled Workers' Relief Fund | .09 |
| Additional Disabled Workers' Relief Fund (.1% of premium at base rate) | .0019 |
| Total average collectible rate | 2.2442 |

Miscellaneous Rates and Assessments

1. No change in premium or assessment rates:
- A. Premium Payment Security Fund assessment
 - B. Additional Disabled Workers' Relief Fund assessment
 - C. Coal Workers' Pneumoconiosis Fund

Coal Workers' Pneumoconiosis Fund (CWPF) Executive Summary

Description of Fund: The Coal Workers' Pneumoconiosis Fund (CWPF) provides benefits for injured workers under the Federal Coal Mine Health and Safety Act of 1969. The federal government sets benefit levels and determines claim eligibility for benefits. The CWPF provides voluntary coverage to employers who have employee exposure to coal dust, as required by federal law. Ohio employers may choose to purchase the insurance from BWC, from a private carrier, or self insure.

Benefits provided by fund: CWPF provides Permanent and Total Disabled (PTD) pension benefits and medical payments to employees who have contracted pneumoconiosis in the course of their employment. CWPF provides for Death benefits for surviving spouses of injured workers who have contracted pneumoconiosis in the course of their employment and subsequently died from the pneumoconiosis.

Rate Method: Calculate and apply premium rates designed to provide premiums to equal the cost of all coal mining lung related occupational diseases that have injury dates during the policy year. The current rate will apply to new employers to the fund. A moratorium on premium collections has been in place beginning in the policy year 7-1-1999 through 7-1-2006 due to the high level of surplus. Premium is paid only by employers who have newly subscribed to the CWPF fund on or after May 15, 1999.

Oliver Wyman Rate Indication:

The BWC's consulting actuary Oliver Wyman's rate indication is for no change in rates at this time.

Administrator's Recommendation:

The Administrator is recommending no rate change and to continue a moratorium for CWPF subscribers to the fund with active dates prior to May 15, 1999.

Coal-Workers' Pneumoconiosis (Black Lung) Fund Rate History

| | |
|----------|---|
| 7-1-74 | Rates: Manual 1112 - \$6.30 Manual 1115 - \$3.68 |
| 7-1-75 | No Change |
| 7-1-76 | No Change |
| 7-1-77 | No Change |
| 7-1-78 | No Change |
| 7-1-79 | No Change |
| 7-1-80 | No Change; Administrative Cost now included as a part of the base rate |
| 7-1-81 | 30% increase |
| 7-1-82 | 30% increase; Manual 1116 was added |
| 7-1-83 | 30% decrease for Manual 1115 and Manual 1116 only |
| 7-1-84 | 30% decrease for Manual 1115 and Manual 1116 only |
| 7-1-85 | 30% decrease |
| 7-1-86 | 30% decrease |
| 7-1-87 | 30% decrease |
| 7-1-88 | No Change |
| 7-1-89 | No Change |
| 7-1-90 | 30% decrease |
| 7-1-91 | 30% decrease |
| 7-1-92 | No Change |
| 7-1-93 | No Change |
| 7-1-94 | No Change |
| 7-1-95 | No Change |
| 7-1-96 | No Change |
| 7-1-97 | 10% decrease |
| 7-1-98 | No Change |
| 7-1-99 | No Change |
| 7-1-2000 | No Change |
| 7-1-2001 | Rates: Manual 1112 - \$3.70 Manual 1115 - \$1.07 Manual 1116 - \$0.83 |
| 7-1-2002 | No Change |
| 7-1-2003 | No Change |
| 7-1-2004 | No Change |
| 7-1-2005 | No Change |
| 7-1-2006 | No Change |

Marine Industry Fund (MIF) Executive Summary

Description of Fund: The Marine Industry Fund provides voluntary coverage to Ohio employers with employees who work on or about navigable waters, as required by the Federal Longshoremen and Harbor Workers' Act. Ohio employers in the marine industry may choose to purchase the insurance from BWC, from a private carrier, or self insure.

Benefits provided by fund: A Marine Fund claim is filed with both the Department of Labor and the BWC. The Federal Government determines the claimant eligibility for benefits and sets the benefit levels. An injured worker may only receive lost time benefits from the federal claim or the BWC claim, but not from both for the same period. Medical benefits may be paid from either the federal claim or the BWC claim as long as duplicate payments do not occur. Injured workers covered under the Marine Industry Fund are entitled to the same benefits as other injured workers **except** for the following:

- Living Maintenance and Living Maintenance Wage Loss benefits
- Lump Sum Advancements
- Rehabilitation Services only as ordered by the Department of Labor

Rate Method: Calculate and apply premium rates designed to provide premiums to equal the cost of all losses related to the Marine Industry Fund exposure that have injury dates during the policy year.

Oliver Wyman Rate Indication:

The BWC's consulting actuary Oliver Wyman has recommended a rate decrease of ten percent (10%) to twenty percent (20%).

Administrator Recommendation:

The Administrator is recommending a decrease of 10 percent (10%).

Marine Industry Fund Rate History

| | |
|----------|---|
| 7-1-80 | Inception of the Marine Industry Fund with the creation of Manuals 9705, 9711, 9719, 9725 and 9741 |
| 1-1-81 | Manuals 9702 and 9740 were added |
| 7-1-81 | No Change |
| 7-1-82 | 30% increase All Marine Industry Fund risks must have Manual 7772 in the Ohio State Insurance Fund |
| 7-1-83 | 30% increase |
| 7-1-84 | No Change |
| 7-1-85 | No Change |
| 7-1-86 | No Change |
| 7-1-87 | No Change |
| 7-1-88 | No Change |
| 7-1-89 | No Change |
| 7-1-90 | No Change |
| 7-1-91 | No Change |
| 7-1-92 | No Change |
| 7-1-93 | No Change |
| 7-1-94 | No Change |
| 7-1-95 | No Change |
| 7-1-96 | No Change |
| 7-1-97 | 10% decrease |
| 7-1-98 | No Change |
| 7-1-99 | No Change |
| 7-1-2000 | No Change |
| 7-1-2001 | No Change |
| 7-1-2002 | No Change |
| 7-1-2003 | No Change |
| 7-1-2004 | No Change |
| 7-1-2005 | 12% Decrease |
| 7-1-2006 | No Change |

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4123-17-19 EMPLOYER CONTRIBUTION TO THE MARINE INDUSTRY FUND

The administrator of workers' compensation, with the advice and consent of the workers' compensation oversight commission, has authority to establish contributions made to the marine industry fund by employers pursuant to sections 4121.121 and 4131.14 of the Revised Code. The administrator hereby sets the premium rates per one hundred dollar unit of payroll to be effective July 1, ~~2005~~ 2007 as indicated in attached appendix A.

Effective: 7/1/2007

Prior Effective Dates: 7/1/90, 7/1/97, 7/1/05,

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Appendix A

Rates are for each \$100 unit of payroll

| NCCI Manual | Code Manual Rate |
|-------------|------------------|
| 6802 | \$16.71 |
| 6847 | \$32.06 |
| 7310 | \$15.50 |
| 7325 | \$42.01 |
| 7330 | \$16.71 |
| 8707 | \$42.01 |
| 8708 | \$10.68 |

NOTE: Manual descriptions for the classifications are in the NCCI Classification section of this publication.

Ohio's underwriting coverage of these manuals is subject to approval by the Federal Government.

Disabled Workers' Relief Fund (DWRF I)

Executive Summary

Description of Fund: The Disabled Workers' Relief Fund (DWRF I) provides for supplementary payments to workers whose combined PTD plus Social Security disability benefits are lower than the DWRF entitlement amount on claims that occurred prior to 1987.

Benefits provided by fund: This allows for cost of living increases to injured workers receiving PTD benefits.

Rate Method: This fund is on a terminal funding or cash flow basis in which the premiums collected each policy year are to equal the payments made in the same policy year without regard to the accident/injury year. The ORC 4123.411 (A) requires that the assessment should be levied at a rate of at least five but not to exceed ten cents per one hundred dollars of payroll, such rate to be determined annually for each employer group, which will produce an amount no greater than the amount the administrator estimates to be necessary to carry out such sections for the period for which the assessment is levied.

Oliver Wyman Rate Indication:

| Employer Type | Previous Rate | Proposed Rate |
|--|----------------------|----------------------|
| Private Employer (PA) | \$0.10 | \$0.09 |
| Public Employer Taxing Districts (PEC) | \$0.08 | \$0.06 |
| Public Employer State Agency (PES) | \$0.06 | \$0.05 |

Administrator Recommendation:

The Administrator is recommending adopting the above proposed rates.

Disabled Workers' Relief Fund -- History--Assessment For Injuries Prior to 1-1-87

| EMPLOYER GROUP | | | |
|--|------------------------|-----|---------------------------|
| Private Fund: | 1959 to 1975 | .03 | Per \$100 Unit of Payroll |
| | 1976 to 6-30-80 | .05 | |
| | 7-1-80 | .10 | |
| | | | |
| Self-Insured: | 1959 to 1975 | .03 | Per \$100 Unit of Payroll |
| | 1976 to 6-30-80 | .05 | |
| | 7-1-80 to 6-30-81 | .08 | |
| | 7-1-81 to 8-21-86 | .05 | |
| | 8-22-86* | | |
| <p>*Effective 8-22-86 self-insured employers must reimburse the Bureau of Workers' Compensation for DWRF benefits paid to claimants in claims which the employer was the employer of record.</p> | | | |
| | | | |
| Public Employer Taxing Districts | 1959 to 1975 | .03 | Per \$100 Unit of Payroll |
| | 1976 to 1979 | .05 | |
| | 1980 to 2003 | .10 | |
| | 1-1-2004 to 12-31-2004 | .09 | |
| | 1-1-2005 to 12/31/2006 | .08 | |
| | | | |
| Public Employer State Agencies | 1959 to 1975 | .03 | Per \$100 Unit of Payroll |
| | 1976 to 6-30-1980 | .05 | |
| | 7-1-1980 to 6-30-2004 | .10 | |
| | 7-1-2004 to 6-30-2005 | .08 | |
| | 7-1-2005 to 6/30/2007 | .06 | |

Additional Disabled Workers' Relief Fund (DWRF II) Executive Summary

Description of Fund: The Additional Disabled Workers' Relief Fund (DWRF II) provides supplementary payments to workers whose combined PTD plus Social Security disability benefits are lower than the DWRF entitlement amount on claims that occurred in 1987 and after. Senate Bill 307 established DWRF II, with the apparent legislative intent of actuarially solvent pre-funding of DWRF benefits for injuries occurring in 1987 and subsequent. This pre-funding caused the DWRF II fund to grow. Subsequently, a formal Attorney General opinion in 1993 required that DWRF II operate on a terminal funding or cash flow basis.

Benefits provided by fund: This allows for cost of living increases to injured workers receiving PTD benefits.

Rate Method: The current rate is one tenth of one percent of premium at base rate. The ORC 4123.411 (B) states that the BWC shall levy an assessment against all employers at a rate per one hundred dollars of payroll, such rate to be determined annually for each classification of employer in each employer group, which will produce an amount no greater than the amount the administrator estimates to be necessary to carry out such sections for the period for which the assessment is levied. Case Notes number 8 and OAG No. 93-011 states that the ORC does not authorize the Administrator of Workers' Compensation to levy the assessment therein described at a rate that will create a reserve within the DWRF.

Oliver Wyman Rate Indication:

The BWC's consulting actuary, Oliver Wyman has recommended that the DWRF II rate remain at one-tenth of one percent of premium at base rate.

Administrator Recommendation:

The Administrator is recommending the rate remain at one-tenth of one percent of premium at base rate.

**Disabled Workers' Relief Fund -- History--Assessment
For Injuries On and After 1-1-87**

| EMPLOYER GROUP | PERIOD | PERCENT OF PREMIUM COMPUTED AT BASE RATE |
|--------------------|---|--|
| Private Employers: | 1-1-87 to 12-31-87 | 2% |
| | 1-1-88 to 12-31-88 | 3% |
| | 1-1-89 to 12-31-89 | 4% |
| | 1-1-90 to 12-31-90 | 5% |
| | 1-1-91 to 12-31-91 | 5% |
| | 1-1-92 to 06-30-93 | 5% |
| | 7-1-93 to 12-31-93 | .1% |
| | 1-1-94 to 12-31-94 | .1% |
| | 1-1-95 to 12-31-95 | .1% |
| | 1-1-96 to 12-31-96 | .1% |
| | 1-1-97 to 12-31-97 | .1% |
| | 1-1-98 to 12-31-98 | .1% |
| | 1-1-99 to 12-31-99 | .1% |
| | 1-1-2000 to 12-31-2000 | .1% |
| | 1-1-2001 to 12-31-2001 | .1% |
| | 1-1-2002 to 12-31-2002 | .1% |
| | 1-1-2003 to 12-31-2003 | .1% |
| | 1-1-2004 to 12-31-2004 | .1% |
| | 1-1-2005 to 12-31-2005 | .1% |
| | 1-1-2006 to 12-31-2006 | .1% |
| Self-Insured: | Reimburse the Bureau of Workers' Compensation for DWRF benefits to claimants in claims in which the employer is the employer of record. | |

**Disabled Workers' Relief Fund -- History--Assessment
For Injuries On and After 1-1-87**

| | | |
|-----------------------------------|------------------------|-----|
| Public Employer Taxing Districts: | 1-1-87 to 12-31-87 | 2% |
| | 1-1-88 to 12-31-88 | 3% |
| | 1-1-89 to 12-31-89 | 4% |
| | 1-1-90 to 12-31-90 | 5% |
| | 1-1-91 to 12-31-91 | 5% |
| | 1-1-92 to 12-31-92 | 5% |
| | 1-1-93 to 12-31-93 | .1% |
| | 1-1-94 to 12-31-94 | .1% |
| | 1-1-95 to 12-31-95 | .1% |
| | 1-1-96 to 12-31-96 | .1% |
| | 1-1-97 to 12-31-97 | .1% |
| | 1-1-98 to 12-31-98 | .1% |
| | 1-1-99 to 12-31-99 | .1% |
| | 1-1-2000 to 12-31-2000 | .1% |
| | 1-1-2001 to 12-31-2001 | .1% |
| | 1-1-2002 to 12-31-2002 | .1% |
| | 1-1-2003 to 12-31-2003 | .1% |
| | 1-1-2004 to 12-31-2004 | .1% |
| | 1-1-2005 to 12-31-2005 | .1% |
| | 1-1-2006 to 12-31-2006 | .1% |
| | | |
| Public Employer State Agencies: | 1-1-87 to 12-31-87 | 2% |
| | 1-1-88 to 12-31-88 | 3% |
| | 1-1-89 to 12-31-89 | 4% |
| | 1-1-90 to 12-31-90 | 5% |
| | 1-1-91 to 12-31-91 | 5% |
| | 1-1-92 to 06-30-93 | 5% |
| | 7-1-93 to 12-31-93 | .1% |
| | 1-1-94 to 12-31-94 | .1% |
| | 1-1-95 to 12-31-95 | .1% |
| | 1-1-96 to 12-31-96 | .1% |
| | 1-1-97 to 12-31-97 | .1% |
| | 1-1-98 to 12-31-98 | .1% |
| | 1-1-99 to 12-31-99 | .1% |
| | 1-1-2000 to 12-31-2000 | .1% |
| | 1-1-2001 to 12-31-2001 | .1% |
| | 1-1-2002 to 12-31-2002 | .1% |
| | 1-1-2003 to 12-31-2003 | .1% |
| | 1-1-2004 to 12-31-2004 | .1% |
| | 1-1-2005 to 12-31-2005 | .1% |
| | 1-1-2006 to 12-31-2006 | .1% |

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4123-17-29 **Disabled workers' relief fund; employers' assessments and self-insurers' payments.**

(A) State fund employers.

(1) In order to make disabled workers' relief fund ("DWRF") payments to claimants having dates of injury or disability prior to January 1, 1987, assessments shall be levied in the following manner for so long as payments to such claimants are required:

- (a) Private state fund employers: ~~ten~~ nine cents per one-hundred-dollar unit of payroll, effective ~~January 1, 1980~~ July 1, 2007;
- (b) Public employer taxing districts: ~~eight~~ six cents per one-hundred-dollar unit of payroll, effective January 1, ~~2006~~ 2007;
- (c) Public employer state agency: ~~six~~ five cents per one-hundred-dollar unit of payroll, effective July 1, ~~2006~~ 2007.

These assessments shall be billed at the same time state insurance fund premiums are billed and payments shall be credited to the disabled workers' relief fund.

(2) In order to make DWRF payments to claimants having dates of injury on or after January 1, 1987, assessments shall be levied in the following manner for so long as payments to such claimants are required:

- (a) Private state fund employers: one-tenth of one per cent of premium, computed at basic rate, effective July 1, 1993;
- (b) Public employer taxing districts: one-tenth of one per cent of premium, computed at basic rate, effective January 1, 1993;
- (c) Public employer state agency: one-tenth of one per cent of premium, computed at basic rate, effective July 1, 1993;

These assessments shall be billed at the same time state insurance fund premiums are billed and payments shall be credited to the disabled workers' relief fund.

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(B) Self-insuring employers.

- (1) Each self-insuring employer shall reimburse the bureau for DWRF payments made in claims in which it is the employer of record, without regard to the date the employer was granted the privilege to pay compensation directly, for all DWRF payments made on or after August 22, 1986. Upon default and a finding of noncompliance by the administrator of workers' compensation, reimbursement shall be made from the self-insuring employers' guaranty fund.
- (2) Self-insuring employers shall be billed on a semi-annual basis for the DWRF payments made pursuant to this rule.

Self-Insured Employers Guaranty Fund (SIEGF), Self-Insured Surety Bond Fund (SBF) and Self-Insured Employers Assessment Fund Executive Summary

Description of Fund: The Self-Insured Employers Assessment Fund is established to support the safety and hygiene fund, the administrative cost fund, and the portion of the surplus fund that is mandatory as they relate to self-insured employers. The Self-Insured Employers Guaranty Fund (SIEGF) and the Self-Insured Surety Bond Fund (SBF) provide for payment of compensation and benefits to injured workers of bankrupt self-insured employers. Claims with injury dates prior to 1987, self-insured employers provided security in the form of a letter of credit or a bond from private insurance carriers to cover the cost of claims in the event of bankruptcy or default. This is referred to as the Surety Bond Fund (SBF). It was replaced in 1993 by the Self-Insured Employers Guaranty Fund (SIEGF) for claims with injury dates after 1986.

Benefits provided by the SIEGF and SBF funds: All injured worker benefits (including DWRP) that would normally be paid by the self-insured employer that has defaulted.

SIEGF Rate Method: The BWC is to maintain a minimum balance of funds in the SIEGF at rates as low as possible to assure sufficient moneys to guarantee the payment of any claims against the fund. The Ohio Administrative Code 4123-19-15 (B) requires the SIEGF to maintain a balance of 1.25 times the annual claims disbursements. When the BWC determines that the SIEGF has insufficient funds, an assessment is necessary to ensure the minimum balance in the fund and will assess all self-insuring employers an annual contribution. New self-insuring employers will be assessed six percent of base rate premium as reported on the last two six month payroll reports for the first three years of self-insurance. When a self-insured employer defaults on its self-insured workers' compensation obligations, the BWC moves to recover monies paid from the SIEGF and SBF by filing bankruptcy claims and by drawing on additional security that may have been placed in BWC's favor by the defaulting employer.

The following is a list of the assessments:

1. Mandatory Surplus Fund (SI Surplus Fund): This assessment is to fund costs charged to the Self-Insured Mandatory Surplus Fund which is an account of the Surplus Fund of the State Insurance Fund. These costs are primarily for claims with injury dates prior to 1987 of bankrupt self-insured employers and for specific medical costs such as some medical exams and prostheses.
2. Safety and Hygiene Fund (S&H Fund): This assessment is to fund the work of the Division of Safety and Hygiene for self-insured employers.

3. Self-Insured Employers Guaranty Fund (SIEGF Fund): This assessment is to fund the costs charged to the SIEGF. These costs are for claims of bankrupt self-insured employers with injury dates after 1986, and for the costs of DWRF on all claims of bankrupt self-insured employers with any injury date.
4. Administrative Cost Fund (ACF): This assessment is to fund the administrative costs for the BWC and IC, for only the activities that support the self-insured employers.
5. Optional Handicap Program (SI Surplus Fund): This assessment mutualizes the costs of handicap claims among the self-insured participants of this program. Currently, there are no self-insured employers participating.
6. Optional Rehabilitation Program (SI Surplus Fund): This assessment mutualizes the costs of rehabilitation among the self-insured participants in this program. Currently, six self-insured employers participate.
7. Optional Disallowed Claim Reimbursement Program (SI Surplus Fund): This assessment mutualizes the costs of disallowed claims among the self-insured employers in this program. This is a new program designed to reimburse self-insured employers for claim costs ordered to be paid by the Industrial Commission that were ultimately denied. Currently, six hundred seventy-three self-insured employers participate.

Number of Bankrupt Ohio Employers: 242

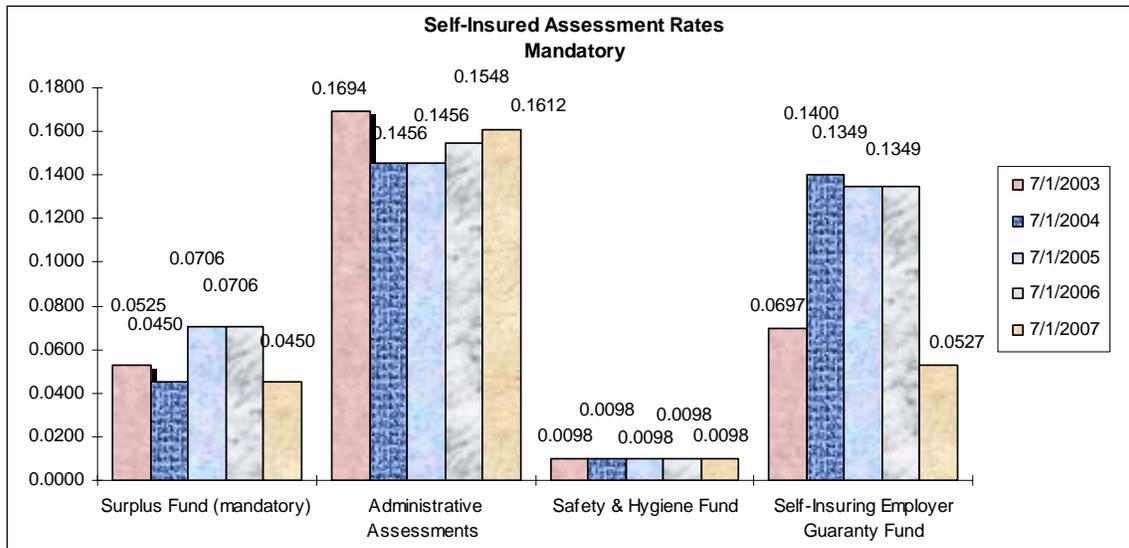
| Calendar Year | Number of Bankruptcies |
|----------------------|-------------------------------|
| 1993 | 7 |
| 1994 | 1 |
| 1995 | 3 |
| 1996 | 4 |
| 1997 | 2 |
| 1998 | 6 |
| 1999 | 4 |
| 2000 | 12 |
| 2001 | 13 |
| 2002 | 24 |
| 2003 | 13 |
| 2004 | 23 |
| 2005 | 8 |
| 2006 | 8 |
| 2007 to date | 2 |

Ohio Revised Code: Chapter 4123.35.1
Ohio Administrative Code: 4123-19-15

Self-Insuring Employer Assessment Funds

**Assessment Rates
Per \$1.00 Paid Comp**

| Mandatory | <u>7/1/2003</u> | <u>7/1/2004</u> | <u>7/1/2005</u> | <u>7/1/2006</u> | <u>7/1/2007</u> | <u>2006/2007 Change</u> |
|--------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------------------|
| Surplus Fund (mandatory) | 0.0525 | 0.0450 | 0.0706 | 0.0706 | 0.0450 | -0.0256 |
| Self-Insuring Employer Guaranty Fund | 0.0697 | 0.1400 | 0.1349 | 0.1349 | 0.0527 | -0.0822 |
| Administrative Cost Fund: <u>BWC</u> | <u>0.0805</u> | <u>0.0790</u> | <u>0.0790</u> | <u>0.0822</u> | <u>0.0822</u> | +0.0000 |
| Administrative Fund: <u>IC</u> | <u>0.0889</u> | <u>0.0666</u> | <u>0.0666</u> | <u>0.0726</u> | <u>0.0790</u> | +0.0064 |
| Safety & Hygiene Fund | 0.0098 | 0.0098 | 0.0098 | 0.0098 | 0.0098 | +0.0000 |
| Mandatory Assessments | 0.3014 | 0.3404 | 0.3609 | 0.3701 | 0.2687 | -0.1014 |
| Optional | | | | | | |
| Surplus Fund (rehabilitation) | 0.1300 | 0.1300 | 0.1300 | 0.1300 | 0.1300 | +0.0000 |
| Surplus Fund (handicap) | 0.2480 | 0.2480 | 0.2480 | 0.2480 | 0.2480 | +0.0000 |
| Surplus Fund (disallowed claims) | n/a | n/a | n/a | n/a | 0.0236 | +0.0236 |



- Mandatory Assessment Rates based upon Paid Compensation of \$218,000,000
- Surplus Fund (mandatory) Regular Disbursements less Adjustments is \$9,800,000
- Surplus Fund (disallowed claims) Claim Disbursements are \$2,900,000 and based upon paid compensation of \$123,000,000
- SIEGF Total Assets as of December 31, 2006 are \$39,600,000 and Current Year Disbursements are \$22,130,000
- Projected Rehabilitation Reimbursements are \$124,500 and based upon paid compensation of \$958,000

4123-17-32 Self-insuring employer assessment based upon paid compensation

The administrator of workers' compensation, with the advice and consent of the workers' compensation oversight commission, has authority to determine and levy against self-insuring employers amounts to be paid to support the safety and hygiene fund, the administrative cost fund, the portion of the surplus fund that is mandatory, the portion of the surplus fund that is used for rehabilitation reimbursement subject to the self-insuring employer's election under section 4121.66 of the Revised Code, the portion of surplus fund that is used for handicap reimbursement subject to the self-insuring employer's election under section 4123.343 of the Revised Code, and the portion of the surplus fund used for claims reimbursement for self-insuring employers under division (H) of section 4123.512 of the Revised Code, pursuant to sections 4121.12, 4121.37, 4121.66, 4123.34, 4123.342, and 4123.35 of the Revised Code in conjunction with rule 4123-19-01 of the Administrative Code. The administrator hereby sets the self-insuring employer assessments to be effective July 1, ~~2006~~ 2007, for the period July 1, ~~2006~~ 2007, to June 30, ~~2007~~ 2008, payable in two equal remittances by February ~~28~~ 29, ~~2007~~ 2008, and August 31, ~~2007~~ 2008, as follows:

(A) The assessments shall be on the basis of the paid compensation attributable to the individual self-insuring employer as a fraction of the total amount of paid compensation for the previous calendar year attributable to all amenable self-insuring employers.

(B) Paid compensation means all amounts paid by a self-insuring employer for living maintenance benefits, all amounts for compensation paid pursuant to sections 4121.63, 4121.67, 4123.56, 4123.57, 4123.58, 4123.59, 4123.60 and 4123.64 of the Revised Code, all amounts paid as wages in lieu of such compensation, all amounts paid in lieu of such compensation under a non-occupational accident and sickness program fully funded by the self-insuring employer, and all amounts paid by a self-insuring employer for a violation of a specific safety standard pursuant to section 35 of article II, Ohio Constitution and section 4121.47 of the Revised Code. Any reimbursement received from the surplus fund pursuant to section 4123.512 of the Revised Code by a self-insuring employer for any such payments or compensation paid shall be applied to reduce the amount of paid compensation reported in the year in which the reimbursement is made. Any amount recovered by the self-insuring employer under section 4123.931 of the Revised Code and any amount that is determined not to have been payable to a claimant in any final administrative or judicial proceeding shall be deducted, in the year collected, from the amount of paid compensation reported.

(C) The assessments shall be computed for all self-insuring employers operating in Ohio by multiplying the following rates by the individual self-insuring employer's paid compensation for calendar year ~~2005-2006~~:

- (1) Safety and hygiene fund: .0098.

(2) Administrative cost fund, BWC: .0822.

(3) Administrative cost fund, IC: ~~.0726~~ .0790.

(4) Surplus fund (mandatory): ~~.0706~~ .0450.

(D) The assessment to fund the portion of the surplus fund that is used for rehabilitation reimbursement for all self-insuring employers who have not made an election to opt out of the rehabilitation reimbursement program under the provisions of section 4121.66 of the Revised Code shall be computed by multiplying the following rate by the individual self-insuring employer's paid compensation for calendar year ~~2005~~ 2006:

(1) Surplus fund (rehabilitation): .1300.

(E) The assessment to fund the portion of the surplus fund that is used for handicap reimbursement for all self-insuring employers operating in Ohio who have not made an election to opt out of the handicap reimbursement program under the provisions of division (G) of section 4123.343 of the Revised Code shall be computed by multiplying the following rate by the individual self-insuring employer's paid compensation for calendar year ~~2005~~ 2006:

(1) Surplus fund (handicap): .2480.

(F) The assessment to fund the portion of the surplus fund that is used for claims reimbursement for all self-insuring employers operating in Ohio who have not made an election to opt out of the right to reimbursement under the provisions of division (H) of section 4123.512 of the Revised Code shall be computed by multiplying the following rate by the individual self-insuring employer's paid compensation for calendar year ~~2005~~ 2006:

(1) Surplus fund (disallowed claims reimbursement): ~~.0360~~ .0236.

(G) An employer who no longer is a self-insuring employer in Ohio or who no longer is operating in this state shall continue to pay assessments for administrative costs and for the portion of the surplus fund that is mandatory. The assessments shall be computed by such employer by multiplying the following rates by the individual employer's paid compensation for calendar year ~~2005~~ 2006:

(1) Administrative cost fund, BWC: .0822.

(2) Administrative cost fund, IC: ~~.0726~~ .0790.

(3) Surplus fund (mandatory): ~~.0706~~ .0450.

(H) If the paid compensation for a self-insuring employer for calendar year ~~2005~~ 2006 is less than ~~twelve~~ thirteen thousand ~~seven~~ eight hundred and ~~fifty-five~~ eighty-eight dollars

and ~~ten~~ eighty nine cents, the minimum assessments shall be paid as follows:

- (1) Safety and hygiene fund: ~~\$125.00~~ \$136.11.
- (2) Administrative cost fund, BWC: ~~\$1,048.47~~ \$1,141.67.
- (3) Administrative cost fund, IC: ~~\$926.02~~ \$1097.22.
- (4) Surplus fund (mandatory): ~~\$900.51~~ \$625.00.

If the paid compensation for calendar year ~~2005~~ 2006 for a self-insuring employer which has not made an election to opt out of the rehabilitation reimbursement program effective on or before July 1, ~~2006~~ 2007 is less than fifteen thousand three hundred and eighty four dollars and sixty two cents, the minimum assessment for the surplus fund (rehabilitation) shall be two thousand dollars.

If the paid compensation for calendar year ~~2005~~ 2006 for a self-insuring employer which has opted to participate in the handicap reimbursement program is less than fifty thousand dollars, the minimum assessment for the surplus fund (handicap) shall be twelve thousand four hundred dollars.

Assessments are applicable only for the funds to which payments must be made based upon the status and the options exercised relative to the handicap reimbursement program and the rehabilitation reimbursement program.

An employer who no longer is a self-insuring employer in Ohio or no longer is operating in this state and who has less than ~~twelve~~ thirteen thousand ~~seven~~ eight hundred and ~~fifty five~~ eighty eight dollars and ~~ten~~ eighty nine cents in paid compensation for calendar year ~~2005~~ 2006 shall have a reduced minimum assessment. The minimum assessment shall be ninety per cent of the above minimum assessments in this paragraph in the year after becoming inactive, eighty per cent in the following year, seventy per cent in the following year, and so forth, being reduced ten per cent each year, until the assessment is phased out over ten years.

(I) If an individual self-insuring employer has become self-insured in the last five years (on or after July 1, ~~2001~~ 2002) paid compensation shall be as defined in paragraph (B) of this rule and shall additionally include compensation paid in calendar year ~~2005~~ 2006 by the state insurance fund for claim costs directly attributable to the employer prior to becoming self-insured.

(J) The initial assessment to a self-insuring employer in its first calendar year of operation as a self-insuring employer shall be prorated to cover the time period that self-insurance was in effect, but shall not be less than the minimum assessment for a self-insuring employer as provided in paragraph ~~(G)~~ (H) of this rule.

(K) Pursuant to rule 4123-19-15 of the Administrative Code, the following assessment,

to be billed and payable in two equal remittances by February ~~28~~ 29, ~~2007~~ 2008, and August 31, ~~2007~~ 2008, shall be computed for all self-insuring employers by multiplying the following rate by the individual self-insuring employer's paid compensation for calendar year ~~2005~~ 2006:

(1) Self-insuring employer guaranty fund: ~~.1349~~ .0527.

(L) If an employer fails to pay the assessment when due, the administrator may add a late fee penalty of not more than five hundred dollars to the assessment plus an additional penalty amount as follows:

(1) For an assessment from sixty-one to ninety days past due, the prime interest rate, multiplied by the assessment due;

(2) For an assessment from ninety-one to one hundred twenty days past due, the prime interest rate plus two per cent, multiplied by the assessment due;

(3) For an assessment from one hundred twenty-one to one hundred fifty days past due, the prime interest rate plus four per cent, multiplied by the assessment due;

(4) For an assessment from one hundred fifty-one to one hundred eighty days past due, the prime interest rate plus six per cent, multiplied by the assessment due;

(5) For an assessment from one hundred eighty-one to two hundred ten days past due, the prime interest rate plus eight per cent, multiplied by the assessment due;

(6) For each additional thirty-day period or portion thereof that an assessment remains past due after it has remained past due for more than two hundred ten days, the prime interest rate plus eight per cent, multiplied by the assessment due.

For purposes of this division, "prime interest rate" means the average bank prime rate, and the administrator shall determine the prime interest rate in the same manner as a county auditor determines the average bank prime rate under section 929.02 of the Revised Code.

Executive Summary

Proposed HPP Hospital Outpatient Services Payment Rule

Background

The Health Partnership Program (HPP) rules were first promulgated in 1996 prior to the implementation of the HPP in 1997. HPP rules establishing criteria for the payment of various specific medical services were initially adopted in February 1997, and have subsequently been amended and updated from time to time as needed.

Ohio Administrative Code 4123-6-37, adopted February 12, 1997 and amended March 1, 2004, provides general criteria for the payment of inpatient and outpatient hospital services under the HPP. Ohio Administrative Code 4123-6-37.1, adopted January 1, 2007 and amended April 1, 2007, provides specific methodology for the payment of inpatient hospital services.

Proposed Ohio Administrative Code 4123-6-37.2 would provide specific methodology for the payment of outpatient hospital services.

Proposed rule:

4123-6-37.2 Payment of hospital outpatient services.

The proposed rule provides that unless an MCO has negotiated a different payment rate with a hospital pursuant to rule 4123-6-08 of the Administrative Code, reimbursement for hospital outpatient services for Ohio hospitals with a 2004 total outpatient cost-to-charge ratio as reported to Ohio Medicaid shall be equal to the hospital's allowable billed charges multiplied by the hospital's reported cost-to-charge ratio plus sixteen percentage points, not to exceed sixty percent of the hospital's allowed billed charges.

The proposed rule also provides that unless an MCO has negotiated a different payment rate with a hospital pursuant to rule 4123-6-08 of the Administrative Code, reimbursement for hospital outpatient services for Ohio hospitals without a 2004 total outpatient cost-to-charge ratio as reported to Ohio Medicaid and out-of-state hospitals shall be equal to fifty-six percent of the hospital's allowed billed charges.

4123-6-37.2 Payment of hospital outpatient services.

Unless an MCO has negotiated a different payment rate with a hospital pursuant to rule 4123-6-08 of the Administrative Code, reimbursement for hospital outpatient services shall be as follows:

(A) For Ohio hospitals with a 2004 total outpatient cost-to-charge ratio as reported to Ohio medicaid, reimbursement shall be equal to the hospital's allowable billed charges multiplied by the hospital's reported cost-to-charge ratio plus sixteen percentage points, not to exceed sixty percent of the hospital's allowed billed charges.

(B) For Ohio hospitals without a 2004 total outpatient cost-to-charge ratio as reported to Ohio medicaid and out-of-state hospitals, reimbursement shall be equal to fifty-six percent of the hospital's allowed billed charges.

Effective:

R.C. 119.032 review dates:

Certification

Date

Promulgated Under: 119.03

Statutory Authority: 4121.12, 4121.30, 4121.31, 4123.05

Rule Amplifies: 4121.121, 4121.44, 4121.441, 4123.66



Ohio Bureau of Workers' Compensation Oversight Commission

RFP # B07016

**Presentation of Results
June 14, 2007**



Services Requested

- Task A - Provide an analysis of the BWC underwriting profit for the past five years and identify underlying drivers
- Task B - Evaluate the current BWC surplus adequacy and premium ratemaking methodologies
- Task C - Evaluate the BWC's current practices relative to industry standards in the areas of ratemaking and reserving



Presentation of Results

- I. BWC Profitability (Task A) – Mark Brissman
- II. BWC Surplus Adequacy (Task B) – Matt South
- III. BWC Ratemaking Methodologies – Joe Kilroy
 - i. Current Practices (Task B)
 - ii. Comparison to Industry (Task C)
- IV. BWC Reserving Methodologies (Task C) – Joe Kilroy



I. BWC Profitability



Approach

We Evaluated Five-Year BWC Historical Results by:

- Reviewing historical financial and actuarial documents
- Conducting personal interviews of the BWC staff
- Testing the financial performance by restating results based on underlying drivers (including loss reserve discounting and a hindsight review of ultimate losses)
- Reviewing individual fund performance after cost allocation of the Administrative Cost Fund
- Comparing key performance metrics to those of two current and two former state monopolistic funds



Insurance Results

Insurance Results Stable

- Exposures insured, premiums collected, and losses paid
- Underlying factors of overall performance

| Fiscal Year | PA+PEC Payroll | PA+PEC Premiums | Paid Losses |
|-------------------------|---------------------------|----------------------------|------------------------|
| 2002 | 97,272 | 1,601 | 1,965 |
| 2003 | 99,388 | 1,627 | 2,080 |
| 2004 | 101,731 | 1,700 | 2,027 |
| 2005 | 104,021 | 1,762 | 2,150 |
| 2006 | 106,376 | 1,830 | 2,106 |
| 2002-2006 Change | 9% | 14% | 7% |
| Average Change | 2% | 3% | 2% |



Financial Aspects

Financial Aspects More Variable

- Carried loss reserves, shifting levels of premium discounts and refunds, fluctuations in investment returns

| Fiscal Year | Premium Discounts and Rebates | Loss Reserve Movements | Accounting Return on Investments |
|--------------------|--------------------------------------|-------------------------------|---|
| 2002 | 1,474 | 969 | -2.22% |
| 2003 | 641 | 1,281 | 3.15% |
| 2004 | 416 | 542 | 6.79% |
| 2005 | 233 | 767 | 5.35% |
| 2006 | (8) | (173) | 4.71% |

- 2005: Significant accounting change for the assessment funds with a restatement of the opening balance sheet:
 - Overall reduction of \$1.8 billion in net assets
 - increased liabilities by \$2.5 billion
 - increased assets by \$0.7 billion



Group Rating

Group Rating: Inequitable, but Neutral Overall Financial Effect

- Significant adverse effect on pricing equity [Task B report]
 - Prices for various groups are not reflective of underlying costs
 - Substantial cross-subsidization
 - Focus of Task A is not pricing inequities, but rather effect on overall financial results of the BWC
- From an overall financial perspective alone, not a material effect:
 - On the overall premiums collected (revenue neutral)
 - Losses incurred by the BWC
- The expenses of administering the group rating plan have a slightly negative, but immaterial, effect



Peer Comparisons

Currently monopolistic state funds – North Dakota, Washington

Previously monopolistic state funds:

– Nevada

- Privatized in 1999, taking on the prior liabilities and reinsuring them at a cost of \$775 million

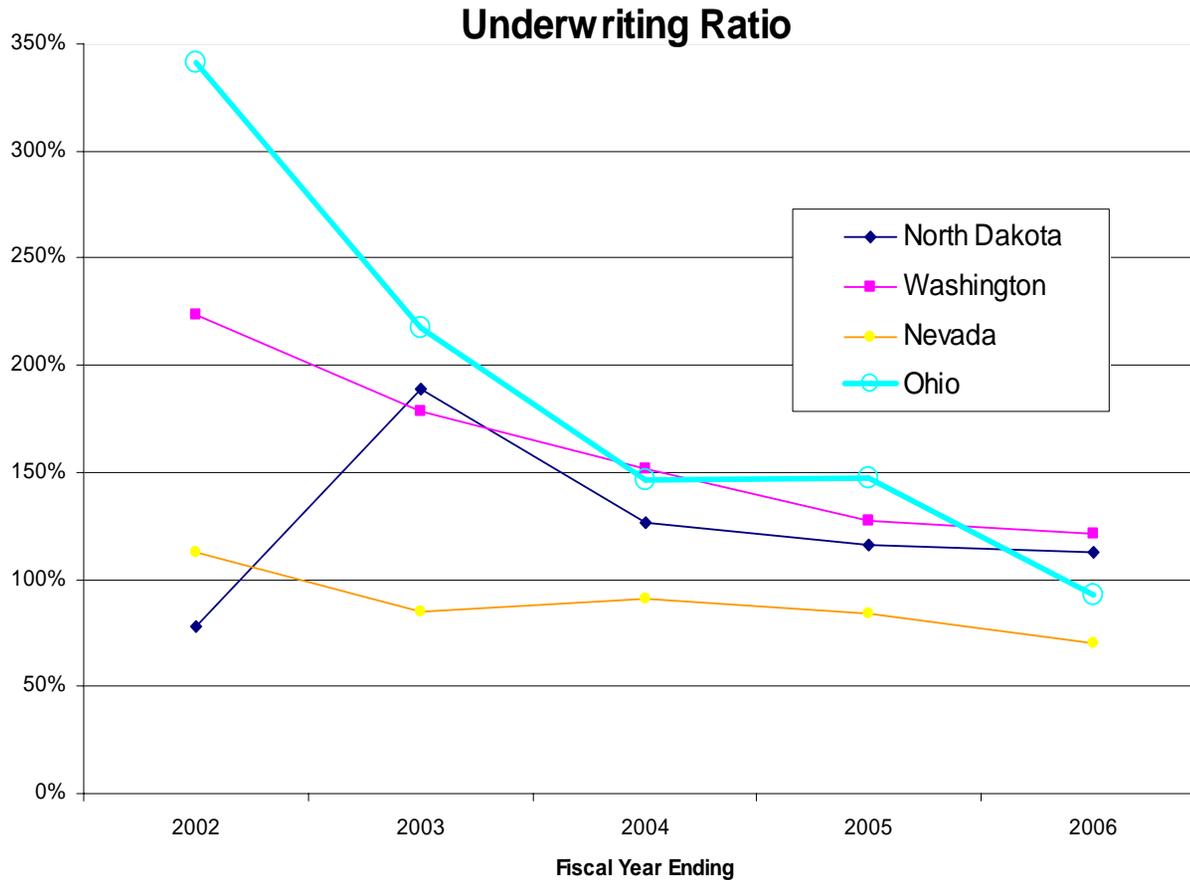
– West Virginia

- Privatized in 2005, did not assume the prior liabilities, and received \$400 million from the state (of which \$200 million is a “surplus note” bearing interest at 1.5%)

From an insurance operations viewpoint, as measured by the “underwriting ratio”, Ohio’s recent results are in line with its peer group

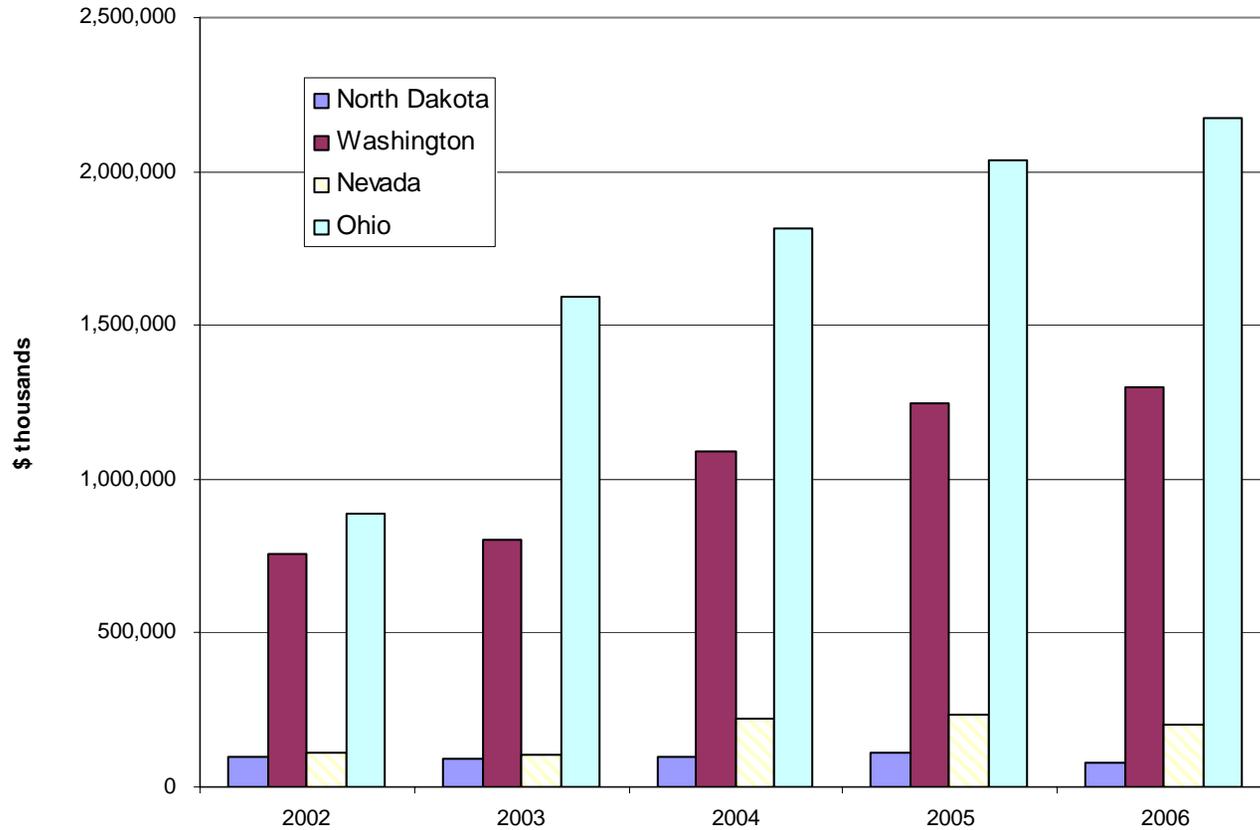


Peer Comparisons



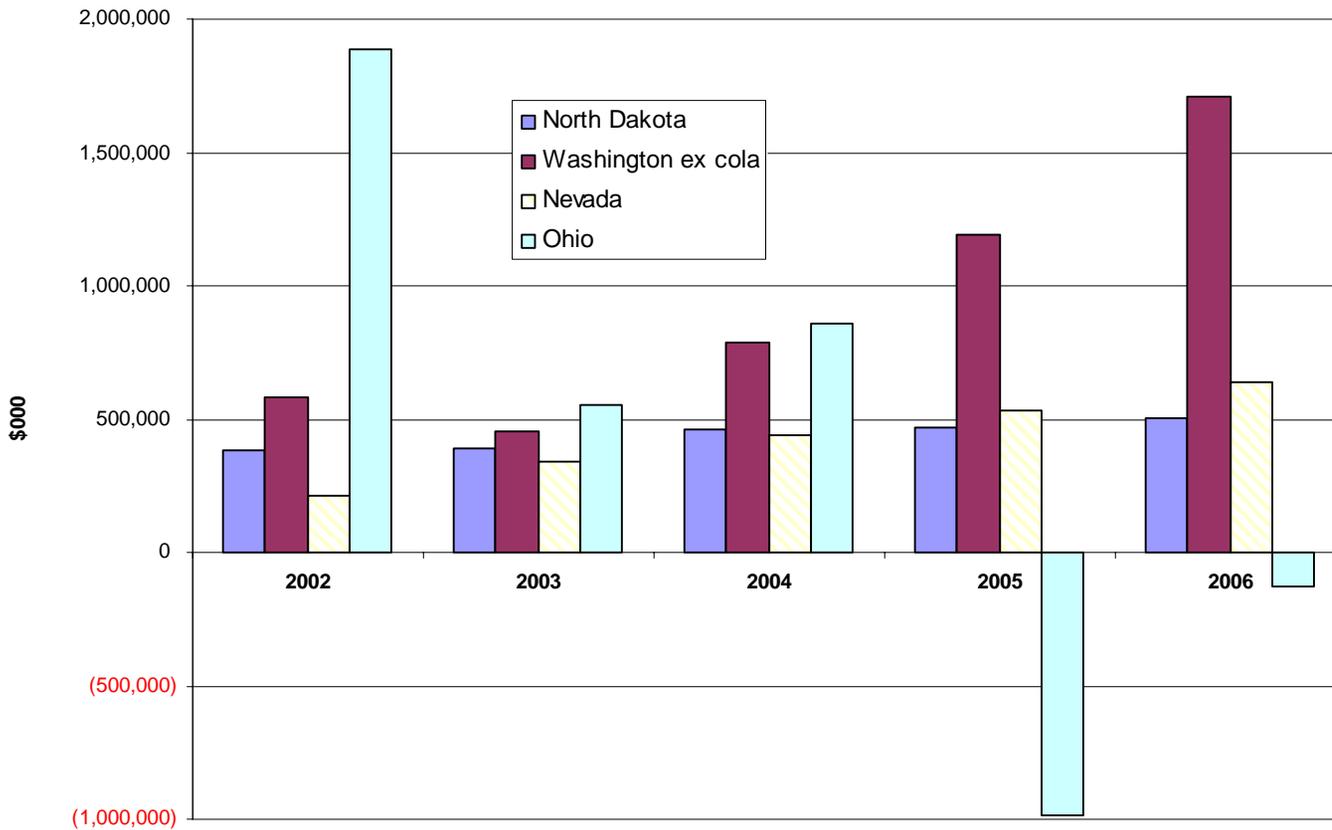
Peer Comparisons

Net Premiums



Peer Comparisons

Net Assets (a.k.a. "Surplus")



Peer Comparisons

2006 Peer Comparison

| | Premiums | Exp | Loss | Exp Ratio | Loss Ratio | Total Ratio |
|----------------------|----------|-----|-------|-----------|------------|-------------|
| North Dakota | 94 | 12 | 88 | 13% | 93% | 106% |
| Washington | 1,758 | 267 | 1,998 | 15% | 114% | 129% |
| Nevada | 208 | 67 | 79 | 32% | 38% | 70% |
| West Virginia | 761 | 26 | 703 | 3% | 92% | 96% |
| Ohio | 2,174 | 86 | 1,933 | 4% | 89% | 93% |



Peer Comparisons

2006 Peer Comparison

| | Net Premiums | Loss Reserves | Net Assets | Premium Leverage | Reserve Leverage |
|-----------------------------|-------------------------|--------------------------|-----------------------|-----------------------------|-----------------------------|
| North Dakota | 94 | 687 | 501 | 19% | 137% |
| Washington (ex cola) | 1,340 | 8,329 | 1,709 | 79% | 487% |
| Nevada | 208 | 641 | 641 | 32% | 100% |
| West Virginia | 761 | 561 | 268 | 284% | 209% |
| Ohio | 2,174 | 18,928 | -126 | #N/A | #N/A |



Individual BWC Funds

Individual BWC Funds Have Differing Results

- Administrative Cost Fund allocated to others for analysis
- Largest is the State Insurance Fund
 - Driver of overall results
 - Negative operating return on assets and historical ROE

| <u>Fund</u> | <u>Assets (\$M)</u> | <u>Return on Assets</u> |
|------------------------------------|---------------------|-------------------------|
| * State Insurance | 17,115 | -3% |
| * Public Work-Relief Employees | 21 | 5% |
| * Self-Insuring Employers Guaranty | 661 | 0% |
| * Administrative Cost | 428 | |
| Disabled Workers' Relief | 1,234 | 2% |
| Coal-Workers Pneumoconiosis | 223 | -2% |
| Marine Industry | 15 | 9% |



Contingency Funding

Limited Contingency Funding

- Measured by “Net Assets” in government accounting
 - Similar to “net worth” in private insurance companies
- Not an historical focus
- BWC resembles a social insurance mechanism rather than a private sector insurer due to different goals and risk tolerances
- In the past this has not caused any difficulty
- Several risks going forward including:
 - Could adversely affect the credit rating of the State of Ohio
 - Sudden adverse change in environment that creates a need for large market-disruptive price increases
 - Privatization would require an infusion of capital from the state
- A BWC policy to build up level of net assets would mitigate these risks



Summary: Historical Financial Results

No Red Flags

BWC operates as a social insurance mechanism: low net assets, large returned premiums, premium collected in arrears

Understandable differences with private insurers' financials

Variability driven by financial/accounting changes, not insurance operations

Extremely low cost of operation



II. BWC Surplus Adequacy



BWC Surplus Position

Surplus is the Reserve of Last Resort = Assets - Liabilities

BWC's Surplus Position at June 30, 2006:

- BWC had **negative** surplus of \$(126,000,000)

How Did We Get Here?

- Roughly **\$10 Billion** of surplus returned to employers as dividends over the past decade

Consequence: Negative surplus implies no capacity to absorb additional financial shocks without additional funds



Surplus: Options

Increase Investment Income Above Discount Rate in Reserves

- But this involves riskier assets and may result in less surplus

Assess Future Premium to Make Up Shortfall

- But this may discourage employers from locating in Ohio and will be unpopular/unfair

Reduce Benefits

Design and Implement a Dividend Policy Targeting Positive Surplus

- Building a reasonable surplus will allow the BWC to withstand negative financial events with its ability to meet commitments to injured workers intact
- Recent changes in surplus have been positive and should be retained



Target Surplus

Examined Several Target Surplus Methods: NAIC, S&P, AM Best etc.

Short-term Recommended Benchmark: NAIC Risk Based Capital

- June 2006 Required RBC = **\$2.65 Billion**
- Additional funds needed to reach this goal depend on view of BWC
 - State agency subject to GAS. A modified NAIC approach suggests at least an additional **\$2.8 Billion**
 - Commercial insurer subject to SAP. NAIC would insist on at least an additional **\$13.6 Billion**

Long-term Recommendation: Consider a Probabilistic Model

- Insurance industry trend is towards these types of models
- Projects likely future cash-flows based on current asset / liability mix
- Provides a range of surplus requirements and likelihoods of each
- BWC's own loss development variability can be incorporated



NAIC RBC Dynamic

NAIC Surplus Requirement: Not a Fixed Target

- The largest component of the RBC surplus requirement is R4 – Reserves
- Changing invested asset mix impacts the RBC requirement:
 - Moving \$3.0 Billion from US Bonds to Equities only has \$38 Million impact on RBC due to independence of the risk categories
 - Moving \$14.9 Billion from Bonds to Equities has \$812 Million impact on RBC

Example: NAIC RBC Calculation in (000)

| Risk Based Capital Category | (1) | (2) | (3) |
|--|------------------|-----------------------|---------------------|
| | As at Jun-06 | Assume \$3B Equity | (2) - (1) Change |
| R0 | 0 | 0 | 0 |
| R1 Fixed Income | 211,770 | 211,770 | 0 |
| R2 Equity | 521 | 450,521 | 450,000 |
| R3 Credit | 0 | 0 | 0 |
| R4 U/W Risk: Reserves | 2,528,410 | 2,528,410 | 0 |
| R5 U/W Risk: Premium | 768,053 | 768,053 | 0 |
| Total Required RBC After Covariance | 2,650,963 | 2,688,973 | 38,010 |



III. BWC Ratemaking Methodologies



Current Process Overview (PA)

Oliver Wyman Generates Statewide Rate Indications

- 3 scenarios: baseline, optimistic, conservative
- Based on ultimate loss estimates for the last ten calendar/accident years
 - From the Reserve Analysis
- Includes discounting to recognize investment income

Once Rate Change is Approved, BWC Produces Rates by Classification

- Starts with adjusted pure premium based on latest 4 years of experience
- Includes credibility weighting with prior year pure premium
- Credibility-weighted pure premium adjusted for:
 - Approved rate change
 - Catastrophe loading
 - Premium Payment Security Fund factor
 - Safety & Hygiene factor
 - Off-balance for impact of Experience and Group rating



Comments on Current Process

Ratemaking Methods Employed by Oliver Wyman and BWC are Reasonable and Appropriate

Transparency Issues with the Rate Recommendation Report

- More linkage to the underlying Reserve Study
- More support for the deviations among the baseline, optimistic and conservative rate indications
- Reconciliation with prior indications
- Impact of other changes on the indication
 - Benefit level changes
 - Changes in expense provisions



Comparison with Industry

Data Used to Develop Statewide Indication

- Industry uses more recent experience
- Industry includes policy year data

Components of Indication

- Industry breaks the indication into separate impacts of experience, trend, benefit changes and expense changes

Loss Development

- Industry examines both incurred and paid development patterns
 - Oliver Wyman uses only paid development

Classification Rates

- Ohio Group Rating Program results in much larger off-balance than industry
 - Base rates are high



Group Rating

Reviewed Prior Studies By Oliver Wyman and Pinnacle

- Group rated employers consistently produce loss ratios much higher than Non-Group rated employers
- Current Group Rating Program results in rates that are not actuarially sound
- Non-Group rated employers are subsidizing Group rated employers

From an Actuarial Perspective, Group Rating Program should not continue in its current form



IV. BWC Reserving Methodologies



Current Process Overview (SIF)

Separate Analyses Performed for PA, PEC and PES Groups

- Used for ratemaking

Within Each Employer Group, Reserves Developed for the Following Benefit Types:

- Medical (lost time and medical only)
 - For lost time claims, reserves are developed by provider group
- Temporary Total
- Permanent Total
- Death
- Other Compensation Benefits

Two General Approaches Used

- “Persistency” method
- “Weeks of benefits method”

Analyses Rely Mainly on Paid Loss Data

- Incurred development history under the MIRA system not yet sufficient



Comments on Current Process

Reserving Methods Employed by Oliver Wyman are Reasonable and Appropriate

Issues with the Reserve Analyses

- Constant persistency rate selections for certain development ages
 - Data would seem to support individual selections
- Certain factors used in the analyses can not be derived from the report
 - Medical persistency rate beyond 29th development period
 - Permanent Total tail factor
- Should look to consider methods that rely on incurred development in the future

An Alternative Method

ICRFS-PLUS Actuarial Software

- Aggregate reserving software (not case estimates)
- User builds probabilistic models around paid loss development triangles
- Describes four components of the underlying data
 - Development year trend (horizontal)
 - Accident year trend (vertical)
 - Calendar year trend (diagonal)
 - Random fluctuation about the trends

Output Produced by ICRFS-PLUS

- Distribution of aggregate reserve by business segment
- Correlations in reserve distribution among business segments
- Capital allocation by business segment
- Distribution of aggregate reserve for all business segments combined



Application of ICRFS to BWC Data

Results of Independent ICRFS Analysis on PA, PEC and PES Segments

- ICRFS point estimate reserve higher than Oliver Wyman for PA
- ICRFS point estimate reserve lower than Oliver Wyman for PEC and PES
- For the three segments combined, the ICRFS point estimate was slightly lower than Oliver Wyman
- ICRFS analysis confirms that the individual benefit types should continue to be analyzed separately as they exhibit different trend structures
- There is significant positive correlation among the reserve distributions of the three segments
- The latest Oliver Wyman reserve estimate for all segments combined is at the high end of the reserve distribution



Ohio Bureau of Workers' Compensation Oversight Commission

RFP #B07016

Task A: Evaluation of Historical BWC Profitability

**Task B: Evaluation of BWC's Current Surplus
Adequacy and Premium Ratemaking
Methodologies**

**Task C: Evaluation of BWC's Current Practices
Relative to Industry Standards in the Areas of
Ratemaking and Reserve Development**

June 14, 2007

Aon Risk Consultants

Actuarial & Analytics Practice

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Actuarial and Analytics Practice

June 14, 2007

Ohio Workers Compensation Oversight Commission
c/o Win McCausland
Columbus, OH

Re: RFP #B07016

Dear Win:

This document constitutes the final report of Aon Risk Consultants (ARC) prepared in response to RFP #B07016 issued by the Ohio Workers Compensation Oversight Commission (WCOC). In our report, we perform the following three tasks, as requested in the RFP:

- Task A - Provide an analysis of the Ohio Bureau of Workers' Compensation's (BWC) historical underwriting profit or loss for the past five years and identify underlying drivers.
- Task B - Evaluate the BWC's current surplus adequacy and premium ratemaking methodologies.
- Task C - Evaluate the BWC's current practices relative to insurance industry standards, both state and private, in the areas of ratemaking and reserve development.

The first section of our report contains a consolidated Executive Summary that encapsulates our findings and conclusions for all three tasks. The three sections that follow contain the individual reports for Task A, Task B and Task C, respectively.

We would like to thank the WCOC for the opportunity to provide actuarial consulting services. We would also like to acknowledge Liz Bravender and the Actuarial Section of the Ohio BWC, along with the consultants at Oliver Wyman for their support and assistance throughout the duration of the project.

Best Regards,

Joseph P. Kilroy, FCAS, MAAA
Director & Actuary

Aon Risk Consultants, Inc.

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Ohio Bureau of Workers' Compensation Oversight Commission

RFP #B07016

MASTER EXECUTIVE SUMMARY

June 14, 2007

Aon Risk Consultants

Actuarial & Analytics Practice

1650 Market Street • Suite 1000 • Philadelphia, PA 19103 • Tel: +1.215.255.1827

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I. Introduction

Purpose

Aon Risk Consultants (“ARC”) has been retained by the Ohio Bureau of Workers’ Compensation Oversight Commission (“WCOC”) to supply actuarial consulting services in support of the WCOC’s evaluation of the performance of the Ohio workers’ compensation system and in comparing Ohio’s system to other state and private compensation systems.

Specifically, ARC has been engaged to perform the following three tasks:

- Task A. Provide an analysis of the Ohio Bureau of Workers’ Compensation’s (“BWC”) historical underwriting profit or loss for the past five years and identify underlying drivers.
- Task B. Evaluate the BWC’s current surplus adequacy and premium ratemaking methodologies.
- Task C. Evaluate the BWC’s current practices relative to insurance industry standards, both state and private, in the areas of ratemaking and reserve development.

Scope

In this section, we present a consolidated Executive Summary. Its purpose is to summarize our findings and conclusions for all three tasks in one self-contained document. More detailed information is contained in the individual reports which are included in subsequent sections.

Please contact the undersigned if you have any questions regarding this report.

Respectfully submitted,

Aon Risk Consultants



Joseph P. Kilroy, FCAS, MAAA
Director & Actuary
(215) 255-1827

II. Conditions and Limitations

Inherent Uncertainty

Actuarial calculations produce estimates of inherently uncertain future contingent events. We believe that the estimates provided represent reasonable provisions based on the appropriate application of actuarial techniques to the available data. However, there is no guarantee that actual future payments will not differ from estimates included herein.

Data Reliance

In conducting this analysis, we relied upon the provided data without audit or independent verification. Any inaccuracies in quantitative data or qualitative representations could have a significant effect on the results of our review and analysis.

Use and Distribution

Use of this report is limited to the WCOC for the specific purpose described in the Introduction section. Other uses are prohibited without an executed release with ARC.

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III. Task A

Note: This, Part A of a three-part report, is focused on the five-year historical results of the Bureau of Workers Compensation (BWC). Parts B and C have conclusions which are integral to this report and must be taken in conjunction with the findings herein. Further, in providing this historical look, we provide examples of alternative views (for example, increased capital) of certain components of the BWC's financial statements for comparison and educational purposes. Full evaluations of new potential operational structures (for example, privatization) related to these alternative views are beyond the scope of this assignment.

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IV. Task B

This report contains two distinct parts. The first part covers surplus adequacy, while the second part evaluates premium ratemaking methodologies. Conclusions drawn in this executive summary are based on the detailed analysis contained in later sections of this report.

Surplus Adequacy Evaluation

Our evaluation begins by defining surplus as the reserve of last resort and examines why it is needed to prevent insurer insolvency. The various risks threatening insurer solvency are reviewed and various methods of measuring these risks are summarized. An overview of several surplus adequacy calculation methodologies is then presented.

ARC believes that a good starting point for the analysis of the BWC's surplus adequacy is a comparison to industry benchmarks. We present three surplus benchmarks in the table below: NAIC Risk Based Capital, A.M. Best Capital Adequacy Ratio, and Standard & Poor's Capital Adequacy Ratio. While we have applied three industry methodologies to the BWC's data, each methodology relies on subjectivity to varying degrees and should be interpreted only as an estimate of the required surplus had the calculations been made by the NAIC, A.M. Best, or Standard & Poor.

Ohio Bureau of Workers' Compensation Indicated Surplus Requirements vs. Surplus @ 6/30/2006

Amounts Shown in Millions

| | <u>NAIC</u> | <u>A.M. Best</u> | <u>S&P</u> |
|---|-----------------|------------------|----------------|
| (1) BWC Reported Total Surplus 6/30/2006 | (127) | (127) | (127) |
| (2) Adjustment for Discount* | 10,843 | 0 | 0 |
| (3) Adjustment for Asset Risk & Credit Risk | 0 | 0 | 434 |
| (4) Risk Adjusted Surplus 6/30/2006 = (1) - (2) - (3) | <u>(10,970)</u> | <u>(127)</u> | <u>(560)</u> |
| (5) Required Surplus | 2,651 | 7,235 | 1,958 |
| (6) Adequacy Ratio = (4) / (5) | -413.8% | -1.8% | -28.6% |
| (7) Indicated Additional Surplus Need = (5) - (4) | 13,621 | 7,362 | 2,518 |

Note: * - Estimated amount of discount related to future payments that are neither fixed nor reasonably determinable.

BWC financial statements show that the BWC was technically insolvent as of June 30, 2006 due to negative carried surplus. Had the BWC been under NAIC jurisdiction, significant regulatory action would have been triggered. Although the rating agencies consider factors in addition to surplus, surplus is central to the rating process. Based on both the A.M. Best and Standard & Poor's required

capital indications, the BWC is unlikely to have received a secure financial strength rating. While the results of the three methods cannot be directly compared with each other, they all tell similar stories: maintaining surplus at the current level seriously restricts the BWC's ability to withstand unexpected adverse events.

The specific surplus indications result both from the goal each method was designed to meet as well as from the specific calibration of each method. The NAIC approach is used by insurance regulators to identify companies at risk of becoming insolvent early enough to take corrective action, while the two rating agency approaches are considered as part of the financial strength rating process. The NAIC RBC methodology was specifically developed and calibrated by US regulators for the purpose of insurance solvency regulation. Therefore, ARC considers NAIC RBC to be more appropriate than the alternative benchmarks developed by rating agencies.

ARC therefore recommends that the WCOC consider using the NAIC required risk based capital indication as a minimum surplus goal equivalent to \$2.65 billion as of June 30, 2006. If the BWC were a commercial insurer, surplus less than \$2.65 billion would cause it to fall short of the NAIC Company Action Level, thereby triggering regulatory action. Approval of policyholder dividends should be resisted until the BWC's surplus exceeds the NAIC RBC Company Action Level.

The additional funds needed by the BWC to achieve this minimum surplus goal depend on one's perspective. If the BWC is viewed as a state agency subject to Governmental Accounting Standards, then reserve discounting would be appropriate, implying additional funds of \$2.78 billion [= 2.651 – (0.127)]. However, if the BWC is viewed as a commercial insurance book of business available for sale, then it would be subject to NAIC regulation and Statutory Accounting Principles ("SAP") would apply. The NAIC and SAP do not allow discounting of future payments that are neither fixed nor reasonably determinable, implying additional funds of \$13.62 billion [= 2.651 – (10.970)].

Note that the NAIC surplus requirement is dynamic in the sense that it adjusts as the risks faced by an insurer change. For example, the surplus requirement an insurer must meet will increase as invested assets are reallocated from risk-free US treasuries to equities.

ARC further recommends that the BWC consider developing a probabilistic-type surplus model. Industry practice for analyzing surplus adequacy among large commercial insurers relies heavily on scenario-based and probabilistic surplus approaches, rather than on RBC-type methods. In addition, rating agencies are

developing more sophisticated models built around scenario-based and probabilistic algorithms.

Probabilistic models have the advantage of being able to quantify the financial impacts from many risk sources simultaneously as well as allowing the introduction of scenario testing. Many diverse risk sources can be incorporated into such models: asset risk, premium risk, and reserving risk, among others.

Typically, the largest risk facing commercial insurers, and the BWC, is underwriting risk, a combination of premium risk and reserving risk. Therefore, ARC recommends that any surplus model developed reflect both the reserve variability inherent in the various funds administered by the BWC as well as any significant correlations between the funds.

The steps involved in constructing a probabilistic surplus model include:

1. Choosing a method for measuring each risk, e.g. Value-at-Risk, Tail Value-at-Risk, or Probability of Ruin.
2. Establishing a risk tolerance standard, e.g. sufficient surplus should be retained to prevent insolvency with 99.5% confidence over the next year.
3. Set the dividend policy so that sufficient surplus is retained to satisfy the selected risk tolerance.

Surplus in excess of that required to satisfy the selected risk tolerance could be treated as free or excess surplus and either approved as policyholder dividends or retained as an additional safety margin. Any dividend plan should incorporate a method of fairly and equitably distributing any declared dividend among policyholders. For example, one consideration that may be addressed through the dividend plan is the extent to which the amount returned to a specific policyholder depends on the losses experienced by that policyholder. A properly structured dividend allocation plan has the potential to complement existing workplace safety programs further reducing overall costs. Although the design of a dividend allocation plan is extremely important, it is beyond the scope of this study.

Premium Ratemaking Methodology Evaluation

The overall results of the ratemaking process appear to be actuarially sound, i.e. enough premiums are collected in total to cover losses and loss adjustment expenses. However, significant cross subsidies exist between group rated and non-group rated insureds indicating that rates are not actuarially sound between these two rating groups.

Our main observation is that the rate recommendation report is not a self-contained document. It is only after a review of several external documents that the process can be fully understood. The rate recommendation should ideally be a stand alone document that includes or explicitly references all items impacting the rates so that an outside party can easily follow the derivation. After reviewing the Ohio Workers Compensation Rate Recommendation prepared by Oliver Wyman, we suggest the following recommendations to enhance the process:

1. The rate recommendation analysis should provide more support for the deviations between the baseline, optimistic and conservative rate indication scenarios. An explanation as to how the scenarios were derived and any changes in assumptions should be included. As these additional scenarios provide the basis for the confidence interval contained in the rate recommendation, it is important that the assumptions underlying them are understood.
2. Consideration should be given to increasing the weight applied to the claims experience from more recent years, and to indications based on policy year data as well as on calendar/accident year data. The use of more years of data can actually decrease the credibility of rate indications as the older years are less likely to be indicative of future results. Policy year data generally provides a better matching of losses and premiums in ratemaking analyses.
3. The rate recommendation should provide a more detailed explanation of the changes in rate indications from one year to the next. In the most recent filing, there was a significant shift in the indications for all scenarios. A summary of any changes in assumptions, benefit level changes, or other factors causing such a shift should be documented.
4. The rate recommendation should include a detailed analysis of changes in expense provisions. The exact details of the expense provisions do not necessarily need to be disclosed, but the impact on the rate indication resulting from a change to the expense ratio should be documented.
5. Given its current unfairness, the Group Rating Program should not continue in its current form. While the general concept of group rating has merit, the program as it currently exists does not produce rates that are actuarially sound (reasonable and not excessive, inadequate, or unfairly discriminatory). Group rated companies consistently produce loss ratios well in excess of non-group rated companies, indicating that non-group rated companies are subsidizing the group rated companies.

In prior group rating studies, Oliver Wyman made several valuable recommendations that should be considered during the development of

any new Group Rating Program. Oliver Wyman's recommendations are discussed in the Group Rating section of this report.

V. Task C

In this report we evaluate the BWC's current actuarial practices and processes in the areas of ratemaking and reserve development against industry standards. As a result of our review, we conclude that the current ratemaking and reserving methods employed by the BWC and their independent actuarial consultant, Oliver Wyman, are reasonable and appropriate. The methods are applied using generally accepted actuarial principles and adhere to all relevant Actuarial Standards of Practice. The focus of our report is to document areas where current BWC practices or those of its actuarial consultant differ from industry standards. However, reliance on a practice other than the industry standard does not automatically imply that changing to the industry standard is appropriate. Often legal, regulatory, or technical restrictions prevent such a change. Our goal is to point out differences so that the BWC can evaluate whether implementing changes would enhance their processes.

A summary of our findings and conclusions is presented in this Executive Summary. A more detailed discussion of the analyses performed is contained in Section IV.

Ratemaking

We have reviewed the methodologies employed by Oliver Wyman in their Rate Recommendations (Private, Public, and Ancillary Funds) and the supporting document for Private Employers, Actuarial Audit of the Private Employer, MIF, and DWRP, Reserves for Rate Recommendation Support. In addition, we reviewed the ratemaking process for several states, including both independent bureau and National Council on Compensation Insurance (NCCI) states.

We have compared the BWC methodology to industry ratemaking standards. The main areas where the BWC process differs from industry standards include the following:

1. The BWC examines ten full years of historical experience in determining the overall rate indication. The industry standard is to use the most recent two years of experience. For instance, the NCCI typically uses the latest two policy years or the latest one calendar/accident year with the latest one policy year.
2. The BWC considers future investment income expected to be earned on premium in the rate structure by using discounted losses in the determination of the overall rate indication. The industry standard is to perform an internal rate of return analysis where an explicit profit and

contingencies load is developed. The profit and contingencies load so determined accounts for the impact of investment income.

3. The BWC uses calendar/accident year data. The industry standard is to use either policy year data exclusively, or to use a combination of calendar/accident year and policy year data.
4. The current Group Rating Plan in Ohio has resulted in a much larger off-balance adjustment than industry standards in the calculation of rates for individual classifications. As a result, non-group rated employers are paying exorbitantly high base rates, and subsidizing the group rated employers in the process.

In the Analysis section, the following aspects of the ratemaking process are focused on in more detail:

1. Data used to determine the rate indication
2. Adjustments to the data
3. Expenses
4. Determination of classification rates

Reserve Development

We have reviewed the methodologies employed by Oliver Wyman in their actuarial audits valued as of June 30, 2005 and June 30, 2006. We find the methods to be reasonable given the exposures being analyzed. There are certain calculations contained in the analyses that could be enhanced or clarified. Our specific comments in this regard are presented in the Analysis section.

It is important to note that the Oliver Wyman reserve analyses rely primarily on paid loss data. Case reserves on Ohio Workers' Compensation claims are developed using the MIRA reserving system and are not generally considered in the Oliver Wyman analyses. The MIRA system has not been in place long enough to produce a credible incurred loss development history. As such, we have introduced herein an alternative reserving method, used widely throughout the insurance industry, which also relies on paid loss data.

The alternative method uses a statistical software package known as ICRFS-PLUS ("ICRFS"). ICRFS is marketed by *Insureware Pty Ltd*, a company based in Australia. ICRFS is a system designed to help actuaries produce aggregate reserve estimates. It is not a system designed to produce case reserve estimates on individual claims.

ICRFS allows the analyst to build probabilistic models around paid loss development arrays. In addition to generating expected aggregate reserve estimates, the ICRFS system also allows for the estimation of the following:

1. Distribution of the aggregate reserve by business segment
2. Value at risk
3. Correlations in reserve distributions among business segments
4. Capital allocation by business segment
5. Distribution of the aggregate reserve for all business segments combined

In conjunction with the consultants at *Insureware*, we have performed an independent reserve analysis on the PA, PEC and PES employer group segments using the ICRFS software. The major conclusions reached in our analysis are summarized below.

1. There is strong evidence that the Oliver Wyman reserve estimate posited as of June 30, 2006 is too low for the PA segment and too high for the PEC and PES segments.
2. For the three segments combined, the Oliver Wyman reserve estimate as of June 30, 2006 is slightly higher than our expected reserve estimate.
3. Separate analyses should continue to be performed for individual benefit types, due to the existence of different underlying trend structures.
4. There is significant positive correlation among the reserve distributions of the three segments.
5. Our analysis produces capital allocation percentages which can be used in executing a dividend policy.
6. The total reserve estimate put forth by Oliver Wyman in their June 30, 2006 analysis for the PA, PEC and PES segments combined is at the very high end of the reserve distribution.

Ohio Bureau of Workers' Compensation Oversight Commission

RFP #B07016

Task A: Evaluation of Historical BWC Profitability

June 14, 2007

Aon Risk Consultants

Actuarial & Analytics Practice

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I. Introduction

Purpose

Aon Risk Consultants (“ARC”) has been retained by the Ohio Bureau of Workers’ Compensation Oversight Commission (“WCOC”) to supply actuarial consulting services in support of the WCOC’s evaluation of the performance of the Ohio workers’ compensation system and in comparing Ohio’s system to other state and private compensation systems.

Specifically, ARC has been engaged to perform the following three tasks:

- Task A. Provide an analysis of the Ohio Bureau of Workers’ Compensation’s (“BWC”) historical underwriting profit or loss for the past five years and identify underlying drivers.
- Task B. Evaluate the BWC’s current surplus adequacy and premium ratemaking methodologies.
- Task C. Evaluate the BWC’s current practices relative to insurance industry standards, both state and private, in the areas of ratemaking and reserve development.

Each of these tasks will be addressed in a separate report, with this report covering Task A.

Scope

For Task A, as stated in the original Request for Proposal, ARC is to:

***“Provide an analysis of the BWC’s historical underwriting profit or loss for the past five years and identify underlying drivers.*”**

“The WCOC desires the CONSULTANT to develop a full report and executive summary to the Investment Committee of the WCOC. As a part of these reports, the CONSULTANT will produce a written report whose intended audience will be the BWC, the Workers’ Compensation Oversight Commission and its subcommittees, BWC stakeholders, which stakeholders include but are not limited to employer groups and associations, labor unions, elected officials, etc.”

***“The report to the stakeholders must include an explanation of the historical results regarding the State Insurance Fund and Related Funds as well as an explanation of the process used to analyze the results. BWC will be responsible for distribution of this report to its stakeholders.”*”**

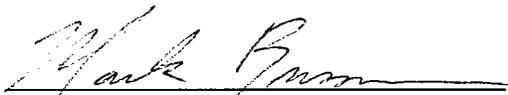
In subsequent discussions with the WCOC members, the project scope for Task A was expanded to include an additional analysis that compares BWC results against those of peer public entities and/or industries.

We performed this analysis using generally accepted actuarial principles and in accordance with all relevant Actuarial Standards of Practice.

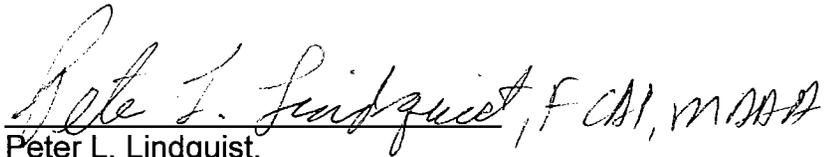
Please contact us if you have any questions regarding this report.

Respectfully submitted,

Aon Risk Consultants



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II. Conditions and Limitations

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Actuarial calculations produce estimates of inherently uncertain future contingent events. We believe that the estimates provided represent reasonable provisions based on the appropriate application of actuarial techniques to the available data. However, there is no guarantee that actual future payments will not differ from estimates included herein.

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Our projections make no provision for the extraordinary future emergence of losses or types of losses not sufficiently represented in the historical data or which are not yet quantifiable.

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IV. Analysis

Background

Results of Insurance Operations - Underwriting Profit

Results of insurance operations are generally measured by “profit.” The concept of “profitability” in the insurance industry has evolved throughout its history. For much of the 20th century, *profitability* mainly focused on underwriting profit (premiums earned less claims and other operating expenses incurred). This *statutory underwriting profit* is defined through *statutory accounting* as promulgated by the National Association of Insurance Commissioners (NAIC) and its set of instructions for the Annual Statement Blank. Generally, for pricing purposes, a five percent (5%) underwriting profit was deemed acceptable for most lines of business with two percent (2%) targeted for workers compensation. This lower rate for Workers Compensation ostensibly recognized the longer payout pattern and resulting discounted value of the losses compared to other lines.

The benchmark calculation for underwriting profitability is the *underwriting ratio to premiums* which was defined as follows:

$$= [\text{claims expenses} + \text{operating expenses}] / \text{earned premium}$$

For this measure, values less than 100% indicate underwriting profitability whereas values greater than 100% represent a loss. This benchmark has been and continues to be used for:

- comparison of the underwriting profitability of an entity over time, or,
- comparison across entities with a single time period.

Results of the Entity - Return on Equity (ROE)

There was little public discussion about the appropriate levels of insurer profitability until the 1970's when the economy hit new records in inflation, interest rates, and stock market returns:

- With the potential for expanded investment in the less-traditional equities, high-yield bonds, and other investment vehicles, insurers' investment portfolios had the promise of record returns with risk increasing commensurately.
- Regulators (and the consumerist organizations pressuring them) were concerned with rising insurance prices and in preventing windfall insurer profits.
- Soon, *cash flow underwriting* practices drove significant insurer reliance on investment returns as well as underwriting returns and eventually resulted in notable insurer insolvencies.

-
- On the other hand, regulators continued to be concerned with solidity and preventing future insolvencies.

The result was a need to measure both the risk and the return of insurers in a manner similar to the return on equity approaches commonly used in finance for other industries.

A distinct difference with other industries is in the defining of equity. In other industries the assets and liabilities, and therefore the equity or net worth, are relatively clearly defined. Thus, projected revenue can be divided by investment to determine a ROE.

For the insurance industry, the answer is not quite so clear as to the appropriate amount of capital needed to support the investment in a single policy, or a portfolio of policies. The debate as to the correct approach continues to this day. A complete exposition of this topic is beyond the scope of this report but the following are some of the methodologies currently in use to define equity (or surplus):

1. Reserves divided by a (commonly accepted) reserves-to-surplus ratio.
2. The amount required by AM Best to receive an A- rating (or A, A+...)
3. The amount required by financial rating agencies (Standard and Poors, Moody's, Fitch) to receive a desired rating.
4. The amount defined through Dynamic Financial Analysis (simulation of the firm) to lower the risk of insolvency or adverse financial results to some acceptably low level.

Options #2 and #3 are not immediately useful for evaluating the profitability of a monopolistic state fund such as the Ohio BWC. Our approach will use #1 and the results from the Task B team to produce an internal rate of return analysis testing the historical profitability.

Approach

Our approach includes steps both outlined in our Proposal and additional steps which we thought to be beneficial to the WCOC.

As our response to the Request for Proposal, we outlined several steps which are commented on individually:

“We believe it is important to have an overview of the operations of the Bureau of Workers' Compensation (BWC). We propose to have two Aon Risk Consultant (ARC) Fellows of the Casualty Actuarial Society meet with personnel from the Actuarial Section of BWC and Mercer Oliver Wyman (Mercer) to gain an understanding of the current Workers' Compensation environment in Ohio, the administration of the BWC, as well as changes over time in the Ohio Workers' Compensation system.”

Members of our ARC Team representing each of the three major tasks met in Columbus with members of the BWC, WCOC, and the Oliver Wyman teams. It was an extremely productive meeting and helped us move the project along in the following areas:

- Understanding of the workers compensation environment and history in Ohio.
- A more exhaustive understanding of the needs of the WCOC from these reports.
- A better view of the BWC operation as it applies to the issues in this RFP.
- Insight into the Oliver Wyman (Mercer) loss reserving reports, issues they faced, solutions they employed, data concerns, etc.
- Clearer insight into data issues, additional data requests, resolution of some current data requests.

“We will then review the latest available actuarial report and analysis prepared by Mercer. This review will focus on the actuarial assumptions and methodologies. We will perform a limited review of the calculations in the report. To the extent we consider alternative assumptions and/or methodologies to be improvements on the current actuarial analysis or to different conclusions reached in the current actuarial analysis, we will either independently perform these calculations or request assistance from Mercer. Our review will include, but not be limited to, such items as data organization, method(s), and trend assumptions.”

In preparation for the work on their individual tasks A, B, and C, the ARC team did an exhaustive review of all pertinent reports (Mercer, Pinnacle) performing the reasonability tests as discussed above.

As part of the profitability analysis, we will also review historical administration expenses of the BWC.

Based on the work described above, we will create a full written report and executive summary documenting our findings regarding BWC's historical underwriting profit or loss for the past five years.

The specific analysis that we performed is described in the following sections of this report.

Results

Five-Year Historical Calendar Year Profitability

For this part of the study we created a simplified 1-page presentation of BWC's balance sheet and income statement for the periods 2002 through 2006.

The BWC figures as published are shown on Exhibit 1 on page 23.

The approach we used was to first identify factors that affected the published financial statements, and then remove their effects and examine the adjusted figures for other patterns that might be present.

After review of the financial statements, we decided to make four adjustments to the as-published figures.

1. As a result of the Price decision, reserves were increased by \$200 million in 2003. As a result of the reversal of the Price decision, the reserves were decreased by \$200 million in 2006. The first adjustment removes both of these effects.
2. There was a restatement that reflected a change in the accounting treatment of the assessment funds. This restatement appears in the 2005 and 2006 published figures. The second adjustment carries the re-statement back to the 2002 through 2004 periods.
3. Each year the actuarial estimates of ultimate loss amounts can change. The third adjustment carries back the most recent actuarial assessment to the prior years' financial statements, by replacing the actual booked reserves with "hindsight estimates" of reserves.
4. The published reserves were discounted using interest rates that were higher – in some cases significantly higher – than the actual rates of return achieved by the BWC investment portfolio. The fourth adjustment reduces these rates to a more reasonable level. For those periods where actual returns were less than 3% we used a 3% interest rate.

The individual financial statement effects of these adjustments are shown on Exhibit 2 on page 24. Exhibit 3 on page 25 shows the combined effects of these adjustments.

Because the fourth adjustment – for interest rate shortfall – introduces significant variability into the by-year figures, we have produced adjusted financial figures both without and with this adjustment. The adjusted figures are shown on Exhibit 4 on page 26 and Exhibit 5 on page 27.

We also created an exhibit (Exhibit 6 on page 28) that shows the effect of not discounting the reserves. This is based on the as-published figures, and does not include the four adjustments noted above.

Significant “drivers” in the 2002-2006 period

The primary driver in the observed year-to-year results of the BWC's operations has been the level of premiums, rather than losses. The net premiums are substantially

more variable than the gross premiums, which indicates that the driver of premiums has been the level of premium discounts and rebates.

Over the 2002-2006 period, gross premiums (before discounts) have been relatively flat – showing a slight decline from \$2.4 billion to \$2.2 billion. Over this period of time payrolls rose slightly (2% per year). These small changes have only a small effect on the BWC’s operating results.

The level of operating expenses has been basically flat in the 2002-2006 period. These are not large enough to have a significant effect on BWC’s operating results.

With respect to loss and loss adjustment expense, over the 2002-2006 period the incurred amounts have ranged as follows:

| | High | Low | Average |
|---------------------------------|-------------|---------------|----------------|
| As published | 3.4 billion | 1.9 billion | 2.7 billion |
| Adjusted (ex interest change) | 3.3 billion | 12.0 billion | 2.6 billion |
| Adjusted (with interest change) | 7.8 billion | (2.9 billion) | 2.4 billion |

We note that over the 2002-2006 period, the paid loss amounts have been more stable than the incurred amounts. This means that the year-to-year differences in incurred amounts have been driven by changes in reserves. Because the financial statements do not reveal the breakdown of reserves between “case reserves” and “IBNR reserves”, we cannot tell how much of the reserve variability is due to “the actual” versus “the actuary.”

However, we can observe that the interest rate used for discounting losses has had an effect on the operating results. We note that, because the actual investment returns have been significantly more volatile than the actuarial interest rate assumption, the actuarial interest assumptions have stabilized the perceived results of the BWC’s insurance operations.

Finally, we observe that a shift to using undiscounted reserves would have these effects:

- (Income statement) It would change the incurred amounts for each individual year, but over the five year period the total incurred amount would increase only slightly – from 13.7 billion to 14.0 billion.
- (Balance sheet) It would increase the loss reserves, with a corresponding decrease in the net assets. These changes would be substantial, and the net assets over the period would range from \$-13.8 billion in 2002 to \$-18.9 billion in 2006.

The Role of Net Assets

After reviewing the BWC financial statements, it appears that the BWC has been acting more like a “social insurance mechanism” than a private sector insurance company. The three factors that lead to this conclusion are:

- the low-to-negative level of “net assets”
- the historical pattern of giving back large discounts and rebates
- the collection of premiums in arrears without an interest charge.

These factors are indicative of the belief that adverse outcomes – either from underwriting or investment – can always be dealt with by raising prices in the future, and there is no need to provide for them in advance.

A private sector insurance company would not be permitted to engage in these practices.

As long as the BWC remains a monopolistic government-backed entity providing a legally mandated coverage, it can continue to operate in this fashion without danger of bankruptcy. However, because future adverse outcomes are not pre-funded through a buildup of net assets, they will need to be funded by sudden price increases sometime in the future. This raises the possibility of future “market shocks” and adverse customer reactions (ranging from individually leaving the state to collectively lobbying for the BWC’s discontinuance.)

We note that in the last few years, Nevada has moved from a monopolistic fund to a competitive environment, and West Virginia is scheduled to complete the same transition by July 1, 2008. It would be prudent to consider the possibility that Ohio might move in this direction.

For these reasons, the BWC should consider adopting a pricing policy that provides for the buildup of net assets over a relatively short period of years. This would minimize the potential for market disruptions, and reduce the potential contribution from the State of Ohio that would be required in the event of privatization.

Calculations of Return on Equity (ROE)

In this analysis, we calculate the internal rate of return given the BWC’s premium and loss level, the structure of asset mix, the rate of investment return and the required capital amount that corresponds to the current operation.

There are several key assumptions worthy of note:

a. Reserve to Surplus Ratio

Two approaches are used. Scenario 1 divides the BWC’s reserve as of 6/30/2006 by the theoretical amount of capital (\$2.6 billion) under the NAIC RBC formula. This results in 6.94 as the reserve to surplus ratio. Scenario 2

assumes 1.86 as the reserve to surplus ratio based on the NCCI May 2007 WC study “State of the Line”.

Tax Rate

We assume no tax liability for the BWC.

b. Investment return & Expense ratios

We use 5% as the investment return rate and 4% as the expense ratio. Both ratios are based on the review of the BWC’s financial statement over the past nine years.

c. Loss & ALAE Ratio

To determine the undiscounted ultimate loss and ALAE ratio, we relied on the loss and premium information provided by the BWC and by Oliver Wyman. We estimated the Loss and ALAE ratio to be 183.7%.

d. Loss payment pattern

We derived the average loss payout pattern based on the combined PA, PEC and PES paid loss triangles (GASB 10 loss development triangle) provided by Oliver Wyman.

e. Loss reporting pattern

We selected the average loss reporting pattern based on the payout pattern derived above.

f. Annual premium amount

The current year (2006) premium of \$2.1 billion is used as a proxy for the average premium going forward.

g. ULAE ratio

The unallocated loss expense relates to the part of claim settling expense such as employee salary, rent, overhead expense, advertise expense, etc. which is not assigned to a particular claim. Since the BWC does not incur the “normal” insurance company expense such as commission expense, we assume one fourth of the general expense relates to the ULAE cost. Also, we assume that 50% of the ULAE expense is paid when a claim is opened and the remaining 50% of the ULAE expense is paid as loss is paid (a common assumption under actuarial projections).

The results of our calculations are summarized below.

Under Scenario 1, we estimate the BWC’s internal rate of return to be -2.40%. These calculations are shown on page 1 of Appendix 1.

Under Scenario 2, we estimate BWC's internal rate of return to be -7.73%. These calculations are shown on page 2 of Appendix 1.

Using Scenario 1, we estimate that an undiscounted loss ratio of 130% would result in a break-even return on equity. To achieve a 5% return, we estimate that an undiscounted loss ratio of 120% would be required. To achieve a 10% return, we estimate that an undiscounted loss ratio of 110% would be required.

The Impact of Group Rating on Overall Financial Performance

The BWC identified *Group Rating* as a major issue in the overall administration and pricing of workers compensation insurance in Ohio. *Group Rating* allows certain employers to combine their collective loss experience with the intended benefit of receiving preferential premium rates. As reported by the BWC, no matter how well-intended the original concept, *Group Rating*—in conjunction with other pricing components—has created the opportunity for employer groups to exploit its provisions and to game the system for their benefit (and some other employers' detriment). The result has been unintended pricing dislocations and cross-subsidies in a highly-charge political environment.

The issues and ramifications of *Group Rating* will be explored in significantly more detail in the report for Task B. In this report, we have focused solely on the question of whether the pricing dislocations and cross-subsidies that have resulted from the use of *Group Rating* have created an impact on the overall financial performance of workers compensation insurance in Ohio.

As a part of the process for Task B and with specific focus on overall financial performance questions, we conducted an in-depth review of available information on *Group Rating* including:

- Group Rating Pricing Studies, March 1990 to present. (The Actuarial Section of the Bureau of Workers Compensation in conjunction with Mercer, Oliver, Wyman Actuarial Consultants)
- Analysis of Group Rating Plan with Recommendations, December, 2006. (Pinnacle Actuarial Resources, Inc.)
- Annual Financial Statements
- Historical usage of premium discounts and reductions
- Direct interview with BWC personnel.

If Ohio were a competitive state for workers compensation, the answer would clearly be that an inefficient rating plan—group rating—would adversely effect overall financial performance since employers would have the freedom to seek other insurance sources. Adverse selection would cause less profitable business to stay and more profitable business to leave thereby creating an overall negative effect.

Given that the BWC is a monopoly, the question is more refined and difficult to answer. Four potential effects on financial performance from *Group Rating* were identified:

1. That the propensity for loss—claim frequency or severity—changes. For example, if the effect were that employer groups would implement effective safety programs that would not have existed without Group Rating, losses might decrease. On the other hand, employers with significantly reduced premiums from *Group Rating* might have a disincentive to implement accident safety programs.

We found no evidence suggesting a proven change in loss propensity has occurred.

2. That the average collected premium changes. *Group Rating* pricing has resulted in significant discounts being given from a much-higher base rate. If the overall base rate increases have not offset the awarded discounts, premium would decrease even though injuries and loss dollars remain unchanged.

It appears that this has not been a factor as the BWC has been successful at collecting total needed premium and it has been in a position of returning premium through discounts and reductions. It was confirmed by the OBWC staff that they have been able to collect all required premium even with the existence of *Group Rating*. We concur.

3. That the size of the customer universe changes. For example, potential employers may be deterred from locating in Ohio because of a perceived cost difference with neighboring states caused by confusion over bases rates and group discounts.

The analysis of this potential phenomenon is beyond the scope of this review. However, we believe that even if this deterrent effect exists to some extent, it would involve more issues than just group rating. Furthermore, the effect would occur so slowly that the BWC could respond adequately to changing premium needs without threatening financial solvency or performance.

4. That the cost of administration of Group Rating raises rate need. While detailed expense data were not made available, *Group Rating* is clearly a complicated, politically contentious pricing feature that involves significant staff time and requires regular research and analyses. This adds expense costs and therefore increasing premium rate needs.

From the above, we draw two conclusions:

- **While there are several potential effects from *Group Rating* (identified in points 1-4 above) that could change overall financial performance, we view *Group Rating* as a zero-sum game with respect to overall financial results.** From a financial performance perspective, points 1 (losses) and 2 (premium) are the most important, but we believe their effects to be modest, if any. We view the workers compensation effect of point 3 (appeal to employers) as having a minor effect in the near term. Yet, we recognize that point 3 has broader social ramifications to the State of Ohio than the worker's compensation issues alone. We believe point 4 (expenses) to be adverse, but immaterial.
- **While we believe there is an immaterial overall effect, *Group Rating* clearly has created significant pricing inequities and inefficiencies at more refined subdivisions of employer groups.** This point of view has been well-documented by the Actuarial Section of the BWC and various actuarial studies.

Profitability Review of Ancillary Funds

The financial statements of the BWC cover several ancillary funds. A list of these funds along with selected financial information is shown below.

| <u>Fund</u> | <u>Assets (\$M)</u> | <u>Return on Assets#</u> |
|------------------------------------|---------------------|--------------------------|
| * State Insurance | 17,115 | -3% |
| * Public Work-Relief Employees | 21 | 5% |
| * Self-Insuring Employers Guaranty | 661 | 0% |
| * Administrative Cost | 428 | |
| Disabled Workers' Relief | 1,234 | 2% |
| Coal-Workers Pneumoconiosis | 223 | -2% |
| Marine Industry | 15 | 9% |

** The Administrative Cost Fund is essentially the only non-claim paying fund and serves as a funding and payment mechanism for BWC expenses for the administration of these identified funds. The expenses of the other funds are funded independently.*

#Operating Return on Assets is based on an average of 2004-2006 adjusted operating income, before transfers and premium reductions, compared to 2006 Total Assets.

The return on assets calculation was developed using the approach detailed in the paragraphs that follow.

We have assembled the five-year balance sheet and income statements for these funds based upon the audited financial statements. These summaries are presented in the Appendix.

From these exhibits, we assembled the three-year operating performance by fund as presented in the top section of Exhibit 7. The numbers are consistent with the audited financial statements. However, for a more effective income statement review, it was necessary to allocate the financial results from the Administrative Cost Fund to the insurance funds that it supports. We did so using the following methods:

- *Loss adjustment expenses* were allocated based upon actual losses experienced by the various funds.
- All other values were allocated based upon revenue which consisted of premium plus assessments minus premium reductions and refunds.
- An average of three years was used for stability.

This adjustment is presented in the bottom section of Exhibit 7.

The adjusted results by fund are presented in Exhibit 8. The effect of the adjustments was to allocate the Administrative Cost Funds net revenue to its supported funds.

Four observations are noted:

- The financial results of the State Insurance Fund, because of its relative size, drive the overall financial performance of Workers Compensation in Ohio. As shown, even after adjustments and before premium reductions, the SIF has operated at a loss of about \$1.3 Billion over the last three years. Better loss performance in 2006 improved that result significantly. Based on the return on assets measure, this fund performed the worst over three years at about -3%.
- The best performing funds have been the Public Work-Relief Employees Fund, the Disabled Workers' Relief Fund, and the Marine Industry Fund which have generally had positive returns and a positive return on assets.
- Based upon operating performance alone (before investment income), it is difficult to justify premium reductions.
- Overall administrative costs are low compared to the size of the total funds managed. Thus, reallocation of these costs to the funds has minimal effect on their financial picture.

Our review of the comparative operating results of the funds did not find any material differences between the funds. For this review we allocated the Administrative Cost Fund to the three funds to which it applies. These calculations are shown on Exhibit 7.

Comparisons to other Entities

We performed comparisons of the BWC financial performance with the financial performance of four similar workers compensation entities.

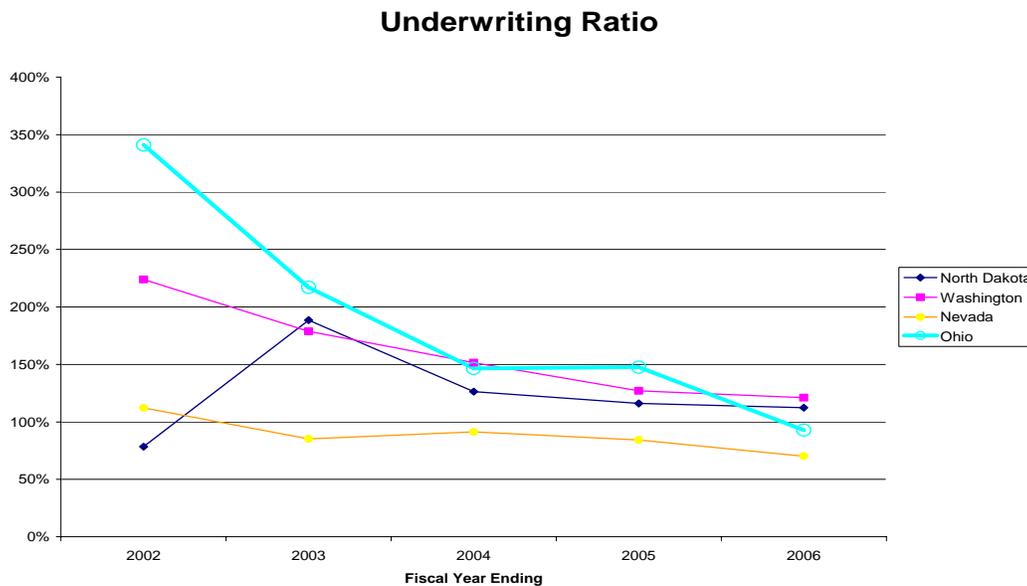
Two of the peer entities are monopolistic state funds – North Dakota and Washington. The other peer entities are private insurance companies in Nevada and West Virginia. Both of these were previously monopolistic state funds. Nevada was privatized in 1999, taking on the prior liabilities and reinsuring them at a cost of \$775 million. West Virginia was privatized in 2005, did not assume the prior liabilities, and received \$400 million from the state (of which \$200 million is a “surplus not” bearing interest at 1.5%.)

From an insurance operations viewpoint, as measured by the “underwriting ratio”, Ohio’s recent results are in line with the peer group, as shown in the chart below.

Results of Insurance Operations

With respect to the results of insurance operations, the “Underwriting Ratio” chart below shows a comparison of the five most recent fiscal years. The Underwriting Ratio is the ratio of losses and expenses incurred to net earned premiums. For this measurement, smaller ratios are better than larger ones.

As can be seen from the chart, there is an improving trend for all the entities. Also, except for the earliest year (2002) the BWC’s results are not that different from the other entities. We note that the high 2002 ratio for the BWC was caused by low premiums.



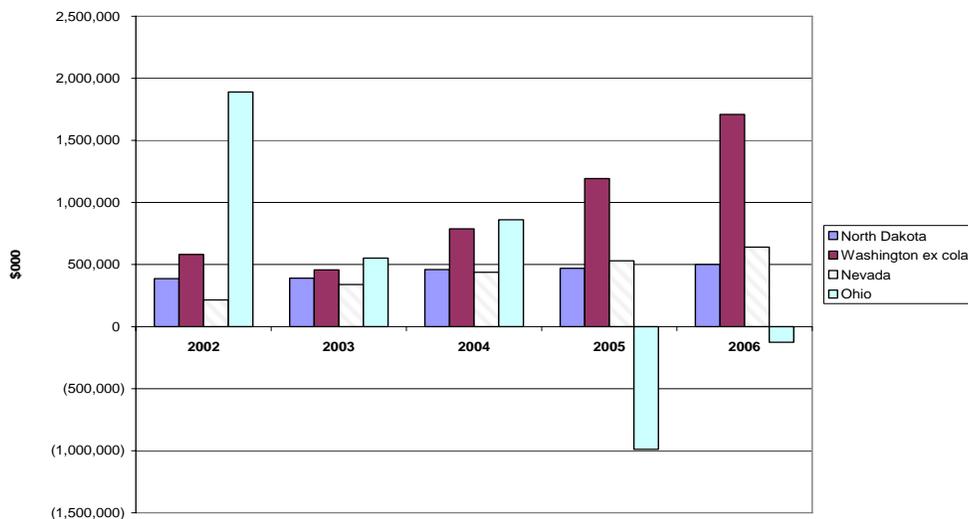
Financial Strength

With respect to financial strength, the “Net Assets (a.k.a. “Surplus”)” chart below shows a comparison of the five most recent fiscal years. For this measurement, larger amounts are better than smaller ones.

On this chart the BWC shows two larger declines – between 2002 and 2003, and between 2004 and 2005. Approximately half of the first decline is due to low premiums. The second decline is due to the restatement of the assessment funds. For 2005 and subsequent, the accounting for the DWRP provides for booking the liability for future claims payments, but does not permit booking the corresponding future assessments. Prior to 2005 the liability was not booked. The restatement for the SIEGF affected both assets and liabilities.

In looking at the comparative figures, it should be noted that Washington has a similar situation with respect to unfunded future cost-of-living increases. However, the Washington financial statements do not include these as liabilities. If Washington used the same accounting approach as the BWC, the Washington net assets would be negative for all the years shown. In particular, the Washington 2006 net assets would be approximately -7 billion dollars.

Net Assets (a.k.a. "Surplus")



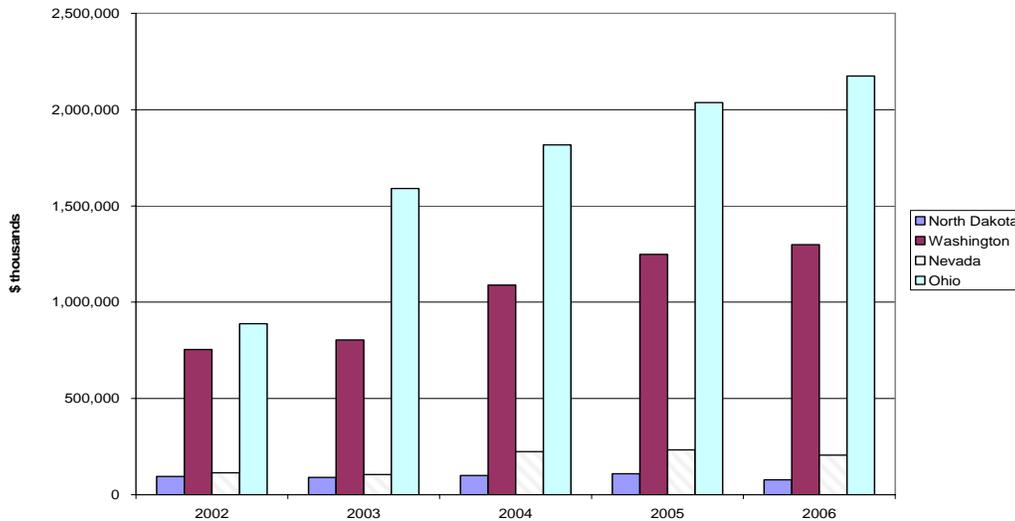
Relative Size

To show the relative size of these entities, the “Net Premiums” chart below shows a comparison of the five most recent fiscal years. For this measurement, larger amounts are better than smaller ones.

Ohio and Washington are considerably larger than Nevada and North Dakota. It should be recalled that the Nevada company, because it is competitive, does not reflect the entire insurance market in that state.

The chart shows considerable growth in the net premiums for Ohio, due to the progressive reduction of premium discounts and rebates.

Net Premiums



We note that the comparative charts do not include the West Virginia entity, because we cannot obtain consistent figures for the pre and post privatization periods. However, the analysis that follows does include the West Virginia company.

We compared the BWC discounting assumptions to those used by two other monopolistic state funds, and found that the assumptions used by the other funds would imply a smaller discount than the amount generated by the BWC assumptions:

| | Ohio | North Dakota | Washington |
|--|------------|--------------|---------------------|
| Time to payout of average reserve dollar | 13.5 years | 10.3 years | 7.2 years (ex cola) |
| Interest rate assumption | 5.25% | 5% | 2.5% |

We also examined two insurance companies that were formerly monopolistic state funds – Nevada and West Virginia. The Nevada entity is currently competing with other private insurers, and the West Virginia company will experience competition as of July 1, 2008. While neither company discounts its reserves, we note that the Nevada company has generated the equivalent effect by the use of reinsurance (a “loss portfolio transfer”).

We observed that the historical rate of turnover of the investment portfolio was extremely high. In 2006 there were asset sales of \$62 million and purchases of \$64 million, compared to the previous-year-end total portfolio amount of \$17 million. The restructuring of the portfolio would account for \$17 million of the sales and purchases, implying a non-restructuring turnover of approximately \$46 million, or approximately 2.5

times the total portfolio amount. This corresponds to a complete portfolio turnover every 5 months. We note that previous years had similar portfolio turnover rates.

By comparison, the Washington state fund has a rate that implies a complete turnover every 8 years, and the Nevada company has a rate that implies a complete portfolio turnover every 6 years.

We cannot perform a similar calculation for the other two peer entities. The asset portfolio for the North Dakota fund is not displayed in their financial statements – the fund is a participant in a statewide pool. The West Virginia company is a start-up, and its entire portfolio was new in 2006.

We cannot determine how much additional expense was generated by the large amount of portfolio activity.

Insurance Operations – Performance Ratios

In evaluating the efficiency and effectiveness of insurance operations, there is one key indicator for each. Efficiency is measured by the ratio of operating expenses to premiums (the “expense ratio”.) Effectiveness is measured by the ratio of insured loss and loss expense to premiums (the “loss ratio”.) For each of these ratios, smaller is better.

2006 peer comparison

| | premiums | exp | loss | exp ratio | loss ratio | total ratio |
|----------------|----------|------|-------|-----------|------------|-------------|
| North Dakota | 94.4 | 12.2 | 88.2 | 13% | 93% | 106% |
| Washington | 1,758 | 267 | 1,998 | 15% | 114% | 129% |
| Nevada | 208 | 67 | 79 | 32% | 38% | 70% |
| West Virginia | 761 | 26 | 703 | 3% | 92% | 96% |
| Ohio published | 2,174 | 86 | 1,933 | 4% | 89% | 93% |
| Ohio adjusted | 2,174 | 86 | 1,624 | 4% | 75% | 79% |

Measurements of Leverage

Traditionally, premium leverage is measured by the ratio of net premiums to “surplus”. (“Surplus” is the insurance industry’s term for fund accounting’s “net assets”.) Reserve leverage is measured by the ratio of loss and loss expense reserves to surplus.

These leverage ratios are important, because they measure the multiplier effects of mispricing and mis-reserving.

The peer comparisons show the following results for the 2006 fiscal year:

2006 peer comparison

| | net premiums | loss reserves | net assets | premium leverage | reserve leverage |
|----------------------|-----------------|------------------|---------------|---------------------|---------------------|
| North Dakota | 94.4 | 686.9 | 501.3 | 19% | 137% |
| Washington (ex cola) | 1,340 | 8,329 | 1,709 | 79% | 487% |
| Nevada | 208 | 641 | 641 | 32% | 100% |
| West Virginia | 761 | 561 | 268 | 284% | 209% |
| Ohio published | 2,174 | 18,928 | -126 | #N/A | #N/A |
| Ohio adjusted | 2,174 | 18,446 | 356 | 611% | 5,181% |

The Ohio ratios are unusual, because the net assets are near or less than zero. We note that the Washington ratios would also be “N/A” if the cost-of-living liabilities were included.

Use of Reinsurance

The primary function of reinsurance is to protect the purchaser from claims-related financial effects that exceed the purchaser’s risk-bearing capacity.

The Ohio BWC does not purchase any reinsurance. Based on our review of the peer group financial statements:

- The North Dakota fund buys reinsurance for occurrences greater than \$1 million.
- The Washington fund does not buy reinsurance.
- The West Virginia company buys reinsurance for occurrences greater than \$10 million.
- The Nevada fund purchases reinsurance for occurrences greater than \$4 million.

Of these 4, the Washington fund, while not as large as Ohio’s, is considerably larger than the other 3.

Ohio’s decision to not purchase reinsurance is consistent with the behavior of the peer group – reinsurance is typically purchased by entities that are smaller than the Ohio BWC.

V. Appendix / Exhibits

Exhibit 1 - Ohio BWC Financial Information – as published

| Balance Sheet | 2002 | 2003 | 2004 | 2005 | 2006 |
|----------------------------|---------|---------|---------|---------|---------|
| ASSETS | | | | | |
| cash | 2.377 | 2.078 | 1.618 | 1.283 | 0.194 |
| invested | 16.937 | 16.166 | 16.777 | 17.201 | 16.036 |
| other | 2.879 | 3.131 | 2.937 | 4.250 | 3.335 |
| total | 22.193 | 21.375 | 21.332 | 22.734 | 19.565 |
| LIABILITIES | | | | | |
| loss & lae | 14.888 | 15.982 | 16.267 | 19.299 | 18.928 |
| other | 5.415 | 4.841 | 4.204 | 4.424 | 0.763 |
| total | 20.303 | 20.823 | 20.471 | 23.723 | 19.691 |
| NET ASSETS | 1.890 | 0.552 | 0.861 | (0.989) | (0.126) |
| | | | | | |
| Income Statement | 2002 | 2003 | 2004 | 2005 | 2006 |
| UNDERWRITING INCOME | | | | | |
| premiums | 1.880 | 1.723 | 1.744 | 1.733 | 1.755 |
| assessments | 0.482 | 0.508 | 0.489 | 0.537 | 0.411 |
| gross premiums | 2.362 | 2.231 | 2.233 | 2.270 | 2.166 |
| discounts & rebates | 1.474 | 0.641 | 0.416 | 0.233 | (0.008) |
| net premiums | 0.888 | 1.590 | 1.817 | 2.037 | 2.174 |
| loss & lae | 2.934 | 3.361 | 2.549 | 2.917 | 1.933 |
| other expenses | 0.094 | 0.091 | 0.113 | 0.090 | 0.086 |
| total | 3.028 | 3.452 | 2.662 | 3.007 | 2.019 |
| underwriting income | (2.140) | (1.862) | (0.845) | (0.970) | 0.155 |
| OTHER INCOME | | | | | |
| investment income | (0.430) | 0.575 | 1.250 | 0.988 | 0.764 |
| miscellaneous income | (0.056) | (0.051) | (0.096) | (0.051) | (0.055) |
| total income | (2.626) | (1.338) | 0.309 | (0.033) | 0.864 |

Exhibit 2 – Adjustments to Ohio BWC Financial Information

1. Removal of the 200 million Supreme Court additional reserve

| | | | | | | |
|------------------|------|---------|---------|---------|-------|---------|
| Balance Sheet | 2002 | 2003 | 2004 | 2005 | 2006 | |
| loss & lae | | (0.200) | (0.200) | (0.200) | | |
| Income Statement | | | | | | 2002-06 |
| loss & lae | | (0.200) | 0.000 | 0.000 | 0.200 | 0.000 |

2. Restating assessment funds to an accrual basis 27.5% of loss & lae is premium effect

| | | | | | | |
|-------------------|---------|-------|---------|-------|-------|---------|
| Balance Sheet | 2002 | 2003 | 2004 | 2005 | 2006 | |
| premiums unbilled | 0.672 | 0.747 | 0.697 | 0.000 | 0.000 | |
| loss & lae | 2.444 | 2.718 | 2.534 | | | |
| Income Statement | | | | | | 2002-06 |
| premiums | (0.110) | 0.075 | (0.051) | | | (0.086) |
| loss & lae | (0.401) | 0.274 | (0.184) | | | (0.311) |

3. Adjusting for current reserve needs - per latest actuarial study

| | | | | | | |
|------------------|---------|---------|---------|---------|---------|---------|
| Balance Sheet | 2002 | 2003 | 2004 | 2005 | 2006 | |
| loss & lae | (0.330) | (0.476) | (0.309) | (0.373) | (0.482) | |
| Income Statement | | | | | | 2002-06 |
| loss & lae | (0.176) | (0.145) | 0.166 | (0.064) | (0.109) | (0.327) |

4. Adjusting the interest rates to a portfolio-appropriate basis.

| | | | | | | |
|------------------|----------|----------|----------|----------|---------|---------|
| | 0.436329 | 0.382311 | 0.382311 | 0.022063 | | |
| Balance Sheet | 2002 | 2003 | 2004 | 2005 | 2006 | |
| loss & lae | 6.500 | 6.100 | 6.200 | 0.400 | | |
| Income Statement | | | | | | 2002-06 |
| loss & lae | 5.400 | (0.400) | 0.100 | (5.800) | (0.400) | (1.100) |

Exhibit 3 – Effects of Adjustments

| Balance Sheet | 2002 | 2003 | 2004 | 2005 | 2006 | |
|----------------------------|----------------|----------------|----------------|--------------|--------------|---------------------|
| ASSETS | | | | | | |
| cash | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| invested | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| other | 0.672 | 0.747 | 0.697 | 0.000 | 0.000 | adjustment 2 |
| total | 0.672 | 0.747 | 0.697 | 0.000 | 0.000 | |
| LIABILITIES | | | | | | |
| loss & lae | 8.614 | 8.142 | 8.225 | (0.173) | (0.482) | adjustments 1,2,3,4 |
| other | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| total | 8.614 | 8.142 | 8.225 | (0.173) | (0.482) | |
| NET ASSETS | (7.941) | (7.395) | (7.528) | 0.173 | 0.482 | |
| Income Statement | | | | | | |
| | 2002 | 2003 | 2004 | 2005 | 2006 | |
| UNDERWRITING INCOME | | | | | | |
| premiums | (0.110) | 0.075 | (0.051) | 0.000 | 0.000 | adjustment 2 |
| assessments | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| gross premiums | (0.110) | 0.075 | (0.051) | 0.000 | 0.000 | |
| discounts & rebates | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| net premiums | (0.110) | 0.075 | (0.051) | 0.000 | 0.000 | |
| loss & lae | 4.823 | (0.471) | 0.082 | (5.864) | (0.309) | adjustments 1,2,3,4 |
| other expenses | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| total | 4.823 | (0.471) | 0.082 | (5.864) | (0.309) | |
| underwriting income | (4.933) | 0.546 | (0.133) | 5.864 | 0.309 | |
| OTHER INCOME | | | | | | |
| investment income | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| miscellaneous income | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | |
| total income | (4.933) | 0.546 | (0.133) | 5.864 | 0.309 | |

Exhibit 4 - Ohio BWC Financial Information with Adjustments 1, 2, 3

| Balance Sheet | 2002 | 2003 | 2004 | 2005 | 2006 |
|----------------------------|---------|---------|---------|---------|---------|
| ASSETS | | | | | |
| cash | 2.377 | 2.078 | 1.618 | 1.283 | 0.194 |
| invested | 16.937 | 16.166 | 16.777 | 17.201 | 16.036 |
| other | 3.551 | 3.878 | 3.634 | 4.250 | 3.335 |
| total | 22.865 | 22.122 | 22.029 | 22.734 | 19.565 |
| LIABILITIES | | | | | |
| loss & lae | 17.002 | 18.024 | 18.292 | 18.726 | 18.446 |
| other | 5.415 | 4.841 | 4.204 | 4.424 | 0.763 |
| total | 22.417 | 22.865 | 22.496 | 23.150 | 19.209 |
| NET ASSETS | 0.449 | (0.743) | (0.467) | (0.416) | 0.356 |
| Income Statement | | | | | |
| UNDERWRITING INCOME | | | | | |
| premiums | 1.770 | 1.798 | 1.693 | 1.733 | 1.755 |
| assessments | 0.482 | 0.508 | 0.489 | 0.537 | 0.411 |
| gross premiums | 2.252 | 2.306 | 2.182 | 2.270 | 2.166 |
| discounts & rebates | 1.474 | 0.641 | 0.416 | 0.233 | (0.008) |
| net premiums | 0.778 | 1.665 | 1.766 | 2.037 | 2.174 |
| loss & lae | 2.357 | 3.290 | 2.531 | 2.853 | 2.024 |
| other expenses | 0.094 | 0.091 | 0.113 | 0.090 | 0.086 |
| total | 2.451 | 3.381 | 2.644 | 2.943 | 2.110 |
| underwriting income | (1.673) | (1.716) | (0.878) | (0.906) | 0.064 |
| OTHER INCOME | | | | | |
| investment income | (0.430) | 0.575 | 1.250 | 0.988 | 0.764 |
| miscellaneous income | (0.056) | (0.051) | (0.096) | (0.051) | (0.055) |
| total income | (2.159) | (1.192) | 0.276 | 0.031 | 0.773 |

Exhibit 5 - Ohio BWC Financial Information with Adjustments 1, 2, 3 and 4

| Balance Sheet | 2002 | 2003 | 2004 | 2005 | 2006 |
|----------------------------|----------------|----------------|----------------|----------------|--------------|
| ASSETS | | | | | |
| cash | 2.377 | 2.078 | 1.618 | 1.283 | 0.194 |
| invested | 16.937 | 16.166 | 16.777 | 17.201 | 16.036 |
| other | 3.551 | 3.878 | 3.634 | 4.250 | 3.335 |
| total | 22.865 | 22.122 | 22.029 | 22.734 | 19.565 |
| LIABILITIES | | | | | |
| loss & lae | 23.502 | 24.124 | 24.492 | 19.126 | 18.446 |
| other | 5.415 | 4.841 | 4.204 | 4.424 | 0.763 |
| total | 28.917 | 28.965 | 28.696 | 23.550 | 19.209 |
| NET ASSETS | (6.051) | (6.843) | (6.667) | (0.816) | 0.356 |
| | | | | | |
| Income Statement | 2002 | 2003 | 2004 | 2005 | 2006 |
| UNDERWRITING INCOME | | | | | |
| premiums | 1.770 | 1.798 | 1.693 | 1.733 | 1.755 |
| assessments | 0.482 | 0.508 | 0.489 | 0.537 | 0.411 |
| gross premiums | 2.252 | 2.306 | 2.182 | 2.270 | 2.166 |
| discounts & rebates | 1.474 | 0.641 | 0.416 | 0.233 | (0.008) |
| net premiums | 0.778 | 1.665 | 1.766 | 2.037 | 2.174 |
| loss & lae | 7.757 | 2.890 | 2.631 | (2.947) | 1.624 |
| other expenses | 0.094 | 0.091 | 0.113 | 0.090 | 0.086 |
| total | 7.851 | 2.981 | 2.744 | (2.857) | 1.710 |
| underwriting income | (7.073) | (1.316) | (0.978) | 4.894 | 0.464 |
| OTHER INCOME | | | | | |
| investment income | (0.430) | 0.575 | 1.250 | 0.988 | 0.764 |
| miscellaneous income | (0.056) | (0.051) | (0.096) | (0.051) | (0.055) |
| total income | (7.559) | (0.792) | 0.176 | 5.831 | 1.173 |

Exhibit 6 – Ohio BWC Financial Information using Undiscounted Reserves

| Balance Sheet | <u>2002</u> | <u>2003</u> | <u>2004</u> | <u>2005</u> | <u>2006</u> |
|--------------------------------|----------------|----------------|----------------|----------------|----------------|
| ASSETS | | | | | |
| cash | 2.377 | 2.078 | 1.618 | 1.283 | 0.194 |
| invested | 16.937 | 16.166 | 16.777 | 17.201 | 16.036 |
| <u>other</u> | <u>2.879</u> | <u>3.131</u> | <u>2.937</u> | <u>4.250</u> | <u>3.335</u> |
| total | 22.193 | 21.375 | 21.332 | 22.734 | 19.565 |
| LIABILITIES | | | | | |
| loss & lae | 30.600 | 32.300 | 33.100 | 38.600 | 37.700 |
| <u>other</u> | <u>5.415</u> | <u>4.841</u> | <u>4.204</u> | <u>4.424</u> | <u>0.763</u> |
| total | 36.015 | 37.141 | 37.304 | 43.024 | 38.463 |
| NET ASSETS | (13.822) | (15.766) | (15.972) | (20.290) | (18.898) |
| | | | | | |
| Income Statement | <u>2002</u> | <u>2003</u> | <u>2004</u> | <u>2005</u> | <u>2006</u> |
| UNDERWRITING INCOME | | | | | |
| premiums | 1.880 | 1.723 | 1.744 | 1.733 | 1.755 |
| <u>assessments</u> | <u>0.482</u> | <u>0.508</u> | <u>0.489</u> | <u>0.537</u> | <u>0.411</u> |
| gross premiums | 2.362 | 2.231 | 2.233 | 2.270 | 2.166 |
| <u>discounts & rebates</u> | <u>1.474</u> | <u>0.641</u> | <u>0.416</u> | <u>0.233</u> | <u>(0.008)</u> |
| net premiums | 0.888 | 1.590 | 1.817 | 2.037 | 2.174 |
| loss & lae | 3.131 | 4.036 | 3.097 | 2.285 | 1.470 |
| <u>other expenses</u> | <u>0.094</u> | <u>0.091</u> | <u>0.093</u> | <u>0.090</u> | <u>0.086</u> |
| total | 3.225 | 4.127 | 3.190 | 2.375 | 1.556 |
| underwriting income | (2.337) | (2.537) | (1.373) | (0.338) | 0.618 |
| OTHER INCOME | | | | | |
| investment income | (0.430) | 0.575 | 1.250 | 0.988 | 0.764 |
| <u>miscellaneous income</u> | <u>(0.056)</u> | <u>(0.051)</u> | <u>(0.096)</u> | <u>(0.051)</u> | <u>(0.055)</u> |
| total income | (2.823) | (2.013) | (0.219) | 0.599 | 1.327 |

Exhibit 7

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | ADMINISTRATIVE COST FUND | | | STATE INSURANCE FUND ACCOUNT | | | PUBLIC WORK-RELIEF EMPLOYEES' FUND ACCOUNT | | | SELF-INSURING EMPLOYERS' GUARANTY FUND | | | TOTAL | | |
|---|--------------------------|-----------------|----------------|------------------------------|--------------------|------------------|--|----------------|------------|--|----------------|-----------------|------------------|--------------------|------------------|
| | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 |
| Operating revenues: | | | | | | | | | | | | | | | |
| Premium Income | - | - | - | 1,741,880 | 1,730,396 | 1,752,108 | 866 | 478 | 811 | - | - | - | 1,742,746 | 1,730,874 | 1,752,919 |
| Assessment Income | 357,139 | 317,777 | 297,039 | - | - | - | - | - | - | 14,450 | 102,931 | (17,179) | 371,589 | 420,708 | 279,860 |
| Provision for uncollectibles | (6,342) | (1,888) | (4,799) | (92,747) | (63,893) | (62,164) | - | - | - | (2,248) | (551) | 638 | (101,337) | (66,332) | (66,325) |
| Other income | 2,310 | 3,298 | 6,496 | 9,542 | 8,689 | 8,830 | - | - | - | - | - | - | 11,852 | 11,987 | 15,326 |
| Total operating revenues | 353,107 | 319,187 | 298,736 | 1,658,675 | 1,675,192 | 1,698,774 | 866 | 478 | 811 | 12,202 | 102,380 | (16,541) | 2,024,850 | 2,097,237 | 1,981,780 |
| Operating expenses: | | | | | | | | | | | | | | | |
| Workers' compensation benefits | - | - | - | 2,021,690 | 2,317,277 | 1,475,907 | 138 | (1,245) | 414 | 20,226 | 95,231 | (17,651) | 2,042,054 | 2,411,263 | 1,458,670 |
| Compensation adjustment expenses | 184,915 | 336,511 | 137,983 | 204,175 | 161,289 | 185,523 | - | - | - | - | - | - | 389,090 | 497,800 | 323,506 |
| Personal services | 62,505 | 51,707 | 44,564 | - | - | - | - | - | - | - | - | - | 62,505 | 51,707 | 44,564 |
| General and administrative | 17,433 | - | - | - | - | - | - | - | - | - | - | - | 17,433 | - | - |
| Other expenses | 15,358 | 20,555 | 17,322 | 17,788 | 17,618 | 22,999 | - | - | - | 49 | 71 | - | 33,195 | 38,244 | 40,321 |
| Total operating expenses | 280,211 | 408,773 | 199,869 | 2,659,176 | 2,729,020 | 1,676,200 | 138 | (1,245) | 414 | 20,275 | 95,302 | (17,651) | 2,959,800 | 3,231,850 | 1,858,832 |
| Net income (loss) before prem. Reductions/refunds & operating transfers | 72,896 | (89,586) | 98,867 | (1,000,501) | (1,053,828) | 22,574 | 728 | 1,723 | 397 | (8,073) | 7,078 | 1,110 | (934,950) | (1,134,613) | 122,948 |
| Operating transfers | 3,435 | 3,841 | 3,399 | (11,115) | (3,841) | (3,399) | - | - | - | - | - | - | (7,680) | - | - |
| Premium reductions and refunds | - | - | - | 415,523 | 232,836 | (8,229) | - | - | - | - | - | - | 415,523 | 232,836 | (8,229) |
| Net operating income (loss) | 76,331 | (85,745) | 102,266 | (1,011,616) | (1,057,669) | 19,175 | 728 | 1,723 | 397 | (8,073) | 7,078 | 1,110 | (942,630) | (1,134,613) | 122,948 |

Reallocation of Administrative Cost Fund

| | ADMINISTRATIVE COST FUND | | | STATE INSURANCE FUND ACCOUNT | | | PUBLIC WORK-RELIEF EMPLOYEES' FUND ACCOUNT | | | SELF-INSURING EMPLOYERS' GUARANTY FUND | | | TOTAL | | |
|---|--------------------------|------------------------------------|------|------------------------------|--------------------|------------------|--|----------------|------------|--|----------------|-----------------|------------------|--------------------|------------------|
| | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 |
| Operating revenues: | | | | | | | | | | | | | | | |
| Premium Income | | (Actual) | | 1,741,880 | 1,730,396 | 1,752,108 | 866 | 478 | 811 | - | - | - | 1,742,746 | 1,730,874 | 1,752,919 |
| Assessment Income | | (Alloc: 3-yr avg prem+assmt-reduc) | | 349,339 | 310,837 | 290,552 | 164 | 146 | 137 | 22,086 | 109,725 | (10,828) | 371,589 | 420,708 | 279,860 |
| Provision for uncollectibles | | (Alloc: 3-yr avg prem+assmt-reduc) | | (98,950) | (65,740) | (66,858) | (3) | (1) | (2) | (2,384) | (591) | 535 | (101,337) | (66,332) | (66,325) |
| Other income | | (Alloc: 3-yr avg prem+assmt-reduc) | | 11,802 | 11,915 | 15,184 | 1 | 2 | 3 | 49 | 71 | 139 | 11,852 | 11,987 | 15,326 |
| Total operating revenues | | | | 2,004,070 | 1,987,408 | 1,990,986 | 1,028 | 625 | 948 | 19,752 | 109,204 | (10,154) | 2,024,850 | 2,097,237 | 1,981,780 |
| Operating expenses: | | | | | | | | | | | | | | | |
| Workers' compensation benefits | | (Actual) | | 2,021,690 | 2,317,277 | 1,475,907 | 138 | (1,245) | 414 | 20,226 | 95,231 | (17,651) | 2,042,054 | 2,411,263 | 1,458,670 |
| Compensation adjustment expenses | | (Alloc. by losses) | | 387,246 | 484,684 | 325,137 | 12 | (174) | 39 | 1,832 | 13,290 | (1,670) | 389,090 | 497,800 | 323,506 |
| Personal services | | (Alloc: 3-yr avg prem+assmt-reduc) | | 61,140 | 50,578 | 43,591 | 29 | 24 | 20 | 1,336 | 1,106 | 953 | 62,505 | 51,707 | 44,564 |
| General and administrative | | (Alloc: 3-yr avg prem+assmt-reduc) | | 17,052 | - | - | 8 | - | - | 373 | - | - | 17,433 | - | - |
| Other expenses | | (Alloc: 3-yr avg prem+assmt-reduc) | | 32,811 | 37,724 | 39,943 | 7 | 9 | 8 | 377 | 510 | 370 | 33,195 | 38,244 | 40,321 |
| Total operating expenses | | | | 2,519,939 | 2,890,262 | 1,884,577 | 194 | (1,386) | 482 | 24,144 | 110,137 | (17,998) | 2,544,277 | 2,999,014 | 1,867,061 |
| Net income (loss) before prem. Reductions/refunds & operating transfers | | | | (515,869) | (902,854) | 106,409 | 834 | 2,010 | 467 | (4,392) | (933) | 7,844 | (519,427) | (901,777) | 114,719 |
| Operating transfers | | (Actual) | | (7,680) | | | - | - | - | - | - | - | (7,680) | - | - |
| Premium reductions and refunds | | (Actual) | | 415,523 | 232,836 | (8,229) | - | - | - | - | - | - | 415,523 | 232,836 | (8,229) |
| Net operating income (loss) | | | | (939,072) | (1,135,690) | 114,638 | 834 | 2,010 | 467 | (4,392) | (933) | 7,844 | (942,630) | (1,134,613) | 122,948 |

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | ADMINISTRATIVE COST FUND | | | STATE INSURANCE FUND ACCOUNT | | | PUBLIC WORK-RELIEF EMPLOYEES' FUND ACCOUNT | | | SELF-INSURING EMPLOYERS' GUARANTY FUND | | | TOTAL | | |
|---|--------------------------|-----------------|----------------|------------------------------|--------------------|------------------|--|----------------|------------|--|----------------|-----------------|------------------|--------------------|------------------|
| | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 |
| Operating revenues: | | | | | | | | | | | | | | | |
| Premium Income | - | - | - | 1,741,880 | 1,730,396 | 1,752,108 | 866 | 478 | 811 | - | - | - | 1,742,746 | 1,730,874 | 1,752,919 |
| Assessment Income | 357,139 | 317,777 | 297,039 | - | - | - | - | - | - | 14,450 | 102,931 | (17,179) | 371,589 | 420,708 | 279,860 |
| Provision for uncollectibles | (6,342) | (1,888) | (4,799) | (92,747) | (63,893) | (62,164) | - | - | - | (2,248) | (551) | 638 | (101,337) | (66,332) | (66,325) |
| Other income | 2,310 | 3,298 | 6,496 | 9,542 | 8,689 | 8,830 | - | - | - | - | - | - | 11,852 | 11,987 | 15,326 |
| Total operating revenues | 353,107 | 319,187 | 298,736 | 1,658,675 | 1,675,192 | 1,698,774 | 866 | 478 | 811 | 12,202 | 102,380 | (16,541) | 2,024,850 | 2,097,237 | 1,981,780 |
| Operating expenses: | | | | | | | | | | | | | | | |
| Workers' compensation benefits | - | - | - | 2,021,690 | 2,317,277 | 1,475,907 | 138 | (1,245) | 414 | 20,226 | 95,231 | (17,651) | 2,042,054 | 2,411,263 | 1,458,670 |
| Compensation adjustment expenses | 184,915 | 336,511 | 137,983 | 204,175 | 161,289 | 185,523 | - | - | - | - | - | - | 389,090 | 497,800 | 323,506 |
| Personal services | 62,505 | 51,707 | 44,564 | - | - | - | - | - | - | - | - | - | 62,505 | 51,707 | 44,564 |
| General and administrative | 17,433 | - | - | - | - | - | - | - | - | - | - | - | 17,433 | - | - |
| Other expenses | 15,358 | 20,555 | 17,322 | 17,788 | 17,618 | 22,999 | - | - | - | 49 | 71 | - | 33,195 | 38,244 | 40,321 |
| Total operating expenses | 280,211 | 408,773 | 199,869 | 2,659,176 | 2,729,020 | 1,676,200 | 138 | (1,245) | 414 | 20,275 | 95,302 | (17,651) | 2,959,800 | 3,231,850 | 1,858,832 |
| Net income (loss) before prem. Reductions/refunds & operating transfers | 72,896 | (89,586) | 98,867 | (1,000,501) | (1,053,828) | 22,574 | 728 | 1,723 | 397 | (8,073) | 7,078 | 1,110 | (934,950) | (1,134,613) | 122,948 |
| Operating transfers | 3,435 | 3,841 | 3,399 | (11,115) | (3,841) | (3,399) | - | - | - | - | - | - | (7,680) | - | - |
| Premium reductions and refunds | - | - | - | 415,523 | 232,836 | (8,229) | - | - | - | - | - | - | 415,523 | 232,836 | (8,229) |
| Net operating income (loss) | 76,331 | (85,745) | 102,266 | (1,011,616) | (1,057,669) | 19,175 | 728 | 1,723 | 397 | (8,073) | 7,078 | 1,110 | (942,630) | (1,134,613) | 122,948 |

Reallocation of Administrative Cost Fund

| | ADMINISTRATIVE COST FUND | | | STATE INSURANCE FUND ACCOUNT | | | PUBLIC WORK-RELIEF EMPLOYEES' FUND ACCOUNT | | | SELF-INSURING EMPLOYERS' GUARANTY FUND | | | TOTAL | | |
|---|--------------------------|------------------------------------|------|------------------------------|--------------------|------------------|--|----------------|------------|--|----------------|-----------------|------------------|--------------------|------------------|
| | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 | 2004 | 2005 | 2006 |
| Operating revenues: | | | | | | | | | | | | | | | |
| Premium Income | | (Actual) | | 1,741,880 | 1,730,396 | 1,752,108 | 866 | 478 | 811 | - | - | - | 1,742,746 | 1,730,874 | 1,752,919 |
| Assessment Income | | (Alloc: 3-yr avg prem+assmt-reduc) | | 349,339 | 310,837 | 290,552 | 164 | 146 | 137 | 22,086 | 109,725 | (10,828) | 371,589 | 420,708 | 279,860 |
| Provision for uncollectibles | | (Alloc: 3-yr avg prem+assmt-reduc) | | (98,950) | (65,740) | (66,858) | (3) | (1) | (2) | (2,384) | (591) | 535 | (101,337) | (66,332) | (66,325) |
| Other income | | (Alloc: 3-yr avg prem+assmt-reduc) | | 11,802 | 11,915 | 15,184 | 1 | 2 | 3 | 49 | 71 | 139 | 11,852 | 11,987 | 15,326 |
| Total operating revenues | | | | 2,004,070 | 1,987,408 | 1,990,986 | 1,028 | 625 | 948 | 19,752 | 109,204 | (10,154) | 2,024,850 | 2,097,237 | 1,981,780 |
| Operating expenses: | | | | | | | | | | | | | | | |
| Workers' compensation benefits | | (Actual) | | 2,021,690 | 2,317,277 | 1,475,907 | 138 | (1,245) | 414 | 20,226 | 95,231 | (17,651) | 2,042,054 | 2,411,263 | 1,458,670 |
| Compensation adjustment expenses | | (Alloc. by losses) | | 387,246 | 484,684 | 325,137 | 12 | (174) | 39 | 1,832 | 13,290 | (1,670) | 389,090 | 497,800 | 323,506 |
| Personal services | | (Alloc: 3-yr avg prem+assmt-reduc) | | 61,140 | 50,578 | 43,591 | 29 | 24 | 20 | 1,336 | 1,106 | 953 | 62,505 | 51,707 | 44,564 |
| General and administrative | | (Alloc: 3-yr avg prem+assmt-reduc) | | 17,052 | - | - | 8 | - | - | 373 | - | - | 17,433 | - | - |
| Other expenses | | (Alloc: 3-yr avg prem+assmt-reduc) | | 32,811 | 37,724 | 39,943 | 7 | 9 | 8 | 377 | 510 | 370 | 33,195 | 38,244 | 40,321 |
| Total operating expenses | | | | 2,519,939 | 2,890,262 | 1,884,577 | 194 | (1,386) | 482 | 24,144 | 110,137 | (17,998) | 2,544,277 | 2,999,014 | 1,867,061 |
| Net income (loss) before prem. Reductions/refunds & operating transfers | | | | (515,869) | (902,854) | 106,409 | 834 | 2,010 | 467 | (4,392) | (933) | 7,844 | (519,427) | (901,777) | 114,719 |
| Operating transfers | | (Actual) | | (7,680) | | | - | - | - | - | - | - | (7,680) | - | - |
| Premium reductions and refunds | | (Actual) | | 415,523 | 232,836 | (8,229) | - | - | - | - | - | - | 415,523 | 232,836 | (8,229) |
| Net operating income (loss) | | | | (939,072) | (1,135,690) | 114,638 | 834 | 2,010 | 467 | (4,392) | (933) | 7,844 | (942,630) | (1,134,613) | 122,948 |

Calculation of BWC Internal Rate of Return -Scenario 1

Assumptions

| | | |
|----|---------------------|--------|
| a. | Reserve to Surplus: | 6.94 |
| b. | Tax Rate: | 0% |
| c. | Investment return: | 5.0% |
| d. | General Expense: | 3.0% |
| e. | ULE Expense: | 1.0% |
| f. | Loss ALAE Ratio | 183.7% |
| g. | Combined Ratio | 187.7% |

Notes: a. NCCI study
 c,d,f. derived from BWC Annual Report & Actuarial Report as of 6/30/2006
 e. selected by Aon
 g. d+e+f

| Time Period | | Premium | | | Expense | | | Losses + ALAE | | | | | | Stat UW Income | Surplus | | | | Avg Inv Assets | Investment Income | Equity Flow | | | |
|------------------|-------|---------|-----------|-----------|---------------------|-----------|--------|---------------|---------------|-----------|----------|-----------|-----------|----------------|-----------|-------------------|-------------|------------|----------------|-------------------|-------------|-----------|-----------|-------------|
| Year | Mid | Written | Collected | Earned | Comm, Gnr, Tx, Rein | ULAE | Total | Incurred | Case Incurred | Paid | Reserves | | | | PreTax | R/S: TI Loss Rsvr | 6.94 | | P/S: 0.39 | | Avg | 5.0% | Amt | |
| | | | | | | | | | | | IBNR | Case | End | Total Avg | | | Required | Surplus | Chg | | | | | |
| 0 | - | 0 | 2,095,060 | 0% | 2,095,060 | - | - | 0% | - | - | - | - | - | - | - | 2,095,060 | 301,882 | - | 301,882 | - | - | - | (301,882) | |
| 1 | 1.00 | 1/2 | 100% | 2,095,060 | 62,852 | 12,099 | 74,950 | 3,849,106 | 44% | 1,704,313 | 15% | 596,482 | 2,144,794 | 1,107,830 | 3,252,624 | 1,626,312 | (1,828,997) | 3,252,624 | 468,678 | 385,280 | 166,796 | 2,011,592 | 100,580 | (1,895,213) |
| 2 | 2.00 | 1 1/2 | 0% | - | - | 1,820 | 1,820 | - | 21% | 806,487 | 17% | 668,783 | 1,338,307 | 1,245,534 | 2,583,841 | 2,918,232 | (1,820) | 2,583,841 | 372,311 | 420,495 | (96,366) | 3,338,727 | 166,936 | 261,483 |
| 3 | 3.00 | 2 1/2 | - | - | - | 1,195 | 1,195 | - | 14% | 535,601 | 11% | 439,047 | 802,706 | 1,342,088 | 2,144,794 | 2,364,317 | (1,195) | 2,144,794 | 309,048 | 340,680 | (63,263) | 2,704,997 | 135,250 | 197,318 |
| 4 | 4.00 | 3 1/2 | - | - | - | 892 | 892 | - | 11% | 404,532 | 9% | 327,767 | 398,173 | 1,418,853 | 1,817,027 | 1,980,910 | (892) | 1,817,027 | 261,819 | 285,434 | (47,229) | 2,266,344 | 113,317 | 159,654 |
| 5 | 5.00 | 4 1/2 | - | - | - | 682 | 682 | - | 10% | 398,173 | 7% | 250,466 | - | 1,566,561 | 1,566,561 | 1,691,794 | (682) | 1,566,561 | 225,729 | 243,774 | (36,090) | 1,935,568 | 96,778 | 132,187 |
| 6 | 6.00 | 5 1/2 | - | - | - | 621 | 621 | - | 0% | - | 6% | 228,255 | - | 1,338,307 | 1,338,307 | 1,452,434 | (621) | 1,338,307 | 192,840 | 209,284 | (32,890) | 1,661,718 | 83,086 | 115,354 |
| 7 | 7.00 | 6 1/2 | - | - | - | 576 | 576 | - | 0% | - | 5% | 211,625 | - | 1,126,682 | 1,126,682 | 1,232,494 | (576) | 1,126,682 | 162,346 | 177,593 | (30,493) | 1,410,087 | 70,504 | 100,422 |
| 8 | 8.00 | 7 1/2 | - | - | - | 465 | 465 | - | 0% | - | 4% | 170,868 | - | 955,814 | 955,814 | 1,041,248 | (465) | 955,814 | 137,725 | 150,036 | (24,621) | 1,191,284 | 59,564 | 83,720 |
| 9 | 9.00 | 8 1/2 | - | - | - | 417 | 417 | - | 0% | - | 4% | 153,108 | - | 802,706 | 802,706 | 879,260 | (417) | 802,706 | 115,664 | 126,694 | (22,062) | 1,005,954 | 50,298 | 71,943 |
| 10 | 10.00 | 9 1/2 | - | - | - | 393 | 393 | - | 0% | - | 4% | 144,518 | - | 658,187 | 658,187 | 730,446 | (393) | 658,187 | 94,840 | 105,252 | (20,824) | 835,698 | 41,785 | 62,216 |
| 11 | 11.00 | 10 1/2 | - | - | - | 369 | 369 | - | 0% | - | 4% | 135,439 | - | 522,749 | 522,749 | 590,468 | (369) | 522,749 | 75,324 | 85,082 | (19,516) | 675,550 | 33,777 | 52,925 |
| 12 | 12.00 | 11 1/2 | - | - | - | 339 | 339 | - | 0% | - | 3% | 124,575 | - | 398,173 | 398,173 | 460,461 | (339) | 398,173 | 57,374 | 66,349 | (17,950) | 526,810 | 26,341 | 43,952 |
| 13 | 13.00 | 12 1/2 | - | - | - | 305 | 305 | - | 0% | - | 3% | 112,007 | - | 286,167 | 286,167 | 342,170 | (305) | 286,167 | 41,234 | 49,304 | (16,139) | 391,474 | 19,574 | 35,408 |
| 14 | 14.00 | 13 1/2 | - | - | - | 242 | 242 | - | 0% | - | 2% | 88,810 | - | 197,356 | 197,356 | 241,761 | (242) | 197,356 | 28,438 | 34,836 | (12,797) | 276,597 | 13,830 | 26,385 |
| 15 | 15.00 | 14 1/2 | - | - | - | 174 | 174 | - | 0% | - | 2% | 63,815 | - | 133,541 | 133,541 | 165,449 | (174) | 133,541 | 19,242 | 23,840 | (9,195) | 189,289 | 9,464 | 18,486 |
| 16 | 16.00 | 15 1/2 | - | - | - | 363 | 363 | - | 0% | - | 3% | 133,541 | - | - | - | 0 | (363) | 0 | 0 | 9,621 | (19,242) | 76,392 | 3,820 | 22,698 |
| Total-Annualized | | | 2,095,060 | 100% | 2,095,060 | 1,047,530 | 62,852 | 20,951 | 83,802 | 3,849,106 | 100% | 3,849,106 | 100% | 3,849,106 | | | (1,837,849) | 19,879,587 | 2,864,494 | 2,713,553 | | 1,024,904 | | -7.73% |

Calculation of BWC Internal Rate of Return -Scenario 2

Assumptions

| | | |
|----|---------------------|--------|
| a. | Reserve to Surplus: | 1.86 |
| b. | Tax Rate: | 0% |
| c. | Investment return: | 5.0% |
| d. | General Expense: | 3.0% |
| e. | ULE Expense: | 1.0% |
| f. | Loss ALAE Ratio | 183.7% |
| g. | Combined Ratio | 187.7% |

Notes: a. NCCI study
 c,d,f. derived from BWC Annual Report & Actuarial Report as of 6/30/2006
 e. selected by Aon
 g. d+e+f

| Time Period | | Premium | | | Expense | | | Losses + ALAE | | | | | | Stat UW Income | Surplus | | | | Avg Inv Assets | Investment Income | Equity Flow | | | | | |
|------------------|-------|-----------|-----------|-----------|---------------------|--------|--------|---------------|---------------|-----------|----------|-----------|-----------|----------------|-----------|-----------|-------------|------------|----------------|-------------------|-------------|-----------|--------------|------------------|-----|-----|
| Year | Mid | Written | Collected | Earned | Comm, Gnr, Tx, Rein | ULAE | Total | Incurred | Case Incurred | Paid | Reserves | | | | PreTax | R/S: | 1.86 | P/S: | 0.10 | Avg | 5.0% | Amt | | | | |
| | | | | | | | | | | | IBNR | Case | Total | | | | | | | | | | TI Loss Rsvr | Required Surplus | | Chg |
| | | | | | | | | | | | | | End | Avg | | | | | | | | | | End | Avg | |
| 0 | 0 | 2,095,060 | 0% | 2,095,060 | - | - | - | - | 0% | - | - | - | - | - | - | - | - | - | - | - | - | - | (1,126,376) | | | |
| 1 | 1.00 | 1/2 | 100% | 2,095,060 | 62,852 | 12,099 | 74,950 | 3,849,106 | 44% | 1,704,313 | 15% | 596,482 | 2,144,794 | 1,107,830 | 3,252,624 | 1,626,312 | (1,828,997) | 3,252,624 | 1,748,723 | 1,437,549 | 622,346 | 3,063,861 | 153,193 | (2,298,150) | | |
| 2 | 2.00 | 1 1/2 | - | - | - | 1,820 | 1,820 | - | 21% | 806,487 | 17% | 668,783 | 1,338,307 | 1,245,534 | 2,583,841 | 2,918,232 | (1,820) | 2,583,841 | 1,389,162 | 1,668,942 | (359,561) | 4,487,174 | 224,359 | 582,099 | | |
| 3 | 3.00 | 2 1/2 | - | - | - | 1,195 | 1,195 | - | 14% | 535,601 | 11% | 439,047 | 802,706 | 1,342,088 | 2,144,794 | 2,364,317 | (1,195) | 2,144,794 | 1,153,115 | 1,271,138 | (236,047) | 3,635,456 | 181,773 | 416,625 | | |
| 4 | 4.00 | 3 1/2 | - | - | - | 892 | 892 | - | 11% | 404,532 | 9% | 327,767 | 398,173 | 1,418,853 | 1,817,027 | 1,980,910 | (892) | 1,817,027 | 976,896 | 1,065,005 | (176,219) | 3,045,916 | 152,296 | 327,623 | | |
| 5 | 5.00 | 4 1/2 | - | - | - | 682 | 682 | - | 10% | 398,173 | 7% | 250,466 | - | 1,566,561 | 1,566,561 | 1,691,794 | (682) | 1,566,561 | 842,237 | 909,567 | (134,659) | 2,601,360 | 130,068 | 264,045 | | |
| 6 | 6.00 | 5 1/2 | - | - | - | 621 | 621 | - | 0% | - | 6% | 228,255 | - | 1,338,307 | 1,338,307 | 1,452,434 | (621) | 1,338,307 | 719,520 | 780,878 | (122,717) | 2,233,312 | 111,666 | 233,762 | | |
| 7 | 7.00 | 6 1/2 | - | - | - | 576 | 576 | - | 0% | - | 5% | 211,625 | - | 1,126,682 | 1,126,682 | 1,232,494 | (576) | 1,126,682 | 605,743 | 662,631 | (113,777) | 1,895,126 | 94,756 | 207,957 | | |
| 8 | 8.00 | 7 1/2 | - | - | - | 465 | 465 | - | 0% | - | 4% | 170,868 | - | 955,814 | 955,814 | 1,041,248 | (465) | 955,814 | 513,878 | 559,811 | (91,865) | 1,601,058 | 80,053 | 171,453 | | |
| 9 | 9.00 | 8 1/2 | - | - | - | 417 | 417 | - | 0% | - | 4% | 153,108 | - | 802,706 | 802,706 | 879,260 | (417) | 802,706 | 431,562 | 472,720 | (82,316) | 1,351,980 | 67,599 | 149,498 | | |
| 10 | 10.00 | 9 1/2 | - | - | - | 393 | 393 | - | 0% | - | 4% | 144,518 | - | 658,187 | 658,187 | 730,446 | (393) | 658,187 | 353,864 | 392,713 | (77,698) | 1,123,160 | 56,158 | 133,463 | | |
| 11 | 11.00 | 10 1/2 | - | - | - | 369 | 369 | - | 0% | - | 4% | 135,439 | - | 522,749 | 522,749 | 590,468 | (369) | 522,749 | 281,048 | 317,456 | (72,816) | 907,924 | 45,396 | 117,844 | | |
| 12 | 12.00 | 11 1/2 | - | - | - | 339 | 339 | - | 0% | - | 3% | 124,575 | - | 398,173 | 398,173 | 460,461 | (339) | 398,173 | 214,072 | 247,560 | (66,976) | 708,021 | 35,401 | 102,038 | | |
| 13 | 13.00 | 12 1/2 | - | - | - | 305 | 305 | - | 0% | - | 3% | 112,007 | - | 286,167 | 286,167 | 342,170 | (305) | 286,167 | 153,853 | 183,962 | (60,219) | 526,132 | 26,307 | 86,221 | | |
| 14 | 14.00 | 13 1/2 | - | - | - | 242 | 242 | - | 0% | - | 2% | 88,810 | - | 197,356 | 197,356 | 241,761 | (242) | 197,356 | 106,106 | 129,979 | (47,747) | 371,741 | 18,587 | 66,093 | | |
| 15 | 15.00 | 14 1/2 | - | - | - | 174 | 174 | - | 0% | - | 2% | 63,815 | - | 133,541 | 133,541 | 165,449 | (174) | 133,541 | 71,796 | 88,951 | (34,309) | 254,400 | 12,720 | 46,856 | | |
| 16 | 16.00 | 15 1/2 | - | - | - | 363 | 363 | - | 0% | - | 3% | 133,541 | - | - | - | 0 | (363) | 0 | 0 | 35,898 | (71,796) | 102,669 | 5,133 | 76,566 | | |
| Total-Annualized | | 2,095,060 | 100% | 2,095,060 | 62,852 | 20,951 | 83,802 | 3,849,106 | 100% | 3,849,106 | 100% | 3,849,106 | - | - | 0 | 66,771 | (1,837,849) | 19,879,587 | 10,687,950 | 10,124,762 | - | 1,395,464 | - | -2.40% | | |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

STATE INSURANCE FUND ACCOUNT

SUPPLEMENTAL SCHEDULE OF NET ASSTS - JUNE 30

| | | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| ASSETS | Current assets | | | | | |
| | Cash and cash equivalents | \$ 2,221,516 | \$ 1,813,445 | \$ 1,477,660 | \$ 1,149,128 | \$ 141,423 |
| | Collateral on loaned securities | 2,020,359 | 1,926,616 | 1,889,613 | 1,565,393 | - |
| | Premiums in course of collection | 133,032 | 804,111 | 657,778 | 844,690 | 754,175 |
| | Assessments in course of collection | - | - | - | - | - |
| | Accounts receivable, net of allowance | 129,101 | 148,768 | 134,533 | 141,472 | 126,679 |
| | Interfund receivables | 4,484 | 8,142 | 18,153 | 18,437 | 19,159 |
| | Investment trade receivables | 1,013,998 | 381,854 | 345,450 | 770,914 | - |
| | Accrued investment income | 85,118 | 73,281 | 62,460 | 60,371 | 2,254 |
| | Other current assets | 2,103 | 2,005 | 2,659 | 2,142 | 1,713 |
| | Total current assets | 5,609,711 | 5,158,222 | 4,588,306 | 4,552,547 | 1,045,403 |
| | Noncurrent assets: | | | | | |
| | Fixed maturities | 7,905,533 | 7,611,380 | 6,806,514 | 7,032,342 | 14,285,602 |
| | Domestic equity securities: | | | | | |
| | Common stocks | 3,977,781 | 3,362,023 | 4,035,829 | 4,299,694 | 1,241 |
| | Preferred stocks | 32,531 | 28,773 | 23,067 | 22,429 | 9,822 |
| | International securities | 1,500,545 | 1,391,386 | 1,774,188 | 1,995,648 | 922 |
| | Investments in limited partnerships | 359,562 | 631,556 | 999,037 | 940,083 | 427,339 |
| | Unbilled premiums receivable | 776,751 | 941,121 | 1,003,553 | 977,147 | 1,049,182 |
| | Retrospective premiums receivable | 230,592 | 266,505 | 247,321 | 252,463 | 271,552 |
| | Capital assets | 36,557 | 39,530 | 37,892 | 24,138 | 23,695 |
| | Restricted cast | - | - | - | - | - |
| | Total noncurrent assets | 14,819,852 | 14,272,274 | 14,927,401 | 15,543,944 | 16,069,355 |
| Total assets | \$ 20,429,563 | \$ 19,430,496 | \$ 19,515,707 | \$ 20,096,491 | \$ 17,114,758 | |
| LIABILITIES | Current liabilities: | | | | | |
| | Reserve for compensation | 1,629,808 | 1,687,058 | 1,763,043 | 1,745,142 | 1,748,743 |
| | Reserve for compensation adjustment expenses | 152,298 | 160,988 | 169,213 | 171,034 | 172,429 |
| | Warrants payable | 34,301 | 34,448 | 36,033 | 42,701 | 44,390 |
| | Deferred revenue | - | - | - | - | - |
| | Bonds payable | - | - | - | - | - |
| | Investment trade payables | 2,433,261 | 1,969,739 | 1,451,130 | 1,933,453 | - |
| | Accounts payable | 518 | 875 | 3,162 | 598 | 1,046 |
| | Interfund payables | 24,677 | 53,638 | 116,373 | 131,297 | 109,509 |
| | Premium refund payable | 66,539 | - | - | - | - |
| | Obligations under securities lending | 2,020,359 | 1,926,616 | 1,889,613 | 1,565,393 | - |
| | Other current liabilities | - | - | - | - | 50,019 |
| | Total current liabilities | 6,361,761 | 5,833,362 | 5,428,567 | 5,589,618 | 2,126,136 |
| | Noncurrent liabilities: | | | | | |
| | Reserve for compensation | 11,583,192 | 12,560,942 | 12,793,957 | 13,310,858 | 13,059,257 |
| | Reserve for compensation adjustment expenses | 516,702 | 535,412 | 557,887 | 546,366 | 557,671 |
| | Premium payment security deposits | 81,123 | 82,843 | 85,156 | 86,467 | 87,166 |
| | Deferred revenue | - | - | - | - | - |
| | Bonds payable | - | - | - | - | - |
| | Other noncurrent liabilities | - | - | 5,696 | 55,691 | 5,683 |
| | Total noncurrent liabilities | 12,181,017 | 13,179,197 | 13,442,696 | 13,999,382 | 13,709,777 |
| | Total liabilities | \$ 18,542,778 | \$ 19,012,559 | \$ 18,871,263 | \$ 19,589,000 | \$ 15,835,913 |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

STATE INSURANCE FUND ACCOUNT

| | | | | | |
|---|---------------------|-------------------|-------------------|-------------------|---------------------|
| NET ASSETS (DEFICIT) | | | | | |
| Invested in capital assets, net of related debt | 36,557 | 39,530 | 37,892 | 24,138 | 23,696 |
| Restricted for Surplus Fund | (818,184) | (954,915) | (1,082,918) | (1,236,953) | (1,394,378) |
| Restricted for Premium Payment Security Fund | 113,110 | 113,541 | 119,319 | 117,131 | 117,451 |
| Restricted for workers' compensation benefits | 2,555,102 | 1,219,781 | 1,570,151 | 1,603,175 | 2,532,076 |
| Total net assets (deficit) | \$ 1,886,585 | \$ 417,937 | \$ 644,444 | \$ 507,491 | \$ 1,278,845 |

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | | | | | |
|--|---------------------|-------------------|-------------------|-------------------|---------------------|
| Operating revenues: | | | | | |
| Premium Income | 1,878,105 | 1,721,581 | 1,741,880 | 1,730,396 | 1,752,108 |
| Assessment Income | - | - | - | - | - |
| Provision for uncollectibles | (61,778) | (52,214) | (92,747) | (63,893) | (62,164) |
| Other income | 3,710 | 5,023 | 9,542 | 8,689 | 8,830 |
| Total operating revenues | 1,820,037 | 1,674,390 | 1,658,675 | 1,675,192 | 1,698,774 |
| Operating expenses: | | | | | |
| Workers' compensation benefits | 2,338,416 | 2,730,319 | 2,021,690 | 2,317,277 | 1,475,907 |
| Compensation adjustment expenses | 223,626 | 196,038 | 204,175 | 161,289 | 185,523 |
| Premium reductions and refunds | 1,473,880 | 640,563 | 415,523 | 232,836 | (8,229) |
| Personal services | - | - | - | - | - |
| General and administrative | - | - | - | - | - |
| Other expenses | 16,400 | 12,942 | 17,788 | 17,618 | 22,999 |
| Total operating expenses | 4,052,322 | 3,579,862 | 2,659,176 | 2,729,020 | 1,676,200 |
| Net income (loss) before operating transfers | (2,232,285) | (1,905,472) | (1,000,501) | (1,053,828) | 22,574 |
| Operating transfers | (25,753) | (18,540) | (11,115) | (3,841) | (3,399) |
| Net operating income (loss) | (2,258,038) | (1,924,012) | (1,011,616) | (1,057,669) | 19,175 |
| Non-operating revenues (expenses) | | | | | |
| Net investment income (loss) | (498,728) | 455,364 | 1,238,123 | 914,607 | 752,179 |
| Loss on disposal of capital assets | - | - | - | 6,108 | - |
| Total non-operating revenues | (498,728) | 455,364 | 1,238,123 | 920,715 | 752,179 |
| Increase (decrease in net assets (deficit) | (2,756,766) | (1,468,648) | 226,507 | (136,954) | 771,354 |
| Net assets (deficit), beginning of year | 4,643,351 | 1,886,585 | 417,937 | 644,444 | 507,491 |
| Net assets (deficit), end of year | \$ 1,886,585 | \$ 417,937 | \$ 644,444 | \$ 507,490 | \$ 1,278,845 |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

DISABLED WORKERS' RELIEF FUND

SUPPLEMENTAL SCHEDULE OF NET ASSTS - JUNE 30

| | | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|---------------------------------------|----------------------|---------------------|---------------------|---------------------|---------------------|
| ASSETS | Current assets | | | | | |
| | Cash and cash equivalents | \$ 41,009 | \$ 122,849 | \$ 116,979 | \$ 92,007 | \$ 6,154 |
| | Collateral on loaned securities | 89,034 | 144,220 | 137,374 | 152,469 | - |
| | Premiums in course of collection | - | - | - | - | - |
| | Assessments in course of collection | 54,626 | 51,447 | 50,353 | 48,891 | 50,096 |
| | Accounts receivable, net of allowance | 23,295 | 24,419 | 21,924 | 21,267 | 19,576 |
| | Interfund receivables | 13,793 | 21,654 | 34,070 | 38,202 | 43,562 |
| | Investment trade receivables | 140 | 114 | 5,022 | 67 | - |
| | Accrued investment income | 12,720 | 11,989 | 8,825 | 9,444 | 29 |
| | Other current assets | - | - | - | - | - |
| | Total current assets | 234,617 | 376,692 | 374,547 | 362,347 | 119,417 |
| | Noncurrent assets: | | | | | |
| | Fixed maturities | 859,024 | 889,610 | 867,643 | 934,278 | 1,050,088 |
| | Domestic equity securities: | | | | | |
| | Common stocks | 8,999 | - | 3,370 | - | - |
| | Preferred stocks | - | 9,819 | 9,867 | 24,927 | - |
| | International securities | - | - | - | - | - |
| | Investments in limited partnerships | - | - | - | - | - |
| | Unbilled premiums receivable | - | - | - | 57,653 | 64,107 |
| | Retrospective premiums receivable | - | - | - | - | - |
| | Capital assets | 22 | 22 | 22 | 22 | 22 |
| | Restricted cast | - | - | - | - | - |
| | Total noncurrent assets | 868,045 | 899,451 | 880,902 | 1,016,880 | 1,114,217 |
| | Total assets | \$ 1,102,662 | \$ 1,276,143 | \$ 1,255,449 | \$ 1,379,227 | \$ 1,233,634 |
| | LIABILITIES | Current liabilities: | | | | |
| Reserve for compensation | | - | - | - | 120,349 | 114,783 |
| Reserve for compensation adjustment expenses | | - | - | - | 693 | 694 |
| Warrants payable | | - | - | - | - | - |
| Deferred revenue | | 12,034 | 14,535 | 16,930 | 17,181 | 17,925 |
| Bonds payable | | - | - | - | - | - |
| Investment trade payables | | - | 20,892 | - | - | - |
| Accounts payable | | - | - | - | - | - |
| Interfund payables | | 2,488 | 6,210 | 11,250 | 16,259 | 16,787 |
| Premium refund payable | | - | - | - | - | - |
| Obligations under securities lending | | 89,034 | 144,220 | 137,374 | 152,469 | - |
| Other current liabilities | | 17 | 18 | 14 | 18 | 17 |
| Total current liabilities | | 103,573 | 185,875 | 165,568 | 306,969 | 150,206 |
| Noncurrent liabilities: | | | | | | |
| Reserve for compensation | | - | - | - | 1,597,350 | 1,636,765 |
| Reserve for compensation adjustment expenses | | - | - | - | 50,807 | 51,806 |
| Premium payment security deposits | | - | - | - | - | - |
| Deferred revenue | | 398,823 | 387,901 | 377,389 | 367,574 | 354,922 |
| Bonds payable | | - | - | - | - | - |
| Other noncurrent liabilities | | - | - | - | - | - |
| Total noncurrent liabilities | 398,823 | 387,901 | 377,389 | 2,015,731 | 2,043,493 | |
| Total liabilities | \$ 502,396 | \$ 573,776 | \$ 542,957 | \$ 2,322,700 | \$ 2,193,699 | |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

DISABLED WORKERS' RELIEF FUND

NET ASSETS (DEFICIT)

| | | | | | |
|---|-------------------|-------------------|-------------------|---------------------|---------------------|
| Invested in capital assets, net of related debt | 22 | 22 | 22 | 22 | 22 |
| Restricted for Surplus Fund | - | - | - | - | - |
| Restricted for Premium Payment Security Fund | - | - | - | - | - |
| Restricted for workers' compensation benefits | 600,244 | 702,345 | 712,470 | (943,495) | (960,087) |
| Total net assets (deficit) | <u>\$ 600,266</u> | <u>\$ 702,367</u> | <u>\$ 712,492</u> | <u>\$ (943,473)</u> | <u>\$ (960,065)</u> |

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | | | | | |
|---|-------------------|-------------------|-------------------|---------------------|---------------------|
| Operating revenues: | | | | | |
| Premium Income | - | - | - | - | - |
| Assessment Income | 118,906 | 114,429 | 117,300 | 115,933 | 130,644 |
| Provision for uncollectibles | (2,401) | (1,593) | (4,536) | (1,738) | (3,713) |
| Other income | - | - | - | - | - |
| Total operating revenues | <u>116,505</u> | <u>112,836</u> | <u>112,764</u> | <u>114,195</u> | <u>126,931</u> |
| Operating expenses: | | | | | |
| Workers' compensation benefits | 127,503 | 121,986 | 113,110 | 10,839 | 145,222 |
| Compensation adjustment expenses | - | - | - | (3,200) | 1,000 |
| Premium reductions and refunds | - | - | - | - | - |
| Personal services | 472 | 512 | 488 | 376 | 354 |
| General and administrative | 231 | 146 | 55 | 105 | 157 |
| Other expenses | - | - | - | - | - |
| Total operating expenses | <u>128,206</u> | <u>122,644</u> | <u>113,653</u> | <u>8,120</u> | <u>146,733</u> |
| Net income (loss) before operating transfers | <u>(11,701)</u> | <u>(9,808)</u> | <u>(889)</u> | <u>106,075</u> | <u>(19,802)</u> |
| Operating transfers | 21,747 | 15,554 | 7,680 | - | - |
| Net operating income (loss) | <u>10,046</u> | <u>5,746</u> | <u>6,791</u> | <u>106,075</u> | <u>(19,802)</u> |
| Non-operating revenues (expenses) | | | | | |
| Net investment income (loss) | 50,378 | 96,355 | 3,334 | 54,586 | 3,210 |
| Loss on disposal of capital assets | - | - | - | - | - |
| Total non-operating revenues | <u>50,378</u> | <u>96,355</u> | <u>3,334</u> | <u>54,586</u> | <u>3,210</u> |
| Increase (decrease in net assets (deficit) | 60,424 | 102,101 | 10,125 | 160,661 | (16,592) |
| Net assets (deficit), beginning of year (as restated) | 539,842 | 600,266 | 702,367 | (1,104,134) | (943,473) |
| Net assets (deficit), end of year | <u>\$ 600,266</u> | <u>\$ 702,367</u> | <u>\$ 712,492</u> | <u>\$ (943,473)</u> | <u>\$ (960,065)</u> |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

COAL-WORKERS PNEUMOCONIOSIS FUND

SUPPLEMENTAL SCHEDULE OF NET ASSTS - JUNE 30

| | | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------|--|-------------------|-------------------|-------------------|-------------------|------------------|
| ASSETS | Current assets | | | | | |
| | Cash and cash equivalents | \$ 15,680 | \$ 42,779 | \$ 15,165 | \$ 17,647 | \$ 1,762 |
| | Collateral on loaned securities | 354 | 7,073 | 12,506 | 5,188 | - |
| | Premiums in course of collection | - | - | - | - | - |
| | Assessments in course of collection | - | - | - | - | - |
| | Accounts receivable, net of allowance | - | (2) | 1 | - | 1 |
| | Interfund receivables | - | 2 | - | - | (1) |
| | Investment trade receivables | 12 | 9 | 8 | 5 | - |
| | Accrued investment income | 2,428 | 2,261 | 1,992 | 1,969 | 7 |
| | Other current assets | - | - | - | - | - |
| | Total current assets | 18,474 | 52,122 | 29,672 | 24,809 | 1,769 |
| | Noncurrent assets: | | | | | |
| | Fixed maturities | 162,046 | 153,063 | 184,720 | 193,784 | 220,125 |
| | Domestic equity securities: | | | | | |
| | Common stocks | - | - | - | - | - |
| | Preferred stocks | 5,595 | 6,105 | 6,135 | 6,146 | - |
| | International securities | - | - | - | - | - |
| | Investments in limited partnerships | - | - | - | - | - |
| | Unbilled premiums receivable | - | - | - | - | - |
| | Retrospective premiums receivable | - | - | - | - | - |
| | Capital assets | - | - | - | - | - |
| | Restricted cast | - | - | - | - | - |
| | Total noncurrent assets | 167,641 | 159,168 | 190,855 | 199,930 | 220,125 |
| Total assets | \$ 186,115 | \$ 211,290 | \$ 220,527 | \$ 224,739 | \$ 221,894 | |
| LIABILITIES | Current liabilities: | | | | | |
| | Reserve for compensation | 989 | 979 | 1,065 | 1,157 | 1,226 |
| | Reserve for compensation adjustment expenses | 51 | 49 | 46 | 61 | 55 |
| | Warrants payable | - | - | - | - | - |
| | Deferred revenue | - | - | - | - | - |
| | Bonds payable | - | - | - | - | - |
| | Investment trade payables | - | - | - | - | - |
| | Accounts payable | - | - | - | - | - |
| | Interfund payables | 64 | 74 | 77 | 103 | 124 |
| | Premium refund payable | - | - | - | - | - |
| | Obligations under securities lending | 354 | 7,073 | 12,506 | 5,188 | - |
| | Other current liabilities | 1 | 3 | 3 | 4 | 5 |
| | Total current liabilities | 1,459 | 8,178 | 13,697 | 6,513 | 1,410 |
| | Noncurrent liabilities: | | | | | |
| | Reserve for compensation | 45,801 | 48,221 | 51,335 | 52,843 | 56,574 |
| | Reserve for compensation adjustment expenses | 3,349 | 3,351 | 3,254 | 3,439 | 3,245 |
| | Premium payment security deposits | 149 | 148 | 523 | 525 | 527 |
| | Deferred revenue | - | - | - | - | - |
| | Bonds payable | - | - | - | - | - |
| | Other noncurrent liabilities | - | - | - | - | - |
| | Total noncurrent liabilities | 49,299 | 51,720 | 55,112 | 56,807 | 60,346 |
| | Total liabilities | \$ 50,758 | \$ 59,898 | \$ 68,809 | \$ 63,320 | \$ 61,756 |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

COAL-WORKERS PNEUMOCONIOSIS FUND

| | | | | | |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|
| NET ASSETS (DEFICIT) | | | | | |
| Invested in capital assets, net of related debt | - | - | - | - | - |
| Restricted for Surplus Fund | - | - | - | - | - |
| Restricted for Premium Payment Security Fund | - | - | - | - | - |
| Restricted for workers' compensation benefits | 135,357 | 151,392 | 151,718 | 161,419 | 160,138 |
| Total net assets (deficit) | \$ 135,357 | \$ 151,392 | \$ 151,718 | \$ 161,419 | \$ 160,138 |

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|
| Operating revenues: | | | | | |
| Premium Income | 1,232 | 267 | 256 | 824 | 921 |
| Assessment Income | - | - | - | - | - |
| Provision for uncollectibles | - | - | - | - | - |
| Other income | 31 | - | - | - | - |
| Total operating revenues | 1,263 | 267 | 256 | 824 | 921 |
| Operating expenses: | | | | | |
| Workers' compensation benefits | 13,393 | 3,438 | 4,294 | 2,808 | 5,025 |
| Compensation adjustment expenses | 731 | 54 | (40) | 266 | (147) |
| Premium reductions and refunds | - | - | - | - | - |
| Personal services | 7 | 13 | 21 | 18 | 32 |
| General and administrative | - | 1 | - | - | - |
| Other expenses | - | - | - | - | - |
| Total operating expenses | 14,131 | 3,506 | 4,275 | 3,092 | 4,910 |
| Net income (loss) before operating transfers | (12,868) | (3,239) | (4,019) | (2,268) | (3,989) |
| Operating transfers | - | - | - | - | - |
| Net operating income (loss) | (12,868) | (3,239) | (4,019) | (2,268) | (3,989) |
| Non-operating revenues (expenses) | | | | | |
| Net investment income (loss) | 13,984 | 19,274 | 4,345 | 11,969 | 2,708 |
| Loss on disposal of capital assets | - | - | - | - | - |
| Total non-operating revenues | 13,984 | 19,274 | 4,345 | 11,969 | 2,708 |
| Increase (decrease in net assets (deficit)) | 1,116 | 16,035 | 326 | 9,701 | (1,281) |
| Net assets (deficit), beginning of year | 134,241 | 135,357 | 151,392 | 151,718 | 161,419 |
| Net assets (deficit), end of year | \$ 135,357 | \$ 151,392 | \$ 151,718 | \$ 161,419 | \$ 160,138 |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

PUBLIC WORK-RELIEF EMPLOYEES' FUND ACCOUNT

SUPPLEMENTAL SCHEDULE OF NET ASSTS - JUNE 30

| | | 2002 | 2003 | 2004 | 2005 | 2006 |
|--------------------------------|--|------------------|------------------|------------------|------------------|-----------------|
| ASSETS | Current assets | | | | | |
| | Cash and cash equivalents | \$ 16,077 | \$ 16,767 | \$ 2,211 | \$ 5,413 | \$ 113 |
| | Collateral on loaned securities | 128 | 124 | 113 | - | - |
| | Premiums in course of collection | 262 | 27 | 60 | (136) | 97 |
| | Assessments in course of collection | - | - | - | - | - |
| | Accounts receivable, net of allowance | 21 | 41 | 137 | 247 | 75 |
| | Interfund receivables | 418 | 739 | 399 | 313 | 252 |
| | Investment trade receivables | 7 | 6 | 5 | 3 | - |
| | Accrued investment income | 7 | 6 | 143 | 156 | - |
| | Other current assets | - | - | - | - | - |
| | Total current assets | <u>16,920</u> | <u>17,710</u> | <u>3,068</u> | <u>5,996</u> | <u>537</u> |
| | Noncurrent assets: | | | | | |
| | Fixed maturities | 399 | 315 | 15,722 | 13,781 | 20,085 |
| | Domestic equity securities: | | | | | |
| | Common stocks | - | - | - | - | - |
| | Preferred stocks | - | - | - | - | - |
| | International securities | - | - | - | - | - |
| | Investments in limited partnerships | - | - | - | - | - |
| | Unbilled premiums receivable | - | - | - | - | - |
| | Retrospective premiums receivable | - | - | - | - | - |
| | Capital assets | - | - | - | - | - |
| | Restricted cast | - | - | - | - | - |
| Total noncurrent assets | <u>399</u> | <u>315</u> | <u>15,722</u> | <u>13,781</u> | <u>20,085</u> | |
| Total assets | <u>\$ 17,319</u> | <u>\$ 18,025</u> | <u>\$ 18,790</u> | <u>\$ 19,777</u> | <u>\$ 20,622</u> | |
| LIABILITIES | Current liabilities: | | | | | |
| | Reserve for compensation | 170 | 176 | 167 | 200 | 188 |
| | Reserve for compensation adjustment expenses | - | - | - | - | - |
| | Warrants payable | - | - | - | - | - |
| | Deferred revenue | - | - | - | - | - |
| | Bonds payable | - | - | - | - | - |
| | Investment trade payables | - | - | - | - | - |
| | Accounts payable | - | - | - | - | - |
| | Interfund payables | 10 | 12 | 16 | 25 | 7 |
| | Premium refund payable | - | - | - | - | - |
| | Obligations under securities lending | 128 | 124 | 113 | - | - |
| | Other current liabilities | - | - | - | - | - |
| | Total current liabilities | <u>308</u> | <u>312</u> | <u>296</u> | <u>225</u> | <u>195</u> |
| | Noncurrent liabilities: | | | | | |
| | Reserve for compensation | 5,340 | 5,546 | 5,561 | 3,981 | 4,281 |
| | Reserve for compensation adjustment expenses | - | - | - | - | - |
| | Premium payment security deposits | - | - | - | - | - |
| | Deferred revenue | - | - | - | - | - |
| | Bonds payable | - | - | - | - | - |
| | Other noncurrent liabilities | - | - | - | - | - |
| | Total noncurrent liabilities | <u>5,340</u> | <u>5,546</u> | <u>5,561</u> | <u>3,981</u> | <u>4,281</u> |
| | Total liabilities | <u>\$ 5,648</u> | <u>\$ 5,858</u> | <u>\$ 5,857</u> | <u>\$ 4,206</u> | <u>\$ 4,476</u> |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

PUBLIC WORK-RELIEF EMPLOYEES' FUND ACCOUNT

NET ASSETS (DEFICIT)

| | | | | | |
|---|------------------|------------------|------------------|------------------|------------------|
| Invested in capital assets, net of related debt | - | - | - | - | - |
| Restricted for Surplus Fund | - | - | - | - | - |
| Restricted for Premium Payment Security Fund | - | - | - | - | - |
| Restricted for workers' compensation benefits | 11,671 | 12,167 | 12,933 | 15,571 | 16,146 |
| Total net assets (deficit) | <u>\$ 11,671</u> | <u>\$ 12,167</u> | <u>\$ 12,933</u> | <u>\$ 15,571</u> | <u>\$ 16,146</u> |

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | | | | | |
|--|------------------|------------------|------------------|------------------|------------------|
| Operating revenues: | | | | | |
| Premium Income | 439 | 613 | 866 | 478 | 811 |
| Assessment Income | - | - | - | - | - |
| Provision for uncollectibles | - | - | - | - | - |
| Other income | - | - | - | - | - |
| Total operating revenues | <u>439</u> | <u>613</u> | <u>866</u> | <u>478</u> | <u>811</u> |
| Operating expenses: | | | | | |
| Workers' compensation benefits | 2,058 | 373 | 138 | (1,245) | 414 |
| Compensation adjustment expenses | - | - | - | - | - |
| Premium reductions and refunds | - | - | - | - | - |
| Personal services | - | - | - | - | - |
| General and administrative | - | - | - | - | - |
| Other expenses | - | - | - | - | - |
| Total operating expenses | <u>2,058</u> | <u>373</u> | <u>138</u> | <u>(1,245)</u> | <u>414</u> |
| Net income (loss) before operating transfers | <u>(1,619)</u> | <u>240</u> | <u>728</u> | <u>1,723</u> | <u>397</u> |
| Operating transfers | - | - | - | - | - |
| Net operating income (loss) | <u>(1,619)</u> | <u>240</u> | <u>728</u> | <u>1,723</u> | <u>397</u> |
| Non-operating revenues (expenses) | | | | | |
| Net investment income (loss) | 388 | 256 | 38 | 915 | 178 |
| Loss on disposal of capital assets | - | - | - | - | - |
| Total non-operating revenues | <u>388</u> | <u>256</u> | <u>38</u> | <u>915</u> | <u>178</u> |
| Increase (decrease in net assets (deficit) | (1,231) | 496 | 766 | 2,638 | 575 |
| Net assets (deficit), beginning of year | 12,902 | 11,671 | 12,167 | 12,933 | 15,571 |
| Net assets (deficit), end of year | <u>\$ 11,671</u> | <u>\$ 12,167</u> | <u>\$ 12,933</u> | <u>\$ 15,571</u> | <u>\$ 16,146</u> |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

MARINE INDUSTRY FUND

SUPPLEMENTAL SCHEDULE OF NET ASSTS - JUNE 30

| | | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|---------------------------------------|----------------------|------------------|------------------|------------------|------------------|
| ASSETS | Current assets | | | | | |
| | Cash and cash equivalents | \$ 10,406 | \$ 11,272 | \$ 3,309 | \$ 4,969 | \$ 267 |
| | Collateral on loaned securities | 976 | 1,014 | 915 | 868 | - |
| | Premiums in course of collection | - | - | - | - | - |
| | Assessments in course of collection | - | - | - | - | - |
| | Accounts receivable, net of allowance | - | - | - | - | - |
| | Interfund receivables | 314 | 32 | 29 | 65 | 178 |
| | Investment trade receivables | 8 | 6 | 6 | 4 | - |
| | Accrued investment income | 34 | 33 | 52 | 154 | 1 |
| | Other current assets | - | - | - | - | - |
| | Total current assets | 11,738 | 12,357 | 4,311 | 6,060 | 446 |
| | Noncurrent assets: | | | | | |
| | Fixed maturities | 1,417 | 1,309 | 9,624 | 8,767 | 14,255 |
| | Domestic equity securities: | | | | | |
| | Common stocks | - | - | - | - | - |
| | Preferred stocks | - | - | - | - | - |
| | International securities | - | - | - | - | - |
| | Investments in limited partnerships | - | - | - | - | - |
| | Unbilled premiums receivable | - | - | - | - | - |
| | Retrospective premiums receivable | - | - | - | - | - |
| | Capital assets | - | - | - | - | - |
| | Restricted cast | - | - | - | - | - |
| | Total noncurrent assets | 1,417 | 1,309 | 9,624 | 8,767 | 14,255 |
| | Total assets | \$ 13,155 | \$ 13,666 | \$ 13,935 | \$ 14,827 | \$ 14,701 |
| | LIABILITIES | Current liabilities: | | | | |
| Reserve for compensation | | 623 | 487 | 553 | 392 | 380 |
| Reserve for compensation adjustment expenses | | 37 | 39 | 37 | 41 | 35 |
| Warrants payable | | - | - | - | - | - |
| Deferred revenue | | - | - | - | - | - |
| Bonds payable | | - | - | - | - | - |
| Investment trade payables | | - | - | - | - | - |
| Accounts payable | | - | - | - | - | - |
| Interfund payables | | 278 | 22 | 7 | 27 | 16 |
| Premium refund payable | | - | - | - | - | - |
| Obligations under securities lending | | 976 | 1,014 | 915 | 868 | - |
| Other current liabilities | | 290 | 243 | 251 | 252 | 324 |
| Total current liabilities | | 2,204 | 1,805 | 1,763 | 1,580 | 755 |
| Noncurrent liabilities: | | | | | | |
| Reserve for compensation | | 1,249 | 3,962 | 4,192 | 1,441 | 1,703 |
| Reserve for compensation adjustment expenses | | 97 | 265 | 262 | 79 | 85 |
| Premium payment security deposits | | - | - | - | - | - |
| Deferred revenue | | - | - | - | - | - |
| Bonds payable | | - | - | - | - | - |
| Other noncurrent liabilities | | - | - | - | - | - |
| Total noncurrent liabilities | | 1,346 | 4,227 | 4,454 | 1,520 | 1,788 |
| Total liabilities | | \$ 3,550 | \$ 6,032 | \$ 6,217 | \$ 3,100 | \$ 2,543 |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

MARINE INDUSTRY FUND

| | | | | | |
|---|-----------------|-----------------|-----------------|------------------|------------------|
| NET ASSETS (DEFICIT) | | | | | |
| Invested in capital assets, net of related debt | - | - | - | - | - |
| Restricted for Surplus Fund | - | - | - | - | - |
| Restricted for Premium Payment Security Fund | - | - | - | - | - |
| Restricted for workers' compensation benefits | 9,605 | 7,634 | 7,718 | 11,727 | 12,158 |
| Total net assets (deficit) | <u>\$ 9,605</u> | <u>\$ 7,634</u> | <u>\$ 7,718</u> | <u>\$ 11,727</u> | <u>\$ 12,158</u> |

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | | | | | |
|--|-----------------|-----------------|-----------------|------------------|------------------|
| Operating revenues: | | | | | |
| Premium Income | 687 | 833 | 764 | 865 | 754 |
| Assessment Income | - | - | - | - | - |
| Provision for uncollectibles | - | - | - | - | - |
| Other income | - | - | - | - | - |
| Total operating revenues | <u>687</u> | <u>833</u> | <u>764</u> | <u>865</u> | <u>754</u> |
| Operating expenses: | | | | | |
| Workers' compensation benefits | (1,478) | 2,817 | 600 | (2,802) | 504 |
| Compensation adjustment expenses | (145) | 211 | 33 | (137) | 33 |
| Premium reductions and refunds | - | - | - | - | - |
| Personal services | 10 | 10 | 14 | 11 | 20 |
| General and administrative | - | - | - | - | - |
| Other expenses | 59 | 64 | 90 | 103 | 4 |
| Total operating expenses | <u>(1,554)</u> | <u>3,102</u> | <u>737</u> | <u>(2,825)</u> | <u>561</u> |
| Net income (loss) before operating transfers | 2,241 | (2,269) | 27 | 3,690 | 193 |
| Operating transfers | - | - | - | - | - |
| Net operating income (loss) | <u>2,241</u> | <u>(2,269)</u> | <u>27</u> | <u>3,690</u> | <u>193</u> |
| Non-operating revenues (expenses) | | | | | |
| Net investment income (loss) | 354 | 298 | 57 | 319 | 238 |
| Loss on disposal of capital assets | - | - | - | - | - |
| Total non-operating revenues | <u>354</u> | <u>298</u> | <u>57</u> | <u>319</u> | <u>238</u> |
| Increase (decrease) in net assets (deficit) | 2,595 | (1,971) | 84 | 4,009 | 431 |
| Net assets (deficit), beginning of year | 7,010 | 9,605 | 7,634 | 7,718 | 11,727 |
| Net assets (deficit), end of year | <u>\$ 9,605</u> | <u>\$ 7,634</u> | <u>\$ 7,718</u> | <u>\$ 11,727</u> | <u>\$ 12,158</u> |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

INTENTIONAL TORT

SUPPLEMENTAL SCHEDULE OF NET ASSTS - JUNE 30

| | | 2002 | | 2003 |
|--|---------------------------------------|--|------------------|------------------|
| ASSETS | Current assets | | | |
| | Cash and cash equivalents | \$ | 65,710 | \$ 66,608 |
| | Collateral on loaned securities | | - | - |
| | Premiums in course of collection | | - | - |
| | Assessments in course of collection | | - | - |
| | Accounts receivable, net of allowance | | 15 | - |
| | Interfund receivables | | 2 | - |
| | Investment trade receivables | | - | - |
| | Accrued investment income | | - | - |
| | Other current assets | | - | - |
| | | Total current assets | <u>65,727</u> | <u>66,608</u> |
| | | Noncurrent assets: | | |
| | | Fixed maturities | - | - |
| | | Domestic equity securities: | | |
| | | Common stocks | - | - |
| | | Preferred stocks | - | - |
| | | International securities | - | - |
| | | Investments in limited partnerships | - | - |
| | | Unbilled premiums receivable | - | - |
| | | Retrospective premiums receivable | - | - |
| | | Capital assets | - | - |
| | | Restricted cast | - | - |
| | | Total noncurrent assets | <u>-</u> | <u>-</u> |
| | | Total assets | <u>\$ 65,727</u> | <u>\$ 66,608</u> |
| | LIABILITIES | Current liabilities: | | |
| Reserve for compensation | | | - | - |
| Reserve for compensation adjustment expenses | | | - | - |
| Warrants payable | | | - | - |
| Deferred revenue | | | - | - |
| Bonds payable | | | - | - |
| Investment trade payables | | | - | - |
| Accounts payable | | | - | - |
| Interfund payables | | | 32 | - |
| Premium refund payable | | | - | - |
| Obligations under securities lending | | | - | - |
| Other current liabilities | | | - | 66,608 |
| | | Total current liabilities | <u>32</u> | <u>66,608</u> |
| | | Noncurrent liabilities: | | |
| | | Reserve for compensation | - | - |
| | | Reserve for compensation adjustment expenses | - | - |
| | | Premium payment security deposits | - | - |
| | | Deferred revenue | - | - |
| | | Bonds payable | - | - |
| | | Other noncurrent liabilities | 65,695 | - |
| | | Total noncurrent liabilities | <u>65,695</u> | <u>-</u> |
| | | Total liabilities | <u>\$ 65,727</u> | <u>\$ 66,608</u> |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

INTENTIONAL TORT

NET ASSETS (DEFICIT)

| | | |
|---|-------------|-------------|
| Invested in capital assets, net of related debt | - | - |
| Restricted for Surplus Fund | - | - |
| Restricted for Premium Payment Security Fund | - | - |
| Restricted for workers' compensation benefits | - | - |
| Total net assets (deficit) | <u>\$ -</u> | <u>\$ -</u> |

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | | |
|--|-------------|-------------|
| Operating revenues: | | |
| Premium Income | - | - |
| Assessment Income | - | - |
| Provision for uncollectibles | - | - |
| Other income | - | - |
| Total operating revenues | <u>-</u> | <u>-</u> |
| Operating expenses: | | |
| Workers' compensation benefits | - | - |
| Compensation adjustment expenses | - | - |
| Premium reductions and refunds | - | - |
| Personal services | - | - |
| General and administrative | - | - |
| Other expenses | - | - |
| Total operating expenses | <u>-</u> | <u>-</u> |
| Net income (loss) before operating transfers | <u>-</u> | <u>-</u> |
| Operating transfers | <u>-</u> | <u>-</u> |
| Net operating income (loss) | <u>-</u> | <u>-</u> |
| Non-operating revenues (expenses) | | |
| Net investment income (loss) | - | - |
| Loss on disposal of capital assets | - | - |
| Total non-operating revenues | <u>-</u> | <u>-</u> |
| Increase (decrease in net assets (deficit) | - | - |
| Net assets (deficit), beginning of year | <u>-</u> | <u>-</u> |
| Net assets (deficit), end of year | <u>\$ -</u> | <u>\$ -</u> |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

SELF-INSURING EMPLOYERS' GUARANTY FUND

SUPPLEMENTAL SCHEDULE OF NET ASSTS - JUNE 30

| | | 2002 | 2003 | 2004 | 2005 | 2006 |
|---------------------|--|-----------------|-----------------|-------------------|-------------------|-------------------|
| ASSETS | Current assets | | | | | |
| | Cash and cash equivalents | \$ 4,864 | \$ 2,283 | \$ 186 | \$ 6,727 | \$ 32,819 |
| | Collateral on loaned securities | - | - | - | - | - |
| | Premiums in course of collection | - | - | - | - | - |
| | Assessments in course of collection | - | - | - | - | - |
| | Accounts receivable, net of allowance | 1,149 | 3,024 | 1,917 | 2,073 | 725 |
| | Interfund receivables | 574 | 200 | 920 | 1,129 | 931 |
| | Investment trade receivables | 28 | - | - | - | - |
| | Accrued investment income | 76 | - | - | - | 130 |
| | Other current assets | - | - | - | - | - |
| | Total current assets | 6,691 | 5,507 | 3,023 | 9,929 | 34,605 |
| | Noncurrent assets: | | | | | |
| | Fixed maturities | 11,624 | 4 | - | - | - |
| | Domestic equity securities: | | | | | |
| | Common stocks | - | - | - | - | - |
| | Preferred stocks | - | - | - | - | - |
| | International securities | - | - | - | - | - |
| | Investments in limited partnerships | - | - | - | - | - |
| | Unbilled premiums receivable | - | - | - | 665,429 | 626,778 |
| | Retrospective premiums receivable | - | - | - | - | - |
| | Capital assets | - | - | - | - | - |
| | Restricted cast | - | - | - | - | - |
| | Total noncurrent assets | 11,624 | 4 | - | 665,429 | 626,778 |
| Total assets | \$ 18,315 | \$ 5,511 | \$ 3,023 | \$ 675,358 | \$ 661,383 | |
| LIABILITIES | Current liabilities: | | | | | |
| | Reserve for compensation | - | - | - | 21,231 | 21,618 |
| | Reserve for compensation adjustment expenses | - | - | - | - | - |
| | Warrants payable | - | - | - | - | - |
| | Deferred revenue | 2,229 | - | - | - | 21,471 |
| | Bonds payable | - | - | - | - | - |
| | Investment trade payables | - | - | - | - | - |
| | Accounts payable | - | - | - | - | - |
| | Interfund payables | 2,419 | 3,009 | 8,591 | 3,793 | 3,986 |
| | Premium refund payable | - | - | - | - | - |
| | Obligations under securities lending | - | - | - | - | - |
| | Other current liabilities | - | - | - | - | - |
| | Total current liabilities | 4,648 | 3,009 | 8,591 | 25,024 | 47,075 |
| | Noncurrent liabilities: | | | | | |
| | Reserve for compensation | - | - | - | 644,198 | 605,160 |
| | Reserve for compensation adjustment expenses | - | - | - | - | - |
| | Premium payment security deposits | - | - | - | - | - |
| | Deferred revenue | - | - | - | 4,577 | 5,676 |
| | Bonds payable | - | - | - | - | - |
| | Other noncurrent liabilities | - | - | - | - | - |
| | Total noncurrent liabilities | - | - | - | 648,775 | 610,836 |
| | Total liabilities | \$ 4,648 | \$ 3,009 | \$ 8,591 | \$ 673,799 | \$ 657,911 |

SELF-INSURING EMPLOYERS' GUARANTY FUND

| | | | | | |
|---|------------------|-----------------|-------------------|-----------------|-----------------|
| NET ASSETS (DEFICIT) | | | | | |
| Invested in capital assets, net of related debt | - | - | - | - | - |
| Restricted for Surplus Fund | - | - | - | - | - |
| Restricted for Premium Payment Security Fund | - | - | - | - | - |
| Restricted for workers' compensation benefits | 13,667 | 2,502 | (5,568) | 1,559 | 3,472 |
| Total net assets (deficit) | \$ 13,667 | \$ 2,502 | \$ (5,568) | \$ 1,559 | \$ 3,472 |

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | | | | | |
|---|------------------|-----------------|-------------------|-----------------|-----------------|
| Operating revenues: | | | | | |
| Premium Income | - | - | - | - | - |
| Assessment Income | 14,117 | 5,463 | 14,450 | 102,931 | (17,179) |
| Provision for uncollectibles | - | (4) | (2,248) | (551) | 638 |
| Other income | - | - | - | - | - |
| Total operating revenues | 14,117 | 5,459 | 12,202 | 102,380 | (16,541) |
| Operating expenses: | | | | | |
| Workers' compensation benefits | 14,117 | 17,360 | 20,226 | 95,231 | (17,651) |
| Compensation adjustment expenses | - | - | - | - | - |
| Premium reductions and refunds | - | - | - | - | - |
| Personal services | - | - | - | - | - |
| General and administrative | - | - | - | - | - |
| Other expenses | - | - | 49 | 71 | - |
| Total operating expenses | 14,117 | 17,360 | 20,275 | 95,302 | (17,651) |
| Net income (loss) before operating transfers | - | (11,901) | (8,073) | 7,078 | 1,110 |
| Operating transfers | - | - | - | - | - |
| Net operating income (loss) | - | (11,901) | (8,073) | 7,078 | 1,110 |
| Non-operating revenues (expenses) | | | | | |
| Net investment income (loss) | 1,390 | 736 | 3 | 50 | 803 |
| Loss on disposal of capital assets | - | - | - | - | - |
| Total non-operating revenues | 1,390 | 736 | 3 | 50 | 803 |
| Increase (decrease) in net assets (deficit) | 1,390 | (11,165) | (8,070) | 7,128 | 1,913 |
| Net assets (deficit), beginning of year (as restated) | 12,277 | 13,667 | 2,502 | (5,569) | 1,559 |
| Net assets (deficit), end of year | \$ 13,667 | \$ 2,502 | \$ (5,568) | \$ 1,559 | \$ 3,472 |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

OCCUPATIONAL SAFETY LOAN FUND

SUPPLEMENTAL SCHEDULE OF NET ASSTS - JUNE 30

2002

| | | | | |
|-------------|-------------------------|--|----|------|
| ASSETS | Current assets | | \$ | - |
| | | Cash and cash equivalents | | - |
| | | Collateral on loaned securities | | - |
| | | Premiums in course of collection | | - |
| | | Assessments in course of collection | | - |
| | | Accounts receivable, net of allowance | | - |
| | | Interfund receivables | | - |
| | | Investment trade receivables | | - |
| | | Accrued investment income | | - |
| | | Other current assets | | - |
| | | Total current assets | | - |
| | Noncurrent assets: | | | |
| | | Fixed maturities | | - |
| | | Domestic equity securities: | | |
| | | Common stocks | | - |
| | | Preferred stocks | | - |
| | | International securities | | - |
| | | Investments in limited partnerships | | - |
| | | Unbilled premiums receivable | | - |
| | | Retrospective premiums receivable | | - |
| | | Capital assets | | - |
| | | Restricted cast | | - |
| | | Total noncurrent assets | | - |
| | | Total assets | | \$ - |
| LIABILITIES | Current liabilities: | | | |
| | | Reserve for compensation | | - |
| | | Reserve for compensation adjustment expenses | | - |
| | | Warrants payable | | - |
| | | Deferred revenue | | - |
| | | Bonds payable | | - |
| | | Investment trade payables | | - |
| | | Accounts payable | | - |
| | | Interfund payables | | - |
| | | Premium refund payable | | - |
| | | Obligations under securities lending | | - |
| | | Other current liabilities | | - |
| | | Total current liabilities | | - |
| | Noncurrent liabilities: | | | |
| | | Reserve for compensation | | - |
| | | Reserve for compensation adjustment expenses | | - |
| | | Premium payment security deposits | | - |
| | | Deferred revenue | | - |
| | | Bonds payable | | - |
| | | Other noncurrent liabilities | | - |
| | | Total noncurrent liabilities | | - |
| | | Total liabilities | | \$ - |

OHIO BUREAU OF WORKERS' COMPENSATION
AND
INDUSTRIAL COMMISSION OF OHIO

OCCUPATIONAL SAFETY LOAN FUND

| | |
|---|-------------|
| NET ASSETS (DEFICIT) | |
| Invested in capital assets, net of related debt | - |
| Restricted for Surplus Fund | - |
| Restricted for Premium Payment Security Fund | - |
| Restricted for workers' compensation benefits | - |
| Total net assets (deficit) | <u>\$ -</u> |

ENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | |
|--|----------------|
| Operating revenues: | |
| Premium Income | - |
| Assessment Income | - |
| Provision for uncollectibles | - |
| Other income | - |
| Total operating revenues | <u>-</u> |
| Operating expenses: | |
| Workers' compensation benefits | - |
| Compensation adjustment expenses | - |
| Premium reductions and refunds | - |
| Personal services | - |
| General and administrative | - |
| Other expenses | - |
| Total operating expenses | <u>-</u> |
| Net income (loss) before operating transfers | - |
| Operating transfers | <u>(1,376)</u> |
| Net operating income (loss) | <u>(1,376)</u> |
| Non-operating revenues (expenses) | |
| Net investment income (loss) | 18 |
| Loss on disposal of capital assets | - |
| Total non-operating revenues | <u>18</u> |
| Increase (decrease in net assets (deficit) | (1,358) |
| Net assets (deficit), beginning of year | <u>1,358</u> |
| Net assets (deficit), end of year | <u>\$ -</u> |

OHIO BUREAU OF WORKERS' COMPENSATION
INDUSTRIAL COMMISSION OF OHIO

ADMINISTRATIVE COST FUND
SUPPLEMENTAL SCHEDULE OF NET ASSETS - JUNE 30

| | 2002 | 2003 | 2004 | 2005 | 2006 |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| ASSETS | | | | | |
| Current assets | | | | | |
| Cash and cash equivalents | \$ 1,791 | \$ 1,638 | \$ 2,397 | \$ 6,750 | \$ 11,068 |
| Collateral on loaned securities | 599 | 600 | 980 | 4,037 | 6,285 |
| Premiums in course of collection | - | - | - | - | - |
| Assessments in course of collection | 174,998 | 194,246 | 182,818 | 155,614 | 146,482 |
| Accounts receivable, net of allowance | 6,957 | 9,288 | 5,884 | 6,862 | 4,154 |
| Interfund receivables | 11,136 | 32,750 | 82,743 | 93,358 | 66,348 |
| Investment trade receivables | - | - | - | - | - |
| Accrued investment income | - | - | - | - | - |
| Other current assets | - | - | - | - | 1,450 |
| Total current assets | 195,481 | 238,522 | 274,822 | 266,621 | 235,787 |
| Noncurrent assets: | | | | | |
| Fixed maturities | - | - | - | - | - |
| Domestic equity securities: | | | | | |
| Common stocks | - | - | - | - | - |
| Preferred stocks | - | - | - | - | - |
| International securities | - | - | - | - | - |
| Investments in limited partnerships | - | - | - | - | - |
| Unbilled premiums receivable | 53,325 | 61,800 | 60,101 | 102,399 | 91,736 |
| Retrospective premiums receivable | - | - | - | - | - |
| Capital assets | 129,074 | 115,000 | 104,128 | 103,909 | 99,225 |
| Restricted cast | 12,911 | 1,891 | 1,768 | 1,675 | 1,540 |
| Total noncurrent assets | 195,310 | 178,691 | 165,997 | 207,983 | 192,501 |
| Total assets | \$ 390,791 | \$ 417,213 | \$ 440,819 | \$ 474,604 | \$ 428,288 |
| LIABILITIES | | | | | |
| Current liabilities: | | | | | |
| Reserve for compensation | - | - | - | - | - |
| Reserve for compensation adjustment expenses | 285,569 | 289,662 | 272,569 | 295,384 | 247,643 |
| Warrants payable | - | - | - | - | - |
| Deferred revenue | - | - | - | - | - |
| Bonds payable | 10,000 | - | 5,300 | 13,190 | 14,150 |
| Investment trade payables | - | - | - | - | - |
| Accounts payable | 11,117 | 4,615 | 4,652 | 10,090 | 7,762 |
| Interfund payables | 753 | 554 | - | - | - |
| Premium refund payable | - | - | - | - | - |
| Obligations under securities lending | 599 | 600 | 980 | 4,037 | 6,285 |
| Other current liabilities | 7,682 | 7,630 | 10,493 | 11,232 | 13,867 |
| Total current liabilities | 315,720 | 303,061 | 293,994 | 333,933 | 289,707 |
| Noncurrent liabilities: | | | | | |
| Reserve for compensation | - | - | - | - | - |
| Reserve for compensation adjustment expenses | 662,231 | 683,938 | 643,931 | 732,636 | 642,835 |
| Premium payment security deposits | - | - | - | - | - |
| Deferred revenue | - | - | - | - | - |
| Bonds payable | 158,770 | 148,745 | 143,090 | 129,012 | 113,902 |
| Other noncurrent liabilities | 21,731 | 23,089 | 22,771 | 23,161 | 19,159 |
| Total noncurrent liabilities | 842,732 | 855,772 | 809,792 | 884,809 | 775,896 |
| Total liabilities | \$ 1,158,452 | \$ 1,158,833 | \$ 1,103,786 | \$ 1,218,742 | \$ 1,065,603 |
| NET WORTH | | | | | |
| Invested in capital assets, net of related debt | (27,897) | (32,929) | (43,451) | (37,303) | (27,683) |
| Restricted for Surplus Fund | - | - | - | - | - |
| Restricted for Premium Payment Security Fund | - | - | - | - | - |
| Restricted for workers' compensation benefits | (739,764) | (708,691) | (619,516) | (706,835) | (609,632) |
| Total net assets (deficit) | \$ (767,661) | \$ (741,620) | \$ (662,967) | \$ (744,138) | \$ (637,315) |

ADMINISTRATIVE COST FUND

SUPPLEMENTAL SCHEDULE OF REVENUES, EXPENSES AND CHANGES IN NET ASSETS - FOR THE YEAR ENDED JUNE 30

| | 2002 | 2003 | 2004 | 2005 | 2006 |
|--|---------------------|---------------------|---------------------|---------------------|---------------------|
| Operating revenues: | | | | | |
| Premium Income | - | - | - | - | - |
| Assessment Income | 349,199 | 388,147 | 357,139 | 317,777 | 297,039 |
| Provision for uncollectibles | (2,374) | (2,584) | (6,342) | (1,888) | (4,799) |
| Other income | 9,826 | 4,231 | 2,310 | 3,298 | 6,496 |
| Total operating revenues | <u>356,651</u> | <u>389,794</u> | <u>353,107</u> | <u>319,187</u> | <u>298,736</u> |
| Operating expenses: | | | | | |
| Workers' compensation benefits | - | - | - | - | - |
| Compensation adjustment expenses | 216,132 | 288,186 | 184,915 | 336,511 | 137,983 |
| Premium reductions and refunds | - | - | - | - | - |
| Personal services | 44,553 | 49,810 | 62,505 | 51,707 | 44,564 |
| General and administrative | 15,745 | 11,298 | 17,433 | - | - |
| Other expenses | 16,522 | 16,400 | 15,358 | 20,555 | 17,322 |
| Total operating expenses | <u>292,952</u> | <u>365,694</u> | <u>280,211</u> | <u>408,773</u> | <u>199,869</u> |
| Net income (loss) before operating transfers | <u>63,699</u> | <u>24,100</u> | <u>72,896</u> | <u>(89,586)</u> | <u>98,867</u> |
| Operating transfers | 5,382 | 2,786 | 3,435 | 3,841 | 3,399 |
| Net operating income (loss) | <u>69,081</u> | <u>26,886</u> | <u>76,331</u> | <u>(85,745)</u> | <u>102,266</u> |
| Non-operating revenues (expenses) | | | | | |
| Net investment income (loss) | 2,069 | 3,119 | 3,989 | 5,994 | 4,496 |
| Loss on disposal of capital assets | (3,848) | (3,964) | (1,667) | (1,420) | 61 |
| Total non-operating revenues | <u>(1,779)</u> | <u>(845)</u> | <u>2,322</u> | <u>4,574</u> | <u>4,557</u> |
| Increase (decrease in net assets) (deficit) | 67,302 | 26,041 | 78,653 | (81,171) | 106,823 |
| Net assets (deficit), beginning of year | (834,963) | (767,661) | (741,620) | (662,967) | (744,138) |
| Net assets (deficit), end of year | <u>\$ (767,661)</u> | <u>\$ (741,620)</u> | <u>\$ (662,967)</u> | <u>\$ (744,138)</u> | <u>\$ (637,315)</u> |

Calculation of payrolls and premiums on a fiscal year basis

| Jan-Dec year | PA premiums | PA payroll | PEC premiums | PEC payroll | PA+PEC premiums | PA+PEC payroll | fiscal year | PA+PEC premiums | PA+PEC payroll |
|-----------------|----------------|---------------|-----------------|----------------|--------------------|-------------------|----------------|--------------------|-------------------|
| 2001 | 1,361 | 80,397 | 235 | 15,809 | 1,596 | 96,206 | 2001 | 1,601 | 97,272 |
| 2002 | 1,350 | 81,621 | 255 | 16,717 | 1,605 | 98,338 | 2002 | 1,627 | 99,388 |
| 2003 | 1,352 | 82,433 | 296 | 18,004 | 1,648 | 100,437 | 2003 | 1,700 | 101,731 |
| 2004 | 1,433 | 84,502 | 318 | 18,523 | 1,751 | 103,025 | 2004 | 1,762 | 104,021 |
| 2005 | 1,438 | 86,461 | 335 | 18,556 | 1,773 | 105,017 | 2005 | 1,830 | 106,376 |
| 2006 | 772 | 44,311 | 171 | 9,556 | 943 | 53,867 | 2006 | | |

Payroll and premiums are from the June 2006 Mercer report (Mercer Exh 4 pages 1 and 9.)
Because the Mercer report shows years beginning January 1, the fiscal year amounts are estimated.
For example, the 2006 fiscal year is the first half of the 2006 calendar year
plus the last half of the 2005 calendar year.

Losses on a fiscal year basis

Amounts in millions from BWC financial statements

| fiscal year | cash flow losses | published incurred | change in reserves | undiscounted incurred |
|----------------|---------------------|-----------------------|-----------------------|--------------------------|
| 2002 | 1,965 | 2,934 | 969 | 3,131 |
| 2003 | 2,080 | 3,361 | 1,281 | 4,036 |
| 2004 | 2,027 | 2,569 | 542 | 3,097 |
| 2005 | 2,150 | 2,917 | 767 | 2,285 |
| 2006 | <u>2,106</u> | <u>1,933</u> | <u>(173)</u> | <u>1,470</u> |
| | 10,328 | 13,714 | 3,386 | 14,019 |

Table for Executive Summary (point #1)

| | PA+PEC payroll | PA+PEC premiums | cash flow losses |
|------------------|-------------------|--------------------|---------------------|
| 2002 | 97,272 | 1,601 | 1,965 |
| 2003 | 99,388 | 1,627 | 2,080 |
| 2004 | 101,731 | 1,700 | 2,027 |
| 2005 | 104,021 | 1,762 | 2,150 |
| 2006 | 106,376 | 1,830 | 2,106 |
| 2002-2006 change | 9% | 14% | 7% |
| average change | 2% | 3% | 2% |

Table for Executive Summary (point #2)

| fiscal year | premium discounts and rebates | loss reserve movements | return on investments |
|----------------|----------------------------------|---------------------------|--------------------------|
| 2002 | 1,474 | 969 | -2.22% |
| 2003 | 641 | 1,281 | 3.15% |
| 2004 | 416 | 542 | 6.79% |
| 2005 | 233 | 767 | 5.35% |
| 2006 | (8) | (173) | 4.71% |

Ohio BWC - Investment Returns amounts in billions

| fiscal year | cash & invested assets | average in year | total investment income | investment rate with cap gains |
|---------------------------|------------------------|-----------------|-------------------------|-----------------------------------|
| 2001 | 20.867 | | | |
| 2002 | 19.326 | 20.097 | (0.430) | -2.22% |
| 2003 | 18.245 | 18.786 | 0.575 | 3.15% |
| 2004 | 18.396 | 18.321 | 1.250 | 6.79% |
| 2005 | 18.483 | 18.440 | 0.988 | 5.35% |
| 2006 | 16.230 | 17.357 | <u>0.764</u> | 4.71% |
| last 5 years total | | | 3.147 | 3.43% \$ wtd avg |

Ohio Bureau of Workers' Compensation Oversight Commission

RFP # B07016

Task B: Evaluation of BWC's Current Surplus Adequacy
and Premium Ratemaking Methodologies

June 14, 2007

Aon Risk Consultants

Actuarial & Analytics Practice

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I. Introduction

Purpose

Aon Risk Consultants (“ARC”) has been retained by the Ohio Bureau of Workers’ Compensation Oversight Commission (“WCOC”) to supply actuarial consulting services in support of the evaluation of the performance of the Ohio workers’ compensation system and in comparing Ohio’s system to other state and private compensation systems.

Specifically, ARC has been engaged to perform the following three tasks:

- Task A. Provide an analysis of the Ohio Bureau of Workers’ Compensation’s (“BWC”) historical underwriting profit or loss for the past five years and identify underlying drivers.
- Task B. Evaluate the BWC’s current surplus adequacy and premium ratemaking methodologies.
- Task C. Evaluate the BWC’s current practices relative to insurance industry standards (state and private) in the areas of ratemaking and reserve development.

Each of these tasks will be addressed in a separate report, with this report covering Task B.

Scope

Under Task B, ARC is to assist the WCOC’s Investment Committee in the development of surplus adequacy requirements and criteria to be used for approving proposed dividends as recommended by the BWC Administrator. The purpose of these criteria will be to preserve the integrity of the asset allocation from the impact of proposed return of “excess” surplus.

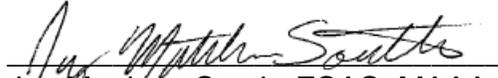
In addition, ARC is to review and evaluate current premium ratemaking methodologies in order to assist the WCOC in evaluating premium rate recommendations presented by the BWC Administrator.

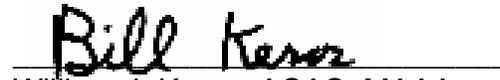
We compiled this report and performed all analysis contained herein using generally accepted actuarial principles and in accordance with all relevant Actuarial Standards of Practice.

Please contact us if you have any questions regarding this report.

Respectfully submitted,

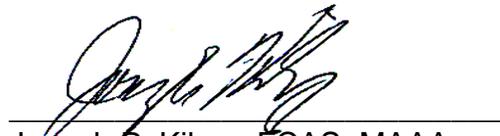
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II. Conditions and Limitations

Data Reliance

In conducting this analysis, we relied upon the provided data without audit or independent verification. Any inaccuracies in quantitative data or qualitative representations could have a significant effect on the results of our review and analysis.

Use and Distribution

Use of this report is limited to the WCOC for the specific purpose described in the Introduction section. Other uses are prohibited without an executed release with ARC.

Distribution by the WCOC is unrestricted. We recognize that this report may be distributed to certain third parties. We request that ARC be notified of further distribution of this report. The report should only be distributed in its entirety including all supporting exhibits.

III. Executive Summary

This report contains two distinct parts. The first part covers surplus adequacy, while the second part evaluates premium ratemaking methodologies. Conclusions drawn in this executive summary are based on the detailed analysis contained in later sections of this report.

Surplus Adequacy Evaluation

Our evaluation begins by defining surplus as the reserve of last resort and examines why it is needed to prevent insurer insolvency. The various risks threatening insurer solvency are reviewed and various methods of measuring these risks are summarized. An overview of several surplus adequacy calculation methodologies is then presented.

ARC believes that a good starting point for the analysis of the BWC's surplus adequacy is a comparison to industry benchmarks. We present three surplus benchmarks in the table below: NAIC Risk Based Capital, A.M. Best Capital Adequacy Ratio, and Standard & Poor's Capital Adequacy Ratio. While we have applied three industry methodologies to the BWC's data, each methodology relies on subjectivity to varying degrees and should be interpreted only as an estimate of the required surplus had the calculations been made by the NAIC, A.M. Best, or Standard & Poor.

Ohio Bureau of Workers' Compensation
Indicated Surplus Requirements vs. Surplus @ 6/30/2006
Amounts Shown in Millions

| | <u>NAIC</u> | <u>A.M. Best</u> | <u>S&P</u> |
|---|-------------|------------------|----------------|
| (1) BWC Reported Total Surplus 6/30/2006 | (127) | (127) | (127) |
| (2) Adjustment for Discount* | 10,843 | 0 | 0 |
| (3) Adjustment for Asset Risk & Credit Risk | 0 | 0 | 434 |
| (4) Risk Adjusted Surplus 6/30/2006 = (1) - (2) - (3) | (10,970) | (127) | (560) |
| (5) Required Surplus | 2,651 | 7,235 | 1,958 |
| (6) Adequacy Ratio = (4) / (5) | -413.8% | -1.8% | -28.6% |
| (7) Indicated Additional Surplus Need = (5) - (4) | 13,621 | 7,362 | 2,518 |

Note: * - Estimated amount of discount related to future payments that are neither fixed nor reasonably determinable.

BWC financial statements show that the BWC was technically insolvent as of June 30, 2006 due to negative carried surplus. Had the BWC been under NAIC jurisdiction, significant regulatory action would have been triggered. Although the rating agencies consider factors in addition to surplus, surplus is central to the rating process. Based on both the A.M. Best and Standard & Poor's required capital indications, the BWC is unlikely to have received a secure financial

strength rating. While the results of the three methods cannot be directly compared with each other, they all tell similar stories: maintaining surplus at the current level seriously restricts the BWC's ability to withstand unexpected adverse events.

The specific surplus indications result both from the goal each method was designed to meet as well as from the specific calibration of each method. The NAIC approach is used by insurance regulators to identify companies at risk of becoming insolvent early enough to take corrective action, while the two rating agency approaches are considered as part of the financial strength rating process. The NAIC RBC methodology was specifically developed and calibrated by US regulators for the purpose of insurance solvency regulation. Therefore, ARC considers NAIC RBC to be more appropriate than the alternative benchmarks developed by rating agencies.

ARC therefore recommends that the WCOB consider using the NAIC required risk based capital indication as a minimum surplus goal equivalent to \$2.65 billion as of June 30, 2006. If the BWC were a commercial insurer, surplus less than \$2.65 billion would cause it to fall short of the NAIC Company Action Level, thereby triggering regulatory action. Approval of policyholder dividends should be resisted until the BWC's surplus exceeds the NAIC RBC Company Action Level.

The additional funds needed by the BWC to achieve this minimum surplus goal depend on one's perspective. If the BWC is viewed as a state agency subject to Governmental Accounting Standards, then reserve discounting would be appropriate, implying additional funds of \$2.78 billion [= 2.651 – (0.127)]. However, if the BWC is viewed as a commercial insurance book of business available for sale, then it would be subject to NAIC regulation and Statutory Accounting Principles ("SAP") would apply. The NAIC and SAP do not allow discounting of future payments that are neither fixed nor reasonably determinable, implying additional funds of \$13.62 billion [= 2.651 – (10.970)].

Note that the NAIC surplus requirement is dynamic in the sense that it adjusts as the risks faced by an insurer change. For example, the surplus requirement an insurer must meet will increase as invested assets are reallocated from risk-free US treasuries to equities.

ARC further recommends that the BWC consider developing a probabilistic-type surplus model. Industry practice for analyzing surplus adequacy among large commercial insurers relies heavily on scenario-based and probabilistic surplus approaches, rather than on RBC-type methods. In addition, rating agencies are developing more sophisticated models built around scenario-based and probabilistic algorithms.

Probabilistic models have the advantage of being able to quantify the financial impacts from many risk sources simultaneously as well as allowing the introduction of scenario testing. Many diverse risk sources can be incorporated into such models: asset risk, premium risk, and reserving risk, among others.

Typically, the largest risk facing commercial insurers, and the BWC, is underwriting risk, a combination of premium risk and reserving risk. Therefore, ARC recommends that any surplus model developed reflect both the reserve variability inherent in the various funds administered by the BWC as well as any significant correlations between the funds.

The steps involved in constructing a probabilistic surplus model include:

1. Choosing a method for measuring each risk, e.g. Value-at-Risk, Tail Value-at-Risk, or Probability of Ruin.
2. Establishing a risk tolerance standard, e.g. sufficient surplus should be retained to prevent insolvency with 99.5% confidence over the next year.
3. Set the dividend policy so that sufficient surplus is retained to satisfy the selected risk tolerance.

Surplus in excess of that required to satisfy the selected risk tolerance could be treated as free or excess surplus and either approved as policyholder dividends or retained as an additional safety margin. Any dividend plan should incorporate a method of fairly and equitably distributing any declared dividend among policyholders. For example, one consideration that may be addressed through the dividend plan is the extent to which the amount returned to a specific policyholder depends on the losses experienced by that policyholder. A properly structured dividend allocation plan has the potential to complement existing workplace safety programs further reducing overall costs. Although the design of a dividend allocation plan is extremely important, it is beyond the scope of this study.

Premium Ratemaking Methodology Evaluation

The overall results of the ratemaking process appear to be actuarially sound, i.e. enough premiums are collected in total to cover losses and loss adjustment expenses. However, significant cross subsidies exist between group rated and non-group rated insureds indicating that rates are not actuarially sound between these two rating groups.

Our main observation is that the rate recommendation report is not a self-contained document. It is only after a review of several external documents that the process can be fully understood. The rate recommendation should ideally be

a stand alone document that includes or explicitly references all items impacting the rates so that an outside party can easily follow the derivation. After reviewing the Ohio Workers Compensation Rate Recommendation prepared by Oliver Wyman, we suggest the following recommendations to enhance the process:

1. The rate recommendation analysis should provide more support for the deviations between the baseline, optimistic and conservative rate indication scenarios. An explanation as to how the scenarios were derived and any changes in assumptions should be included. As these additional scenarios provide the basis for the confidence interval contained in the rate recommendation, it is important that the assumptions underlying them are understood.
2. Consideration should be given to increasing the weight applied to the claims experience from more recent years, and to indications based on policy year data as well as on calendar/accident year data. The use of more years of data can actually decrease the credibility of rate indications as the older years are less likely to be indicative of future results. Policy year data generally provides a better matching of losses and premiums in ratemaking analyses.
3. The rate recommendation should provide a more detailed explanation of the changes in rate indications from one year to the next. In the most recent filing, there was a significant shift in the indications for all scenarios. A summary of any changes in assumptions, benefit level changes, or other factors causing such a shift should be documented.
4. The rate recommendation should include a detailed analysis of changes in expense provisions. The exact details of the expense provisions do not necessarily need to be disclosed, but the impact on the rate indication resulting from a change to the expense ratio should be documented.
5. Given its current unfairness, the Group Rating Program should not continue in its current form. While the general concept of group rating has merit, the program as it currently exists does not produce rates that are actuarially sound (reasonable and not excessive, inadequate, or unfairly discriminatory). Group rated companies consistently produce loss ratios well in excess of non-group rated companies, indicating that non-group rated companies are subsidizing the group rated companies.

In prior group rating studies, Oliver Wyman made several valuable recommendations that should be considered during the development of any new Group Rating Program. Oliver Wyman's recommendations are discussed in the Group Rating section of this report.

IV. Surplus Adequacy Evaluation

Background

As described in the introduction, ARC is to assist the Investment Committee in the development of surplus adequacy requirements and criteria to be used for approving proposed dividends as recommended by the BWC Administrator. The purpose of these criteria will be to preserve the integrity of the asset allocation from the impact of proposed return of excess surplus. In order to provide a framework for what follows, we first present a brief overview of some concepts related to insurance and surplus.

Insurance, Surplus and Technical Insolvency

At its most basic level, insurance is a promise. Insurance entities collect premiums from those they insure and promise to pay covered losses suffered by the insureds during the policy's term. In addition, premiums must cover the insurer's expenses. The insurance promise is made in advance without knowing how much it will ultimately cost to fulfill.

The portion of premiums intended to cover insured losses is an estimated amount called the Loss Cost or Pure Premium. Collected premiums are usually invested until needed to pay claims, thereby reducing the insureds' upfront cost. At the same time, the company establishes loss reserves representing the amount the company expects will be needed to settle all claims. As claims are paid, these reserves are reduced. If at any point the insurer cannot meet all of its promises, i.e. cannot pay all claims, it is deemed technically insolvent.

The distinction between insolvency and technical insolvency is one of degree. An insolvent company is bankrupt; it has paid out all of its assets, but still has unpaid liabilities that cannot be satisfied. While a technically insolvent company still possesses assets, they are exceeded by its liabilities. Insurance companies and their regulators focus on technical insolvency because threats to the company's continued existence and harm to its policyholders can still be minimized or avoided by prudent action.

Technical insolvency occurs when an insurer's surplus, i.e. total assets less total liabilities, becomes negative and can result from many causes or risks. Some examples include:

- premiums were set too low

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- premium discounts were set too high
 - actual investment returns were lower than expected
 - claims were under-reserved
 - past dividends to policyholders were too generous.

Evaluation of Surplus Adequacy

To avoid technical insolvency from these and other risks, insurers must maintain their assets at a level greater than their liabilities. Surplus is often referred to as an insurer's reserve of last resort. The more assets a company has in relation to its liabilities, the "safer" it is considered to be. If an unforeseen event materializes, a company with higher surplus is more capable of absorbing the negative financial impact while still keeping its promises to policyholders.

Surplus adequacy is evaluated by quantifying the financial threat posed by each risk facing the company, combining these amounts together and comparing the resulting required surplus to the company's actual surplus. If actual surplus is less than required surplus, the company, while technically solvent, is considered at risk. If actual surplus exceeds required surplus, the excess may either be returned to policyholders, or retained as an added safety margin.

The critical question of how much surplus is enough is difficult and its answer depends somewhat on who is answering it. Historically, three groups have had an interest in evaluating surplus adequacy and have contributed to the development of methods for doing so,

1. Insurance Regulators
2. Rating Agencies
3. Company Management

Each group answers the surplus adequacy question from its own perspective.

Insurance Regulators and Solvency

One of the central duties of insurance regulators is to ensure that insurance companies maintain sufficient financial resources to pay all of their policyholders' claims. This duty is known as solvency regulation and its goal is to protect policyholders by identifying early those insurers likely to become technically insolvent and to take corrective action before this occurs. To this end, insurance regulators in the United States developed a set of accounting rules known as Statutory Accounting Principles ("SAP") that tend to minimize the value of assets and maximize the value of liabilities, thereby valuing surplus on a conservative basis.

Solvency regulation has evolved over time, tending to become more sophisticated in order to meet the regulators' duty to policyholders.

Rating Agencies

Rating agencies such as A.M. Best, Standard & Poor, and Moody's, among others, calculate insurers' required risk capital or risk equity, representing an amount needed to offset unforeseen risks. Risk capital is then considered in the process used by rating agencies to assign financial strength and credit ratings to insurance companies.

Rating agencies are more concerned about a company's ability to meet obligations on a "going concern" basis and so rely more on assets and liabilities valued under Generally Accepted Accounting Principles ("GAAP"). GAAP equity tends to be greater than SAP surplus. Each rating agency applies its own proprietary method to calculate the equity a company needs to absorb potential risks and remain in business.

Internal Company Management

Insurance company management is interested in risk capital for various reasons including the efficient deployment of available capital in support of different lines of business, evaluation of profitability by sub-units, and evaluation of reinsurance program structures. Management is focused on the continued operation of the company and therefore tends to use GAAP accounting, although SAP accounting cannot be ignored given its importance to regulators.

Risk and Risk Measurement

The concept of risk does not have a precise definition, meaning different things to different people. Some define corporate risk as anything that keeps a company's executive officers awake at night. Applying this definition in the context of evaluating surplus adequacy leads to the question, "which risks have historically threatened insurers' surplus?" The next natural question is how these risks can be measured.

Sources of Risk

A number of studies have examined past insurer insolvencies and concluded that threats to solvency exist throughout the insurance process. Historically, the main causes of insolvencies included one or more of the following:

1. Occurrence of large losses including catastrophe losses
2. Under-pricing of insurance policies

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3. Under-reserving of past losses
 4. Management incompetence and inexperience
 5. Fraud
 6. Rapid and uncontrolled new business growth or expansion
 7. Over-reliance on uncollectible reinsurance
 8. Inappropriate reinsurance programs
 9. Overstatement of asset values and imprudent investments

Often, these risks are organized into broader categories similar to the following,

1. Asset Risk
The risk to the market value of a company's assets due to changes in interest rates and market conditions, including bond default risk
2. Credit Risk
The risk a company will not be able to collect amounts it is owed
3. Underwriting Risk
Comprising the following two distinct risks
 - a. Premium Risk – the risk that future business will be unprofitable
 - b. Reserving Risk – the risk that the current reserves carried by the company will be inadequate
4. Off-Balance Sheet Risk
The risk that certain items are not fully reflected in a company's financial statements

Having identified the main risks to insurer solvency, the next step is how to measure them.

Common Risk Measures

A risk measure is a mathematical formula for measuring the financial impact of a given risk. Any risk will have a range of possible outcomes, e.g. annual hurricane related losses can range from zero to multi-billion dollar events. Risk measures condense this range of possibilities down to a single number.

Many popular risk measures are variations of the following,

1. Probability of Ruin

The probability of ruin risk measure answers the question, “how likely is surplus to be exhausted?”

2. Value-at-Risk

The value-at-risk (“VaR”) risk measure answers the question, “how much surplus is needed to absorb a risk’s financial impact over the chosen time horizon at a given confidence level, e.g. 99.5%?”

3. Tail Value-at-Risk

The tail value-at-risk (“TVaR”) risk measure answers the question, “how much surplus is needed to absorb a risk’s average financial impact, given that a specified threshold is exceeded?”

Surplus Adequacy Approaches

The methods used to analyze surplus adequacy have evolved over time. The methods developed to date may be classified as belonging to one of the following broad approaches, ranging from least to most complex:

1. Fixed Ratio Approaches
2. Risk Based Capital Approaches
3. Scenario-Based Approaches
4. Probabilistic Approaches

Any method of analyzing surplus adequacy consists of two components, a model or and a set of parameters. The model represents the general design of the calculation, while the parameters fine-tune the model; they are the factors applied during the calculation of required surplus. If the choice of parameters is poor, the calculated required surplus will be either overstated, leading to higher costs for policyholders, or understated, increasing the possibility of insolvency.

Static or Fixed Ratios

Fixed ratio methods use simple formulas that apply fixed ratios to various financial statement values. For example, the ratio of net written premiums to surplus must be less than 3-to-1. The financial statement values used represent proxies or substitutes for the underlying risks. These methods are the least complex, easiest to apply and easiest to understand of the various approaches.

There are several disadvantages to fixed ratio methods. Most implementations focus on a limited number of risks, usually related to underwriting. Some risks such as the quality and benefits of ceded reinsurance are difficult to incorporate into the models. Some of the financial statement quantities used in the models

can be manipulated. For example, arbitrarily reducing carried reserves would improve the company's one-year reserve development-to-surplus ratio, but would not actually decrease the likelihood of insolvency. These methods provide no incentive for good internal risk management, diversification among lines of business and territories, or strong reserving practices. For these reasons, the calculated surplus requirements are in some sense arbitrary. Finally, these methods do not have significant predictive power; they tend to indicate there is a problem after it is too late to correct.

Both the current European Union Solvency I method and the US NAIC Insurance Regulatory Information System ("IRIS") are examples of this approach. The drawbacks inherent in these approaches led the regulators who relied on them to develop more sophisticated approaches.

Risk Based Capital

Risk Based Capital ("RBC") methods are similar to Fixed Ratio methods in that separate surplus requirements are calculated for each risk category by applying factors to risk proxies. These individual surplus requirements are then combined, using a more sophisticated mathematical formula, into a RBC surplus requirement. Actual surplus is compared to this RBC requirement and, depending on the ratio, various actions can or must be taken by company management and regulatory authorities.

In contrast to fixed ratio methods, which focus primarily on underwriting and reserving risks, RBC methods use more risk proxies such as asset risks, credit risks, and off-balance sheet risks. By risk-weighting the individual surplus requirements for assets and liabilities to determine required surplus, RBC required surplus reflects the nature of the business written and the assets held to meet the company's obligations to policyholders.

Further advantages of RBC methods include the adjustment of risk factors to company-specific levels and their objective application based on historic accounting values. Although RBC methods are more complex than Fixed Ratio methods, they do not require complex systems or models to calculate.

There are a number of disadvantages to RBC methods. Similar to Fixed Ratio methods, the use of premiums and reserves as risk proxies can have unintended consequences leading to under-pricing and under-reserving. For example, arbitrarily reducing reserves will directly increase surplus and decrease the RBC surplus requirement intended to absorb reserving risk.

RBC methods are not dynamic and are not forward looking, i.e. they do not model possible future movements of risk variables like interest rates and do not

project future company cash flows or balance sheets. Dissatisfaction with the weaknesses of the RBC approach led to the Scenario-Based approach.

Scenario-Based

Scenario-based approaches analyze the impact of selected risk variables on financial models of companies. The financial models project future cash flows and balance sheets, given the values of the selected risk variables. Scenario-based approaches proceed by choosing a limited number of plausible worst-case “scenarios”, assigning specific values to each of the key risk variables. The financial models then project cash flows and balance sheets under the scenarios, indicating the surplus required to withstand each.

Key risk variables might include projected premium income, future loss experience and reserve development, the incidence of catastrophes and other large losses, future inflation, the movement of interest rates and returns on assets among others.

These approaches have a number of advantages. They directly estimate a company’s surplus need for each scenario from all risk sources simultaneously. The results may be presented in a straightforward way and easily interpreted by those familiar with financial statements. Certain impacts like ceded reinsurance can be more easily incorporated. Interactions between various risk variables can be modeled directly, rather than indirectly through a mathematical formula. The more sophisticated scenario-based models can be used to analyze what-if type situations, representing a valuable tool for internal risk management.

Scenario-based approaches also have a number of drawbacks. The results of the approach are critically dependent on which scenarios are chosen, due to the limited number of scenarios analyzed. Introduction of subjectivity is unavoidable during the scenario selection process. Finally, increased model complexity general increases the need for detailed data.

Despite their drawbacks, scenario-based methods represent improvements over Fixed Ratio and RBC approaches. However, dissatisfaction with some of the technical limitations combined with the availability of increased computer power stimulated the development of the final type of approach.

Probabilistic

The probabilistic approach is closely related to the scenario-based approach. The approaches differ mainly in the number of scenarios investigated and the manner in which these are selected. The probabilistic approach simulates the

impact of thousands of scenarios or iterations on a company's cash-flows and balance sheet, while the scenario-based approach looks at only a small number.

The probabilistic approach takes observed historic relationships between the key risk variables into account during their selection process. This key risk selection process is repeated once for each of the thousands of iterations rather than being subjectively determined for a limited number of scenarios.

Probabilistic approaches then collect and analyze the results of the thousands of cash-flow and balance sheet iterations in light of the selected risk measure (VaR, Tail-VaR, Expected Policyholder Deficit, etc.). The results and analysis are used to make statements about the probability of various financial outcomes and associated surplus needs.

The probabilistic approach is very flexible with respect to the risks that can be incorporated. In addition, unlike the three preceding approaches, the probabilistic approach allows correlations between the key risks to be reflected. A further strength is the ability to describe the entire range of possible surplus needs and the probability of each. Due to its ability to simulate future cash-flows and balance sheets, this approach has the potential to be a valuable addition to the internal risk management process.

The disadvantages of the probabilistic approach stem mainly from its complexity. The results of the approach are not necessarily intuitive and are therefore more difficult to interpret. The data demands of this approach can be high and when data is unavailable, subjective assumptions are introduced. Finally, the approach's complexity usually implies added cost.

Specific Surplus Adequacy Methods

As a first step in assisting the Investment Committee to develop surplus adequacy requirements, a sample of various methodologies developed by insurance regulators, rating agencies and internal company management is presented below. This presentation is intended as an overview and as such only a limited amount of detail is provided on each.

Insurance Regulators

Current European Union Solvency I

The current European Union ("EU") solvency monitoring system is known as Solvency I and is a fairly simple Fixed Ratio method. Solvency I was introduced in the early 1970's and applies only to primary companies as reinsurers are not currently subject to solvency regulation within the EU.

Required surplus is calculated as the largest of the following three items:

1. Premium Basis

18% of the first 10 million Euros Gross Written Premium plus 16% of the remaining Gross Written Premium for the year

The above amount is then netted down for the effect of reinsurance based on gross to net incurred claims; maximum 50% reduction

2. Claim Basis

26% of the first 7 million Euros of the average annual incurred loss over the past 3 years (7 years for Credit, Storm, Hail or Frost lines of business) plus 23% of the remaining average annual incurred loss over the analogous period

The above amount is then netted down for the effect of reinsurance based on gross to net incurred claims; maximum 50% reduction

3. Minimum Guarantee Fund

Varies between 200,000 and 1,400,000 Euros depending on the lines of business written

The EU is developing a new, more sophisticated solvency regulation system known as Solvency II. Although Solvency II has not yet been finalized, its proposed form is described below.

U.S. NAIC Risk Based Capital

Traditionally, US regulatory solvency monitoring involved periodically auditing insurer financial statements and evaluating these statements using the Insurance Regulatory Information System (“IRIS”) financial ratio tests with the goal of identifying companies warranting closer review. Gradually, it became clear that this approach did not identify problems early enough to implement corrective measures. In addition, even when weak companies were identified by this system, it was left to the discretion of state regulators if and how problems would be addressed.

The NAIC attempted to address these problems by adopting Risk-Based Capital (“RBC”) standards and model laws for insurance companies in 1994. The intent of the NAIC RBC standards is to assist regulators in monitoring the financial health of insurance companies. The model laws provide the legal basis for initiating remedial action if a company’s actual surplus falls below the RBC required surplus.

The RBC surplus requirement represents the theoretical surplus needed to absorb various risks involved in the operation of an insurance company. Financial statement values related to each NAIC risk category component are multiplied by RBC factors prescribed by the NAIC. The product of these two quantities represents the amount of risk capital required to absorb potential adverse financial impacts stemming from each component. The various risk category components are then combined into risk groups R_0 through R_5 as documented in Appendix B. The risk group surplus charges R_0 through R_5 are then combined through a mathematical Square Root formula into the Required Risk Based Capital.

The various risk group charges are combined using the square root formula rather than simple addition in order to reflect the statistical independence of the risks. Simply adding the risk charges together implies that the risks are correlated, moving together in lockstep, e.g. were equity prices to fall, so would loss reserves. In reality, changes in the stock market have little impact on the level of loss reserves and the two risks are said to be independent. The square root formula implicitly assumes that each term under the square root is independent of the others.

Although the risk groups actually exhibit some correlation, it tends to be rather weak in practice with one exception: reserving risk and uncollectible reinsurance risk. This exception is adjusted for in the formula by adding $\frac{1}{2}$ of the Credit Risk charge (R_3) to the Reserving Risk charge (R_4) before squaring; thereby assuming that when one goes up or down, the other will behave in a similar manner. Details of the formula are provided in the Exhibits section.

Note that the proposed Solvency II methodology attempts to reflect the small dependencies between risk groups by incorporating the “covariance” between each risk.

The NAIC uses a graduated approach to solvency regulation that is stated in terms of the Authorized Control Level (“ACL”), rather than in terms of the required RBC capital. The ACL equals 50% of the required RBC capital and represents the surplus threshold under which regulators are authorized, but not required, to assume control of the company.

Once the ACL has been calculated, it is compared to the company’s adjusted surplus. If the insurer’s adjusted surplus is positive, but less than specified multiples of the ACL, the company is deemed at risk, although still technically solvent. The following four RBC action levels are stated relative to the ACL and each has specific consequences and requirements for both the company and regulators.

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1. Company Action Level
Company surplus is between 150% and 200% of ACL.
 2. Regulatory Action Level
Company surplus is between 100% and 150% of ACL.
 3. Authorized Control Level
Company surplus is between 70% and 100% of ACL.
 4. Mandatory Control Level
Company surplus is less than 70% of ACL.

Identifying at risk companies before they become insolvent allows regulators and company management the time needed to take corrective action. In addition, the NAIC hoped RBC would encourage companies to improve internal risk management.

Proposed European Union Solvency II

The proposed EU Solvency II represents a more refined and much more complex implementation of the RBC approach. Under Solvency II, two capital requirements are calculated: 1) the Solvency Capital Requirement (“SCR”) and 2) the Minimum Capital Requirement (“MCR”). As currently envisaged, regulatory action could be triggered when a company’s actual capital fell below the SCR. In a manner similar to NAIC RBC action levels, EU regulatory action would increase as actual capital fell further towards the MCR. The viability of a company whose capital fell below the MCR would be in doubt and the company subject to possible regulatory control. Although the details of the SCR and MCR calculations have not been finalized, a framework containing a number of alternatives has been released for discussion and the following description is based on it.

The main refinement of Solvency II is the reflection of partial dependencies or covariance between risk components in the formula used to combine the individual risk charges when determining the SCR. Additional details concerning the calculation of the SCR are given in Appendix C.

Proposals for the calculation of the MCR include setting the MCR equal to 1/3 of the SCR, or equal to a company’s current Solvency I required solvency margin. The current implementation timeline calls for the details of the calculations to have been finalized and codified by the end of 2008, so that Solvency II can be in place by the end of 2010.

Rating Agencies

Rating agencies such as A.M. Best, Standard & Poor, and Moody's among others calculate insurers' risk capital as part of the process they use to assign financial strength and credit ratings to insurance companies. These models tend to be similar to the NAIC RBC approach, but more judgment is used in the process, specifically in determining the actual risk capital factors and in adjusting certain aspects of the calculations to reflect specific characteristics of individual insurers. We therefore stress that the calculations presented in this report that are based on rating agency methods must be viewed only as approximations of the results which would be obtained by rating agencies applying proprietary methodologies to BWC data.

A.M. Best's Capital Adequacy Ratio ("BCAR")

A.M. Best's objective in assigning financial strength ratings to companies is, "to provide an opinion of an insurer's financial strength and ability to meet its obligations to policyholders." Three areas are evaluated and compared with A.M. Best's quantitative and qualitative standards during this process: 1) balance sheet strength, 2) operating performance, and 3) business profile.

A.M. Best states that balance sheet strength is, "the most important to evaluate, since it is the foundation for policyholder security", while operating performance indicates how balance sheet strength will develop in the future.

Mechanically, BCAR's calculations are very similar to those of the NAIC's RBC method. A.M. Best segregates risks the categories B₁ through B₇ and applies risk factors. Individual BCAR risk factors are calibrated using a 1% expected policyholder deficit¹ risk measurement basis. This approach allows the surplus requirements produced for the various risk categories to be more consistent.

In contrast to the NAIC RBC method, BCAR adjusts company reserves based on A.M. Best's perception of their adequacy. This adjustment may well reduce the incentive companies have under NAIC RBC to understate reserves. BCAR makes a number of "Concentration", "Growth", "Diversification" and similar adjustments, the details of which may be found in "Understanding BCAR", available through the A.M. Best website.

The categories B₁ through B₇ are then combined into the Net Required Capital ("NCL") using a square root method very similar the NAIC's.

¹ The Expected Policyholder Deficit risk measure reflects the expected cost of insolvency rather than only its probability.

A number of adjustments are then made to the company's reported surplus with the intent of restating surplus on a more "economic" basis. Details regarding the types of surplus adjustments are shown in the Exhibits section.

Finally, the A.M. Best's Capital Adequacy Ratio ("BCAR") is calculated as the ratio of Adjusted Surplus to Net Required Capital.

$$BCAR = \frac{\text{Adjusted Surplus}}{\text{Net Required Capital}}$$

The following table shows the minimum BCAR levels a company must achieve to receive a given balance sheet strength rating.

| Minimum BCAR Levels | |
|---|-----------------|
| Implied Balance Sheet Strength Rating | Minimum BCAR |
| Secure Ratings | |
| A++ | 175 |
| A+ | 160 |
| A | 145 |
| A- | 130 |
| B++ | 115 |
| B+ | 100 |
| Vulnerable Ratings | |
| B | 90 |
| B- | 80 |
| C++ | 70 |
| C+ | 60 |
| C | 50 |
| C- | 40 |
| D | 0 |

A.M. Best stresses that its BCAR method, although very useful for evaluating a company's balance sheet, is "only one component of that analysis. In addition, balance-sheet strength is only one component of the overall financial strength rating, which also includes operating performance and market profile. BCAR very often is a minimum requirement to support a rating, but other factors deriving expectations of future balance-sheet strength drive the rating as well."

Standard & Poor and Moody's have developed very similar RBC-like models, differing only in detail from the two described above. This report will therefore not describe them further.

Fitch Ratings Insurance Capital Assessment Methodology (“Prism”)

Fitch Ratings presented its Insurance Capital Assessment Methodology, known as Prism, in June 2006. This model represents the probabilistic approach of assessing surplus adequacy and uses a Tail-VaR risk measure.

Prism is described by Fitch as an economic simulation model used to project cash flows for up to 30 years and reflects the following risks:

1. Asset Risk

Cash flows are generated reflecting the current investment portfolio composition and the following investment return risks,

- Interest Rate Risk
- Non-Interest Rate Risk on Fixed Income Assets
- Equity Market Risk
- Real Estate Risk

2. Underwriting Risk

Quantifies the risk losses and expenses exceed premiums for 1 additional year of writings net of ceded reinsurance

3. Loss Reserve Risk

Variability in future loss payments is incorporated via the Mack Method of estimating loss development variability

4. Property Catastrophe Risk

Reflects the company’s exposure to natural catastrophes over the next 12 months

5. Credit Risk on Current and Contingent Reinsurance Recoveries

Represents uncollectible reinsurance recoveries

6. Latent Claim Risk

Reflects the possibility that carried reserves will be insufficient to expansion of liabilities due to future adverse legal decisions or government actions (e.g. Asbestos & Environmental liabilities)

7. Asbestos & Environmental Liability Adjustments

Reflects an adjustment for inadequate carried Asbestos & Environmental reserves

Prism relies on published financial and regulatory statements for its required input data. The method produces a “Required Capital Loss Distribution Curve” based on the results of 5,000 randomly generated runoff scenarios of the company’s current book of business. Underlying each runoff scenario are simulated values of the above risks. Asset risks are simulated through an economic scenario generator; while reserve risks are modeled using a method developed by Dr. Thomas Mack based on paid loss development triangles.

Prism begins each of the 5,000 scenarios by assuming the company has assets just equal to its liabilities. A single year’s worth of additional premium is assumed under the model. Then for each future year, investment income is generated, losses and expenses are paid, uncollectible reinsurance is written off and the ending reserve balance is calculated. This ending reserve balance forms the beginning reserve balance for the next year. Any negative ending reserve balances are topped up with “required capital” at the end of each year. The discounted value of these required capital amounts represents the surplus needed today in order to satisfy all policyholder claims.

The resulting 5,000 required surplus amounts are used to estimate how likely it is that the company will be unable to meet its policyholder obligations, given its current surplus. This probability is then compared to cumulative corporate bond default rates by rating category to establish which rating threshold an insurer’s surplus meets.

Internal Company Management

Insurance industry management uses a wide variety of methods to analyze surplus adequacy. Methods range from fairly simple to complex depending on the purposes for which they have been designed. While describing these methods in detail is beyond the scope of this report, some brief comments are provided.

Few companies rely on fixed ratios other than as part of required regulatory calculations. Given management’s goals of efficiently deploying capital by line of business, evaluating profitability by sub-units, and evaluating reinsurance program structures, many companies rely on either the scenario-based or probabilistic approach. These two approaches allow management the opportunity to ask “what-if” type questions and analyze the likely outcomes of various alternatives.

V. Premium Ratemaking Methodology Evaluation

Background

ARC is to assist the Ohio Workers' Compensation Oversight Committee in evaluating the premium ratemaking recommendations presented by the BWC Administrator by reviewing and evaluating the current methodologies.

The BWC's actuarial consultant, Oliver Wyman, follows Ohio regulatory requirements that the rate adequacy for private and public employers be reviewed separately. Below is ARC's review of Oliver Wyman's ratemaking process. Following the evaluation of the premium ratemaking process, the Group Rating Plan is reviewed in detail.

Oliver Wyman Actuarial Evaluation

Oliver Wyman performs two actuarial evaluations each year that serve as starting points for the rate recommendations. The first report is titled Actuarial Audit of the Private Employer, MIF and DWRP Reserves for Rate Recommendation Support. A corresponding report for Public Employers was not provided to us however we were assured by Mercer that the evaluation follows the same basic processes. The analysis contained in each report forms the basis for the baseline scenario used in the rate recommendation. This baseline is essentially a mid-range rate indication and is accompanied by optimistic and conservative selections. A detailed review of the Oliver Wyman actuarial audit is outside the scope of this assignment and is contained in the report for Task C. The scenarios used in the rate recommendation are discussed in the Private Employers Section below.

Private Employers (PA) Rate Recommendation

This section of Oliver Wyman's report pulls the pure premiums directly from the Oliver Wyman Private Employers Actuarial Evaluation. These pure premiums are the starting point to determine the recommended rate change indication for private employers.

Scenarios

Oliver Wyman considers three scenarios in their rate review:

1. Baseline
2. Reasonable Expectation Optimistic
3. Reasonable Expectation Conservative

The baseline is analogous to a best estimate selection. The remaining scenarios utilize optimistic and conservative assumptions, and act as confidence intervals. Each of these three scenarios considers two discount rates that are applied to ultimate losses to calculate their present values: 5.00% and 5.25%.

Oliver Wyman provides the following explanation in the PA 7-1-2007 Rate Recommendation:

The indicated rate change in one of the scenarios contemplates maintaining the “baseline” experience, the second scenario considers an additional improvement of 9.54% in the loss rate from the baseline, including further reductions in claim frequency, and the third scenario assumes a projected loss rate that is 3.12% higher than the baseline loss rate.

While the deviations for the Reasonable Expectation scenarios as compared to the Baseline are provided, how the deviations were derived is not clear.

Discounting

We understand from the Oliver Wyman reserve review that the discount rates have historically been developed using BWC calculations and its position paper “Reserve for Compensation Discount Rate – Selection of Rate”. We did not have a copy of this position paper available to review. The rate recommendation reports do not clearly document the source of the discount rates used, in contrast to the reserving reports.

Selected Indications

The scenarios in the PA 7-1-2007 Rate Recommendation provide a wide range of possible rate changes, from -13.1% to 0.9%. The recommended change of 0.0% is at the conservative end of the range. The overall range has shifted compared to the last several years where an increase was recommended. Given the large shift in the indications, taking Oliver Wyman’s recommended change of 0.0% appears reasonable.

Experience Period

The rate change is based on more years of historical experience than the industry standard. NCCI generally assigns full credibility to the two most recent available policy years. Several other non-NCCI states also use this method. One state uses a blend of the most recent policy and accident year. The use of more years can actually decrease the credibility of the indication because the older years are likely less indicative of future results. Actuarial factors are intended to

adjust these years to future conditions, but they lose accuracy as the time lag increases.

The rate change is also calculated using Calendar/Accident Year data (Calendar Year Premium and Accident Year Losses). While this data is relatively easy to obtain and verify, it is generally considered to be less reliable for rate-making than policy year data because of the mismatch in premiums and losses. Policy Year indications are generally considered more accurate and predictive for future policy periods because the losses and premiums relate to the same period, however, policy year data takes longer to compile. Calendar/Accident Year data is more timely, but less accurate than Policy Year. We recommend either a full conversion to the Policy Year approach, or the application of both methods, from which one selection would be made.

Reconciliation of Rate Changes

A table on Page 2 of Oliver Wyman’s Executive Summary raises some questions. The table shows the historical indications and approved rate changes. For the periods incepting 7-1-2003 to 7-1-2006, the scenarios gave positive rate indications with the exception of the Reasonable Expectation Optimistic indication in 7-1-2006. From 7-1-2006 to 7-1-2007, the indications changed as follows:

| PERIOD | REASONABLE EXPECTATION OPTIMISTIC | BASELINE | REASONABLE EXPECTATION CONSERVATIVE |
|------------------|-----------------------------------|----------|-------------------------------------|
| 7-1-2006 | -1.8% | +3.9% | +8.8% |
| 7-1-2007 @ 5.25% | -13.1% | -3.9% | -0.9% |
| 7-1-2007 @ 5.00% | -11.9% | -2.2% | +0.9% |

Note how the range of 7-1-2006 indicated rate changes is predominately positive, while the subsequent 7-1-2007 ranges are essentially negative. A change in Ohio benefit levels or other trends could adjust the historical losses so that the rate indications would reflect the impact and explain the shift in the indications. However, no such explanation was provided.

Other Issues

No documentation was provided for how the expenses are determined. Appendix A: Bureau of Workers’ Compensation NCCI Base Rates and Expected Loss Rates Effective July 1, 2006 was provided, but contained no support for expense loadings. Several things including payroll trend and investment income can impact expenses and this in turn will influence the premium rate need. It is not necessary to provide the specific input used to set the expense provisions, but a detailed summary of what the expenses consider should be included. Part

C of this report will provide a list of the expense items mentioned in other workers' compensation rate filings.

Premium discounts due to expense gradation can also impact the amount of premium that will be collected in the future.

Public Employers (PE) Rate Recommendation

Ohio law requires that Public Employer ("PE") rates be determined separately from Private Employer ("PA") rates. This approach is reasonable from an actuarial perspective if the two employer types exhibit different loss patterns or if there are other underlying issues that impact the employer types differently.

The same concerns mentioned in the PA section also apply to PE. Note that we did not receive a copy of the Oliver Wyman Actuarial Evaluation for Public Employers. It would be expected that the rate review process would be similar for both PA and PE. One notable exception is that, while all three scenarios are shown discounted at 5.25%, the 5.00% discount rate is only utilized in the Baseline Scenario for PE. This review was completed prior to the PA review, so it is possible that the additional scenarios would be considered in future reviews.

Marine Industry, Coal Workers Pneumoconiosis, and Disabled Workers' Relief Fund

The rate indication for these ancillary funds is determined with a traditional loss ratio approach. The target loss ratio is not well documented and, in some cases, is simply selected judgmentally. The target loss ratio is equal to one minus the expense ratio. Therefore, assumptions made regarding expenses can have a significant impact on the target loss ratio selected and the final rate indication. As such, more support should be provided for the assumptions underlying the expenses and target loss ratio.

Group Rating

Approximately a quarter of the Ohio market is group rated and the discounts are significant. Since the inception of the plan, there has been concern over the level of discount and the required ratemaking off-balance. In the Statement of Principles Regarding Property and Casualty Ratemaking adopted by the Casualty Actuarial Society in 1988, Principle 4 states that "a rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer". In its 2004 study of the Group Rating Program, Oliver Wyman showed that the Group Incurred Loss Ratio is consistently higher than the Non Group Incurred Loss Ratio. If the rates were reasonable and not

excessive, inadequate, or unfairly discriminatory, then the loss ratio for both groups should be fairly close and not exhibit any obvious patterns.

In the past, Oliver Wyman has suggested the following changes to improve the Group Rating Program:

1. Add restrictions to the Plan to minimize the opportunities for manipulation
2. Adopt the NCCI Plan
3. Lower the Maximum Credibility in the Ohio Plan

It seemed that keeping the Ohio Plan and lowering the credibility was the most favorable suggestion as it would be very easy to implement. Oliver Wyman first suggested in a 1994 Group Rating Pricing Study, that the maximum credibility be reduced to 70%, close to NCCI's maximum credibility. In an August 1995 report, Oliver Wyman suggested reducing the maximum credibility to 70% using 10% increments to phase in the change. In the 2004 study, the maximum credibility was listed at 95%. The current maximum credibility is 93% for Private Employers.

Group Rating has been an issue for Ohio since it was introduced in 1991. In 1990, the actuarial consultant Robert Finger warned that the potential for manipulation in the plan would lead to a large off-balance adjustment. Mr. Finger made three specific suggestions:

1. Membership should not be dependent on claim experience
 - a. Ohio has the One Claim Program which limits the impact of significant claims for a group member
 - b. This seems to imply that claim experience is a criteria
2. All members of the sponsoring organization should be given the opportunity to join the group to prevent the formation of groups with abnormally good experience
3. Members of the rating group should be compelled to keep the group's rating for at least 3 years
 - c. Members must reapply every year

In the 1991 review of the plan, Oliver Wyman points out that the rating method does not support the forming of groups for loss control for two reasons:

1. The oldest 4 of the last 5 calendar years are used for experience rating and group membership has no obligation to continue with that group. Over time, only groups with better than average experience will persist.

-
2. Experience can be double counted as employers move from group to group. This can lead to the formation of splinter groups to capitalize on good experience.

The intent of group rating was to help small- to medium-sized employers with good experience not otherwise eligible for experience rating. We did not come across any limitations on the size of members, so it is possible that employers are joining to get a larger discount than under individual experience rating. Participation in Group Rating has increased very significantly, indicating that members recognize the significant benefit they are receiving.

Finally, we point out that any overall subsidy of group-rated employers shows up as higher base-rates and thus higher Workers' Compensation costs to non group-rated employers. This will likely reduce Ohio's competitiveness in attracting and retaining employers to the state. Employers considering relocating to or from Ohio may be misled by comparing Ohio's Workers' Compensation base rates to those of surrounding states.

While group rating can be a useful tool, especially as a way to equitably adjust rates for small employers, its current implementation in Ohio is not actuarially sound. Considering both the difficulty experienced to date in adjusting the Plan's structure to a more actuarially sound basis and the increasing rate inequity between group and non-group employers, we see little alternative but to recommend the elimination of the Group Rating Program as it exists today.

Should the Group Rating Program be eliminated, we would also recommend introducing a credit for those employers not eligible for experience rating who have had no claims during the experience rating period.

VI. Data

In compiling this report we have relied on a number data sources and additional documents.

Surplus Adequacy Evaluation

1. Ohio Bureau of Workers' Compensation and Industrial Commission of Ohio Financial Statements and Supplementary Financial Information for the Years Ended June 30, 2006 and 2005 and Independent Auditors' Report Thereon
2. Actuarial Audit of the Workers' Compensation State Insurance Fund and Related Funds Administered by the Ohio Bureau of Workers' Compensation as of June 30, 2006 prepared by Oliver Wyman
3. Ruhm, et al. "Elicitation and Elucidation of Risk Preferences" *Casualty Actuarial Society Forum* (Fall 2005): 1-27.
4. Feldblum. "NAIC Property/Casualty Insurance Company Risk-Based Capital Requirements" *Proceedings of the Casualty Actuarial Society, Volume LXXXIII* (1996): 297-435.
5. Kaye. "Risk Measurement in Insurance: A Guide to Risk Measurement, Capital Allocation and Related Decision Support Issues" *Primer on Enterprise Risk Management* (May 2005): 1-33.
6. "Exposure Draft: Insurance Capital Assessment Methodology and Model (Prism) – Executive Summary" (2006): www.fitchratings.com
7. "Exposure Draft: Prism – Insurance Capital Model – Technical Document" (2006): www.fitchratings.com
8. Cummins, et al. "Insolvency Experience, Risk-Based Capital and Prompt Corrective Action in Property-Liability Insurance" *The Wharton Financial Institutions Center* (1995)
9. "Understanding BCAR – A.M. Best's Capital Adequacy Ratio for Property/Casualty Insurers and Its Implications for Ratings" (November 2003): www.ambest.com
10. KPMG. "Study into the Methodologies to Assess the Overall Financial Position of an Insurance Undertaking from the Perspective of Prudential

Supervision” (May 2002): ec.europa.eu/internal_market/insurance/docs/solvency/solvency2-study-kpmg_en.pdf

11. “CEA Working Paper on the MCR and Proposed Ladder of Intervention” (October 2006): www.cea.assur.org
12. “Solvency II: Understanding the Process” (February 2007): www.cea.assur.org
13. “Solvency Assessment Models Compared” (2005): www.cea.assur.org
14. “QIS 3: Guidance on the QIS3 Package” (April 2007): www.ceiops.org
15. “QIS 3: Technical Specifications - Part I: Instructions” (April 2007): www.ceiops.org
16. “QIS 3: Technical Specifications - Part II: Background Information” (April 2007): www.ceiops.org
17. “Request for Comment: Revisions in the Risk-Based Insurance Capital Model” (November 2006): www2.standardandpoors.com
18. Filipovic and Rost. “Benchmarking Study of Internal Models” Chief Risk Officer Forum (April 2005)

Premium Ratemaking Methodology Evaluation

1. Group Rating Pricing Studies Executive Summaries, March 1990 to Present
2. Historical Oliver Wyman Rate Recommendations
3. Actuarial Audit of the Private Employer, MIF and DWRP Reserves for Rate Recommendation as of December 31, 2006
4. Statement of Principles Regarding Property and Casualty Insurance Ratemaking
5. Actuarial Standard of Practice No 13, Trending Procedures in Property/Casualty Insurance Ratemaking
6. Actuarial Standard of Practice No 20, Discounting of Property and Casualty Loss and Loss Adjustment Expense Reserves

VII. Exhibits

Surplus Adequacy Evaluation

Ohio BWC - NAIC RBC Calculation Detail

The following presents the estimated surplus requirement for the BWC using the NAIC RBC formula as calculated by ARC. In making these calculations, ARC relied on information contained in the BWC's 2006 Audited Annual Report and the June 30, 2006 Actuarial Audit prepared by Oliver Wyman.

Section I - Asset Risk RBC

NAIC RBC formula prescribes RBC factors that are applied to various asset categories such as fixed income securities (e.g. bonds, short term investments and cash), equity investment (e.g. common stocks and preferred stocks), investments in insurance affiliates, etc.

The BWC's invested assets were grouped into NAIC asset categories. The following table shows ARC's assumptions for fixed income securities.

| S&P Rating | NAIC Classes |
|-------------------------|------------------------|
| AAA | 1 - Highest Quality |
| AA+, AA, AA- | 2 - High Quality |
| A+, A, A- | 3 - Medium Quality |
| BBB+, BBB, BBB- | 4 - Low Quality |
| BB+, BB, BB-, B+, B, B- | 5 - Lower Quality |
| CCC+, CCC-, other | 6 - In or Near Default |

The resulting Asset Risk RBC charge is \$212.3 Million for the BWC. The supporting, detailed calculations may be found in Exhibit 1.

Section 2 –Underwriting Risk RBC

Underwriting risk consists of two components, reserving risk and premium risk. The surplus charge for reserving risk under NAIC RBC formula represents the dominant portion of the total RBC charge.

The NAIC RBC formula considers the individual company's own loss experience and adjusts both underwriting RBC factors to reflect whether the company's experience has been better or worse than the industry's.

For reserving risk, average historical loss development is used to measure the degree of adverse development in relation to the industry's experience.

$$\text{Average Loss Development} = \frac{\text{Current Incurred Loss} - \text{Initial Incurred Loss}}{\text{Initial Incurred Loss}}$$

For premium risk, the average historical loss ratio is used to measure the profitability of future business.

The RBC formula considers the time value of money by applying an interest discount factor to the RBC charge, derived from US Treasury issues. In addition, the RBC formula provides an offset to RBC for loss sensitive contracts (risks in retrospective rating plans).

The Underwriting Risk RBC charge is \$3.3 Billion for the BWC. The supporting, detailed calculations may be found in Exhibit 2.

Section 3 – Credit Risk RBC & Other

Based on the historical BWC information, both the Credit Risk RBC and Growth RBC charges are minimal. The BWC does not purchase ceded reinsurance and given its position as a monopolistic state fund, the opportunity for rapid expansion is minimal.

Section 4 – Putting it Together – The Square Root Rule

The NAIC Risk Based Capital formula recognizes that the various risks facing insurance enterprises are unlikely to all occur simultaneously; the risks are independent of each other. For example, one study has demonstrated that non-insurance asset risk is independent of underwriting risk.

As described earlier, the component capital charges are combined into six categories, termed as R_0 to R_5 and the total capital requirement or Authorized Control Level is then calculated using the square root rule.

$$\text{Required RBC} = R_0 + \sqrt{R_1^2 + R_2^2 + \left(\frac{1}{2} \times R_3\right)^2 + \left(\frac{1}{2} \times R_3 + R_4\right)^2 + R_5^2}$$

The RBC requirement for BWC is calculated as \$2.651 Billion. The details of this calculation are shown in the Summary Exhibit.

Exhibit 1 Summary

**NAIC Risk Based Capital Requirement Calculation
Ohio Bureau of Workers' Compensation
As of 6/30/2006**

Calculation of Total Required RBC

| <u>RBC Requirement</u> | <u>Amounts in (000)</u> |
|---|------------------------------------|
| R0 - Subsidiary Insurance Company | - |
| R1 - Fixed Income | 145,643 |
| R2 - Equity | 521 |
| R3 - Credit | - |
| R4 - Underwriting Risk: Reserves | |
| Reserve Charge | 2,528,410 |
| One half of the Credit RBC | - |
| Excessive Reserve Growth Charge | - |
| R4 - Total | 2,528,410 |
| R5 - Underwriting Risk: Net Written Premium | |
| Premium | 768,053 |
| Excessive Premium Growth Charge | - |
| R5 - Total | 768,053 |
| Total Required RBC After Covariance | 2,646,502 |
| <u>Capital</u> | |
| Reported Total Capital | (126,621) |
| Non-Tabular discount amount | 10,843,130 |
| Total Adjusted capital | (10,969,751) |
| <u>Level of Action</u> | |
| Company Action Level = 200% of ACL | 2,646,502 |
| Regulatory Action Level = 150% of ACL | 1,984,876 |
| Authorized Control Level (ACL) | 1,323,251 |
| Mandatory Control Level = 70% of ACL | 926,276 |

NAIC Risk Based Capital Requirement Calculation
Ohio Workers' Compensation Bureau
As of 6/30/2006

Calculation of Asset Risk RBC
Amounts in (000)

| | (1) | (2) | (3) (1)(2) |
|---------------------------------------|-------------------|--------------|----------------|
| | Fair Value | RBC % | RBC |
| <u>Bond</u> | | | |
| US Government | 10,948,563 | 0.0% | - |
| Class 1 | 888,834 | 0.3% | 2,667 |
| Class 2 | 579,951 | 1.0% | 5,800 |
| Class 3 | 1,253,834 | 2.0% | 25,077 |
| Class 4 | 1,017,561 | 4.5% | 45,790 |
| Class 5 | 16,590 | 10.0% | 1,659 |
| Class 6 | <u>215,503</u> | <u>30.0%</u> | <u>64,651</u> |
| Total Bonds | 14,920,836 | | 145,643 |
| <u>Equity</u> | | | |
| Preferred Stock: | 9,822 | 2.0% | 196 |
| Common Stock: | 1,241 | 15.0% | 186 |
| <u>International Security</u> | <u>922</u> | <u>15.0%</u> | <u>138</u> |
| Total Equity | 11,985 | | 521 |
| <u>Other</u> | | | |
| State Street money market fund | 1,705,935 | 0.3% | 5,118 |
| Net trade payable bond index fund | (1,036,616) | 0.3% | (3,110) |
| Security lending short-tem collateral | 6,285 | 0.3% | 19 |
| <u>Inv. In limited partnerships</u> | <u>427,339</u> | <u>15.0%</u> | <u>64,101</u> |
| Total Other | 1,102,943 | | 66,128 |
| Total | 16,035,764 | | 212,291 |

Exhibit 2

NAIC Risk Based Capital Requirement Calculation Ohio Workers Compensation Bureau As of 6/30/2006

Calculation of Reserve Risk RBC Amounts in (000)

| | PA | PEC | PES | PA+PEC+PES | Other* | Total |
|--|------------|-----------|---------|------------|-----------|------------|
| (1) Industry Average Development | 1.081 | 1.081 | 1.081 | | 1.081 | |
| (2) Company Average Development | 0.880 | 0.870 | 0.853 | | 0.868 | |
| (3) $^{(2)}/(1)$ | 0.814 | 0.805 | 0.790 | | 0.803 | |
| (4) Industry Loss & LAE RBC Percentage | 0.273 | 0.273 | 0.273 | | 0.273 | |
| (5) Company RBC Percentage | 0.248 | 0.246 | 0.244 | | 0.246 | |
| (6) Loss & LAE Unpaid | 11,236,416 | 2,560,397 | 835,622 | 14,632,435 | 3,633,048 | 18,265,483 |
| (7) Non-tabular Disc included in (6) | 6,372,341 | 2,453,428 | 929,084 | 9,754,853 | 1,088,276 | 10,843,130 |
| (8) Adjustment for Inv. Income | 0.872 | 0.872 | 0.872 | | 0.872 | |
| (9) Base Loss & ALE Reserve RBC | 1,547,524 | 435,235 | 150,008 | 2,132,768 | 408,702 | 2,541,470 |
| (10) Percentage Loss-Sensitive | 0.7% | 7.4% | 0.0% | | 0.0% | |
| (11) Loss Sensitive Discount | 3,364 | 9,696 | - | 13,060 | - | 13,060 |
| (12) Loss & LAE RBC After Discount | 1,544,160 | 425,539 | 150,008 | 2,119,708 | 408,702 | 2,528,410 |
| (13) Loss Concentration Factor | 1.0 | 1.0 | 1.0 | | 1 | |
| (14) Net Loss & LAE RBC Charge | 1,544,160 | 425,539 | 150,008 | 2,119,708 | 408,702 | 2,528,410 |

Notes: (1), (4), (8): from NAIC 2006 RBC
 (2), (6), (7), (10): based on information provided by BWC and Mercer report. (7) reflects only non-tabular discount
 (5): $5 * [(3) * (4) + (4)]$
 (9): $[(6) + (7)] * [(1 + (5))] * (8) - 1$
 (11): $30\% * (9) * (10)$
 (12): $(9) - (11)$
 (13): factor of 1.0 because BWC has WC business only
 (14): $(13) * (12)$
 Other*: incl. all residual funds

Calculation of Premium RBC Amounts in (000)

| | PA | PEC | PES | PA+PEC+PES | Other* | Total |
|--|-----------|---------|---------|------------|--------|-----------|
| (1) Industry Average Loss & LAE Ratio | 0.856 | 0.856 | 0.856 | | 0.856 | |
| (2) Company Average Loss & LAE Ratio | 1.55 | 2.11 | 4.36 | | 2.67 | |
| (3) $(2)/(1)$ | 1.81 | 2.46 | 5.09 | | 3.12 | |
| (4) Industry Loss & LAE Ratio | 1.008 | 1.008 | 1.008 | | 1.008 | |
| (5) Company RBC Loss and LAE Ratio | 1.416 | 1.746 | 3.071 | | 2.078 | |
| (6) Company Underwriting Expense Ratio | 0.040 | 0.040 | 0.040 | | 0.040 | |
| (7) Adjustment for Inv. Income | 0.836 | 0.836 | 0.836 | | 0.836 | |
| (8) C/Y Written Premium | 1,544,000 | 342,000 | 139,668 | 2,025,668 | 69,392 | 2,095,060 |
| (9) Base Written Premium RBC | 345,385 | 170,853 | 224,495 | 740,732 | 53,909 | 794,641 |
| (10) Percentage Loss-Sensitive WP | 3.40% | 45.00% | | | | |
| (11) Loss Sensitive Discount - WP | 3,523 | 23,065 | - | 26,588 | - | 26,588 |
| (12) NWP RBC after Discount | 341,862 | 147,787 | 224,495 | 714,144 | 53,909 | 768,053 |
| (13) Premium Concentration Factor | 1.0 | 1.0 | 1.0 | | 1.0 | |
| (14) Net Written Premium RBC Charge | 341,862 | 147,787 | 224,495 | 714,144 | 53,909 | 768,053 |

Notes: (1), (4), (7): from NAIC 2006 RBC
 (2), (6), (8), (10): based on information provided by BWC and Mercer report.
 (5): $5 * [(3) * (4) + (4)]$
 (9): $[(5) * (7) + (6)] * (8)$
 (11): $30\% * (9) * (10)$
 (12): $(9) - (11)$
 (13): factor of 1.0 because BWC has WC business only
 (14): $(13) * (12)$
 Other*: incl. all residual funds

**NAIC Risk Based Capital Requirement Calculation
Ohio Workers Compensation Bureau
As of 6/30/2006**

Calculation of Credit Risk RBC
Amounts in (000)

| | (1) | (2) | (3) (1)(2) |
|---|----------------|--------------|---------------|
| | Value | RBC % | RBC |
| Unbilled premium receivable | 1,831,803 | 0.0% | - |
| <u>Retrospective premium receivable</u> | <u>271,552</u> | <u>0.0%</u> | <u>-</u> |
| Total | 2,103,355 | | - |

**NAIC Risk Based Capital Requirement Calculation
Ohio Workers Compensation Bureau
As of 6/30/2006**

RBC for Excessive Growth
Amounts in (000)

| | (1) | (2) (1) / Sub. (1) | (3) (2) - 1 |
|-------------|------------------|-----------------------|----------------|
| Calendar | | Premium | Annual |
| <u>Year</u> | <u>Premium</u> | <u>Index</u> | <u>Change</u> |
| 2006 | 2,095,060 | | |
| 2005 | 2,201,134 | 95.2% | -4.8% |
| 2004 | 2,300,661 | 95.7% | -4.3% |
| <u>2003</u> | <u>2,174,938</u> | <u>105.8%</u> | <u>5.8%</u> |
| Average | | | -1.1% |
| RBC Charge | | 0 | |

Ohio BWC - BCAR Calculation Detail

A.M. Best segregates risks into the following categories:

- (B1) Investment Risk (Fixed Income Securities)
- (B2) Investment Risk (Equity Securities)
- (B3) Interest Rate Risk
- (B4) Credit Risk
- (B5) Reserve Risk
- (B6) Net Written Premium Risk
- (B7) Off Balance Sheet Risk

Individual risks are combined into the A.M. Best Net Capital Charge using a square root formula.

$$NCL = B_7 + \sqrt{B_1^2 + B_2^2 + B_3^2 + \left(\frac{1}{2} \times B_4\right)^2 + \left(\frac{1}{2} \times B_4 + B_5\right)^2 + B_6^2}$$

A company's reported surplus is restated to reflect the following items, resulting in Adjusted Surplus ("AS").

1. Equity Adjustments
 - Unearned Premiums
 - Assets
 - Loss Reserves
 - Reinsurance
2. Debt Adjustments
 - Surplus Notes
 - Debt Service Requirements
3. Other Adjustments
 - Potential Catastrophe Losses
 - Future Operating Losses

Exhibit 5

**AM Best's Capital Adequacy Ratio
Ohio Workers Compensation Bureau
As of 6/30/2006**

| NET REQUIRED CAPITAL: | Amount in (000) |
|---|--------------------|
| Asset Risk: | |
| (B1) Fixed Income Securities | 182,804 |
| (B2) Equity Securities | 67,907 |
| Subtotal | 250,710 |
| | |
| (B3) Interest Rate Risk | 103,559 |
| Total Investment Risk | 354,269 |
| | |
| (B4) Credit Risk | 118,745 |
| Total Asset Risk | 473,015 |
| | |
| Underwriting Risk: | |
| (B5) Loss & LAE Reserves | 7,123,538 |
| (B6) Net Premiums Written | 838,024 |
| Total Underwriting Risk | 7,961,562 |
| | |
| (B7) Business Risk | - |
| | |
| Gross Required Capital (GRC) | 8,434,577 |
| Less Covariance Adjustment | 1,199,332 |
| Net Required Capital (NRC) | 7,235,245 |
| | |
| ADJUSTED SURPLUS RECAP (APHS): | |
| Reported Surplus | (126,621) |
| UPR Equity (Net of tax) | - |
| Loss Reserve Equity | - |
| Fixed Income Equity (Net of tax) | - |
| Sub Total | (126,621) |
| Surplus Notes | - |
| Off Balance Sheet Losses | - |
| Deferred Tax on CS Appreciation | - |
| Potential Losses (Including Cats) | - |
| Adjusted Surplus (APHS) | (126,621) |
| | |
| BEST'S CAPITAL ADEQUACY RATIO (BCAR) | |
| BCAR % (APHS/NRC) | -1.75% |

| A.M. Best's 2004 Capital Adequacy Scale | | |
|--|----------------|---------------|
| <u>Rating</u> | <u>Minimum</u> | <u>Median</u> |
| A++ | 175 | 280 |
| A+ | 160 | 236 |
| A | 145 | 233 |
| A- | 130 | 192 |
| B++ | 115 | 166 |
| B+ | 100 | 141 |

Ohio BWC - SPCAR Calculation Detail

Exhibit 6

**Standard & Poors Capital Adequacy Ratio
Ohio Workers Compensation Bureau
As of 6/30/2006**

| | | Amounts in (000) |
|-----|--|---------------------|
| TAC | Total Adjusted Capital | (126,621) |
| | a. Surplus as regards policyholders | - |
| | b. Adjustment for Redundancy/(Deficiency) of Reserves | - |
| | c. Discount for time value of money | - |
| | d. Adjustment to statement value subsidiaries | - |
| | e. Analyst's adjustments (e.g. surplus notes) | - |
| | S&P TOTAL ADJUSTED CAPITAL a+b+c+d+e | (126,621) |
| C-1 | Asset Risk for: | |
| | Unaffiliated Bonds | 324,497 |
| | Mortgage Backed Securities Interest Rate Risk | - |
| | Unaffiliated Preferred Stock | 589 |
| | Unaffiliated Common Stock | 64,425 |
| | Mortgage Loans | - |
| | Real Estate Holdings | - |
| | Cash | 2,027 |
| | Other Invested Assets | - |
| | Aggregate Write-ins for Invested Assets | - |
| | Off Balance Sheet Items | - |
| | Additional Capital Needs for Asset Risks not already captured | - |
| | Required capital for ASSET RISK | 391,539 |
| | Required capital for ASSET RISK adj. By SIZE FACTOR | 391,539 |
| | Affiliated Bonds | - |
| | Affiliated Preferred & Common Stocks | - |
| | Concentration Risk | - |
| | TOTAL REQUIRED CAPITAL FOR ASSET RISK adj. By SIZE FACTOR | 391,539 |
| C-2 | Credit Risk for: | |
| | Reinsurance Recoverables | - |
| | Other non-invested assets | 42,067 |
| | Aggregate write-ins for other than invested assets | - |
| | Additional capital needs for Credit Risks not already captured | - |
| | TOTAL REQUIRED CAPITAL FOR CREDIT RISK (C-2) | 42,067 |
| C-3 | Premium Risk for: | |
| | Workers' Compensation | 314,259 |
| | TOTAL REQUIRED CAPITAL FOR PREMIUM RISK (C-3) | 314,259 |
| C-4 | Reserve Risk for: | |
| | Workers' Compensation | 1,643,893 |
| | TOTAL REQUIRED CAPITAL FOR RESERVE RISK (C-4) | 1,643,893 |
| C-5 | BUSINESS RISK AND OTHER LOSS NOT ALREADY CAPTURED | - |
| A | RISK ADJUSTED CAPITAL (S&P TAC - C1 - C2) | (560,227) |
| B | REQUIRED CAPITAL (C3+C4+C5) | 1,958,152 |
| | CAPITAL ADEQUACY RATIO (A / B) | -28.6% |

| S&P's Capital Adequacy Scale | |
|------------------------------|------------|
| Rating | Guideline |
| AAA | 175+ |
| AA | 150 to 175 |
| A | 125 to 149 |
| BBB | 100 to 124 |
| BB | Below 100 |

VIII. Appendix A – NAIC IRIS Ratios

The following table shows the thirteen NAIC IRIS Ratios and their associated threshold values.

| NAIC IRIS Ratios | Unusual Values Equal to or: | |
|--|--------------------------------|-------|
| | Over | Under |
| 1 Gross Premium to Surplus | 900% | |
| 2 Net Premium to Surplus | 300% | |
| 3 Change in Net Writings | 33% | -33% |
| 4 Surplus Aid to Surplus | 15% | |
| 5 Two-Year Overall Operating Ratio | 100% | |
| 6 Investment Yield | 6.5% | 3.0% |
| 7 Gross Change in Surplus | 50% | -10% |
| 8 Net Change in Adjusted Surplus | 25% | -10% |
| 9 Liabilities to Liquid Assets | 105% | |
| 10 Gross Agents' Balances to Surplus | 40% | |
| 11 One-Year Reserve Development to Surplus | 20% | |
| 12 Two-Year Reserve Development to Surplus | 20% | |
| 13 Estimated Current Reserve Deficiency to Surplus | 25% | |

IX. Appendix B – NAIC RBC Category Detail

Each of the six risk categories (R_0 through R_5) is comprised of a number of individual components as shown in the table below. NAIC RBC factors are applied to each component and various adjustments are made to account for diversification, rapid growth in business etc. The individual component capital charges are then summed to form the six categories (R_0 through R_5):

R_0 (Investments in Insurance Affiliates and Off-Balance Sheet Risks)

- Investments in Insurance Affiliates
- Non-Controlled Assets
- Guarantees to Affiliates
- Contingent Liabilities

R_1 (Fixed Income Investment Risk)

- Fixed Income Securities
 - Cash
 - Bonds
 - Bond Size Adjustment Factor
 - Mortgage Loans
- Short-term Investments
- Collateral Loans
- Asset Concentration Adjustment for Fixed Income Securities (doubles RBC charge on 10 largest investments, with a maximum of 30% of any one security)

R_2 (Equity Investment Risk)

- Equity Investments
 - Common Stocks
 - Preferred Stocks
 - Real Estate
- Other Invested Assets
- Aggregate write-ins for Invested Assets
- Asset Concentration Adjustment for Equity Investments (doubles RBC charge on 10 largest investments, with a maximum of 30% of any one security)

R_3 (Credit Risk)

- Reinsurance Recoverables

-
- Other Receivables

R₄ (Reserving Risk)

- Basic Reserving Risk Charge
- Offset for Loss-Sensitive Business
- Adjustment for Claims-Made Business
- Loss Concentration Factor
- Growth Charge for Reserving Risk

R₅ (Written Premium Risk)

- Basic Premium Risk Charge
- Offset for Loss-Sensitive Business
- Adjustment for Claims-Made Business
- Premium Concentration Factor
- Growth Charge for Premium Risk

The actual values of individual risk charge factors resulted from a process involving compromise. As such, the values were not necessarily set in a consistent fashion, i.e. some were judgmentally selected, while others were set using a probability of ruin equal to 1% etc.

The “Bond Size Adjustment Factor” adjusts the RBC charge to reflect the degree of diversification in the investment portfolio and is based on the number of bond issuers².

The “Asset Concentration Adjustment Factors” represent a penalty for not diversifying investments among different issuers. The 10 largest investments are determined by combining fixed income and equity investments in each issuer.

“Growth Charges” represent penalties for rapid business expansion. Companies whose average three-year premium growth rate exceeds 10% per year attract additional reserving and written premium risk charges.

Premium and Reserve “Concentration Factors” reflect an attempt to recognize the partial independence of different lines of business. Companies that concentrate on single lines of business receive no benefit.

² The factor is 250% for the first 50 issuers, 130% for the next 50, 100% for the next 300, and 90% for the remaining issuers.

The “Adjustment for Claims-Made Business” recognizes that claims-made policies are not subject to late reported claims, which are a major contributor to adverse loss development risk.

The “Offset for Loss-Sensitive Business” recognizes that the potential risk to the insurance company of unexpectedly poor reserve development or underwriting results on loss sensitive contracts is reduced by the nature of such contracts. As losses exceed expectations, the insurer has the right to receive additional premium from the insured, thereby leaving the company’s surplus unaffected.

X. Appendix C – Solvency II Detail

Solvency II considers the following Solvency Capital Requirement categories for a property and casualty (non-life) insurer:

| | |
|--------------------------|--|
| SCR_{NL} | - Non-Life Insurance Operations |
| SCR_{MKT} | - Market Risk |
| SCR_{DEF} | - Counterparty Default Risk |
| SCR_{OP} | - Operational Risk |

The Solvency II surplus requirement is calculated using the following formula, with the covariance adjustments appearing as the second through fourth lines under the square root.

$$SCR = SCR_{OP} + \sqrt{\begin{aligned} &SCR_{NL}^2 + SCR_{MKT}^2 + SCR_{DEF}^2 + \\ &2 \times (0.25 \times SCR_{NL} \times SCR_{MKT}) + \\ &2 \times (0.50 \times SCR_{NL} \times SCR_{DEF}) + \\ &2 \times (0.25 \times SCR_{MKT} \times SCR_{DEF}) \end{aligned}}$$

The Solvency II proposal is intended to reflect a value-at-risk risk measure calibrated to a 99.5% confidence level and a time horizon of one year. Note that the insurance operations category SCR_{NL} reflects premium and reserve risk charges on a combined basis, while the market risk category SCR_{MKT} reflects,

- interest rate risk
- equity risk
- property risk
- currency risk
- spread risk

Covariance adjustments similar to those in the formula above for SCR are used to combine the components of SCR_{NL} and SCR_{MKT}.

Ohio Bureau of Workers' Compensation Oversight Commission

RFP #B07016

Task C: Evaluation of BWC's Current Practices Relative to
Industry Standards in the Areas of Ratemaking
and Reserve Development

June 14, 2007

Aon Risk Consultants

Actuarial & Analytics Practice

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I. Introduction

Purpose

Aon Risk Consultants (“ARC”) has been retained by the Ohio Bureau of Workers’ Compensation Oversight Commission (“WCOC”) to supply actuarial consulting services in support of the WCOC’s evaluation of the performance of the Ohio workers’ compensation system and in comparing Ohio’s system to other state and private compensation systems.

Specifically, ARC has been engaged to perform the following three tasks:

- Task A. Provide an analysis of the Ohio Bureau of Workers’ Compensation’s (“BWC”) historical underwriting profit or loss for the past five years and identify underlying drivers.
- Task B. Evaluate the BWC’s current surplus adequacy and premium ratemaking methodologies.
- Task C. Evaluate the BWC’s current practices relative to insurance industry standards, both state and private, in the areas of ratemaking and reserve development.

Each of these tasks will be addressed in a separate report, with this report covering Task C.

Scope

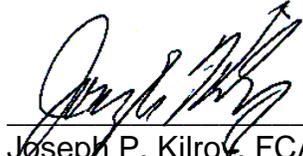
Under Task C, ARC is to review and evaluate BWC’s current actuarial practices and processes in the areas of ratemaking and reserve development and compare the current practices to accepted insurance industry standards. The ultimate goal of our review is to provide recommendations and alternatives for improving existing practices and implementing new procedures.

We performed this analysis using generally accepted actuarial principles and in accordance with all relevant Actuarial Standards of Practice.

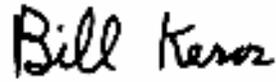
Please contact any of the undersigned us if you have any questions regarding this report.

Respectfully submitted,

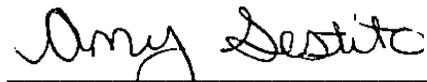
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II. Conditions and Limitations

Inherent Uncertainty

Actuarial calculations produce estimates of inherently uncertain future contingent events. We believe that the estimates provided represent reasonable provisions based on the appropriate application of actuarial techniques to the available data. However, there is no guarantee that actual future payments will not differ from estimates included herein.

Data Reliance

In conducting this analysis, we relied upon the provided data without audit or independent verification. Any inaccuracies in quantitative data or qualitative representations could have a significant effect on the results of our review and analysis.

Use and Distribution

Use of this report is limited to the WCOC for the specific purpose described in the Introduction section. Other uses are prohibited without an executed release with ARC.

Distribution by the WCOC is unrestricted. We request that ARC be notified of further distribution of this report. The report should only be distributed in its entirety including all supporting exhibits.

III. Executive Summary

In this report we evaluate the BWC's current actuarial practices and processes in the areas of ratemaking and reserve development against industry standards. As a result of our review, we conclude that the current ratemaking and reserving methods employed by the BWC and their independent actuarial consultant, Oliver Wyman, are reasonable and appropriate. The methods are applied using generally accepted actuarial principles and adhere to all relevant Actuarial Standards of Practice. The focus of our report is to document areas where current BWC practices or those of its actuarial consultant differ from industry standards. However, reliance on a practice other than the industry standard does not automatically imply that changing to the industry standard is appropriate. Often legal, regulatory, or technical restrictions prevent such a change. Our goal is to point out differences so that the BWC can evaluate whether implementing changes would enhance their processes.

A summary of our findings and conclusions is presented in this Executive Summary. A more detailed discussion of the analyses performed is contained in Section IV.

Ratemaking

We have reviewed the methodologies employed by Oliver Wyman in their Rate Recommendations (Private, Public, and Ancillary Funds) and the supporting document for Private Employers, Actuarial Audit of the Private Employer, MIF, and DWRF, Reserves for Rate Recommendation Support. In addition, we reviewed the ratemaking process for several states, including both independent bureau and National Council on Compensation Insurance (NCCI) states.

We have compared the BWC methodology to industry ratemaking standards. The main areas where the BWC process differs from industry standards include the following:

1. The BWC examines ten full years of historical experience in determining the overall rate indication. The industry standard is to use the most recent two years of experience. For instance, the NCCI typically uses the latest two policy years or the latest one calendar/accident year with the latest one policy year.
2. The BWC considers future investment income expected to be earned on premium in the rate structure by using discounted losses in the determination of the overall rate indication. The industry standard is to perform an internal rate of return analysis where an explicit profit and

contingencies load is developed. The profit and contingencies load so determined accounts for the impact of investment income.

3. The BWC uses calendar/accident year data. The industry standard is to use either policy year data exclusively, or to use a combination of calendar/accident year and policy year data.
4. The current Group Rating Plan in Ohio has resulted in a much larger off-balance adjustment than industry standards in the calculation of rates for individual classifications. As a result, non-group rated employers are paying exorbitantly high base rates, and subsidizing the group rated employers in the process.

In the Analysis section, the following aspects of the ratemaking process are focused on in more detail:

1. Data used to determine the rate indication
2. Adjustments to the data
3. Expenses
4. Determination of classification rates

Reserve Development

We have reviewed the methodologies employed by Oliver Wyman in their actuarial audits valued as of June 30, 2005 and June 30, 2006. We find the methods to be reasonable given the exposures being analyzed. There are certain calculations contained in the analyses that could be enhanced or clarified. Our specific comments in this regard are presented in the Analysis section.

It is important to note that the Oliver Wyman reserve analyses rely primarily on paid loss data. Case reserves on Ohio Workers' Compensation claims are developed using the MIRA reserving system and are not generally considered in the Oliver Wyman analyses. The MIRA system has not been in place long enough to produce a credible incurred loss development history. As such, we have introduced herein an alternative reserving method, used widely throughout the insurance industry, which also relies on paid loss data.

The alternative method uses a statistical software package known as ICRFS-PLUS ("ICRFS"). ICRFS is marketed by *Insureware Pty Ltd*, a company based in Australia. ICRFS is a system designed to help actuaries produce aggregate reserve estimates. It is not a system designed to produce case reserve estimates on individual claims.

ICRFS allows the analyst to build probabilistic models around paid loss development arrays. In addition to generating expected aggregate reserve estimates, the ICRFS system also allows for the estimation of the following:

1. Distribution of the aggregate reserve by business segment
2. Value at risk
3. Correlations in reserve distributions among business segments
4. Capital allocation by business segment
5. Distribution of the aggregate reserve for all business segments combined

In conjunction with the consultants at *Insureware*, we have performed an independent reserve analysis on the PA, PEC and PES employer group segments using the ICRFS software. The major conclusions reached in our analysis are summarized below.

1. There is strong evidence that the Oliver Wyman reserve estimate posited as of June 30, 2006 is too low for the PA segment and too high for the PEC and PES segments.
2. For the three segments combined, the Oliver Wyman reserve estimate as of June 30, 2006 is slightly higher than our expected reserve estimate.
3. Separate analyses should continue to be performed for individual benefit types, due to the existence of different underlying trend structures.
4. There is significant positive correlation among the reserve distributions of the three segments.
5. Our analysis produces capital allocation percentages which can be used in executing a dividend policy.
6. The total reserve estimate put forth by Oliver Wyman in their June 30, 2006 analysis for the PA, PEC and PES segments combined is at the very high end of the reserve distribution.

IV. Analysis

Ratemaking

We have reviewed the ratemaking process used in several states for comparison with the BWC process. Our comparison will allow the BWC to benchmark their current ratemaking methodology against industry standards. Rate filings produced by the following states/entities were reviewed for this analysis:

State Compensation Insurance Fund of California
Workers' Compensation Insurance Rating Bureau of California
National Council on Compensation Insurance (Indiana and West Virginia)
Workers' Compensation Rating and Inspection Bureau of Massachusetts
New York Compensation Insurance Rating Board

Data Used for Determination of Statewide Indication

The industry standard is to use the latest two available policy years as the basis for the rate review. Policy year data is preferred because the losses and premiums emanate from the same time period. The New York filing used an average of the latest policy and calendar/accident year. In its filing for rates effective 1/1/2007, NCCI used policy years 2003 and 2004 evaluated as of 12/31/2005 for Indiana. West Virginia's last review (first year with NCCI) used the latest two and a half policy years. Both California filings used calendar/accident year data.

The Insurance Expense Exhibit (IEE) and Annual Statement required of insurers by the NAIC are used to support expense and profit provisions in the rates. Generally, three to five years are reviewed for the expense provisions. Some states have additional data calls.

The states reviewed generally kept twenty years of historical loss experience for determining loss development factors. After the twentieth report, a tail factor is applied to take the development factors to ultimate.

Adjustments to Losses

Several adjustments need to be made to the data before it can be used for ratemaking purposes. Effects of inflation, benefit changes and other trends need to be removed so that a true analysis of the rate adequacy can be completed without distortion from these historical effects. Premium and losses must also be developed to ultimate expected levels. This allows for an "apples to apples" comparison of the years of historical experience.

The first step to adjust the losses involves determining the development pattern used to estimate the ultimate value of losses. In general, a combination of paid and incurred (paid plus case) cumulative triangles is reviewed to determine the development pattern. The table below shows the distribution of development methods used in NCCI states.

| Type of Triangles Used | Percent of States |
|------------------------|-------------------|
| Incurred Only | 25% |
| Paid Only | 36% |
| Both Paid and Incurred | 39% |

Of the non-NCCI states reviewed, Massachusetts and New York use incurred development patterns and California uses paid development patterns. Due to the insufficient loss history compiled since the implementation of the MIRA system, the BWC analysis uses only paid data to develop the losses. While this is within the industry standards of practice, it may be worth reviewing the incurred triangles at some point to see if they offer insight into the development patterns. NCCI states the following reasoning for reviewing both paid and incurred losses for Indiana:

1. “The paid losses reported in the experience period did not yet reflect large losses that were reported as case reserves. Indications based on the paid method alone may slightly understate the correct premium need.”
2. “The paid plus case losses reported in the experience period reflect the case reserves for large losses and are developed to ultimate using historical loss development patterns. The resulting estimated ultimate losses may overstate the premium need.”
3. “An average of the paid and paid plus case methodologies produces an indication that offsets the shortcomings observed in each methodology.”

The losses also need to be adjusted for any benefit level changes. This adjustment is state specific in that it depends on legislated benefit revisions. Similar to industry practices, the impact of benefit level changes in Ohio is considered in the BWC rate indication.

Adjustments to Premium

The Workers' Compensation premium that an employer pays is dependent on several items, one of which is payroll. When the premium is calculated for the upcoming policy year, the payroll for the coverage period is estimated and multiplied by the appropriate rate. After the policy period has expired, the payroll is audited and the premium is adjusted accordingly. Loss size limits and retrospective rating adjustments can also alter the final premium. Thus, any ratemaking analysis that uses policy year premium needs to include an adjustment to develop the premium to an ultimate basis. The common practice to develop the premium to ultimate is to use a method like the traditional age-to-age triangles.

The BWC currently uses calendar year premium and therefore this adjustment is not needed. Calendar year premium consists of premium from expired policy years, where the payroll has already been audited. We recommend that a policy year method be considered by the BWC in the future, and this will necessitate the premium development process just described.

The premium must also be adjusted for trend and prior rate changes, so that the historical premiums are reflective of the premium dollars that would be collected under the current rate structure. For purposes of this adjustment, it is common practice in ratemaking to assume that policies are written evenly through out the year. The Massachusetts Bureau determines the actual premium distribution, which seems more reasonable for the BWC since both are the single repository for statewide information.

Expenses

While the BWC considers how expenses impact workers' compensation rates, this area of the process is not well documented. What follows is a brief discussion of how expenses are commonly considered in industry ratemaking practices.

Expenses are commonly broken down into three categories: those that vary with loss, those that vary with premium and those that are fixed dollar amounts. Expenses that vary with losses are normally evaluated as part of the loss analysis and are not discussed here. Expense items that vary with premium are simply loaded into the final rate multiplicatively. Expenses that are fixed are typically collected by way of an expense constant. Expenses that vary with premium can include premium taxes, licenses and fees, commissions and other acquisition. Fixed expenses can include general expenses, policy issuance fees and other taxes. Most industry rate filings provide a detailed expense analysis.

Like premiums and losses, the expense provisions must be trended so that they reflect the period that the rates will be in effect. Expenses are generally trended with a combination of historical state data, the consumer price index or other external composite indices.

Another aspect of the expenses is the profit and contingencies provision. The profit and contingencies load is the portion of every premium dollar that needs to be set aside as profit in order to earn a reasonable rate of return on the capital put forth to support the underwriting process. Historically, the profit provision for Workers' Compensation was set judgmentally at an arbitrary amount such as 2.0%. As investment income levels rose, however, states began to pay more attention to the profit and contingencies load included in Workers' Compensation rate filings.

Most state rating agencies and the NCCI now perform a detailed internal rate of return analysis in support of their profit and contingency provisions. All the cash flows associated with underwriting Workers' Compensation insurance are considered (premium collection, loss and expense payments, investment income, etc.). The ultimate profit and contingencies load is determined by first establishing an overall target rate of return on capital, and then iteratively testing profit provisions until that target is achieved.

Determination of Classification Rates

After the statewide indication has been determined, it must be spread to the individual risk classifications. An iterative process is required, as there are many things that impact how the rate indication is spread. The process is not as simple as multiplying the new indication by the existing rate.

Many states first spread the indication over five to ten industry groups. The industry group indications are then spread to the member risk classifications. The BWC procedure limits the rate change for any one classification to +/- 30%. The industry standard is +/- 25%.

Given that the volume of the risk classification data may be less than credible, most states credibility weight the indication for an individual classification. The compliment of credibility is usually applied to a combination of the statewide indication, the industry group indication, or the current class rate. The BWC uses a similar approach.

Finally, the application of the experience rating modification (and group rating in the BWC plan) and other discount programs will impact the premium collected. This creates an off-balance between the premium needed to achieve the new rate indication and the premium that will be collected after the indication is

spread to the risk classes. The off-balance is based on the ratio of manual premium (payroll x rate) to standard premium (manual premium adjusted for discounts). Ideally, the overall off-balance should be close to unity (1.0). The ratio of manual premium to standard premium is a weighted average of the Experience Modification. Larger employers generally have better experience and therefore receive a credit modification. Since more premium is collected from larger employers, the ratio of manual to standard premium is usually slightly over unity. The Ohio ratio, well over unity, has been allowed to deteriorate largely due to the Group Rating Plan.

Reserve Development

Discussion of Current Methodology

The BWC has contracted with the actuarial consulting firm Mercer Oliver Wyman (now Oliver Wyman) since 1990 to produce estimates of the ultimate reserve needs for the State Insurance Fund (“SIF”) and the related funds administered by the BWC. In this section, we discuss the methodologies employed by Oliver Wyman in their actuarial audits valued as of June 30, 2005 and June 30, 2006. Our comments will be limited to the methodologies used in the development of reserves for the SIF, which account for more than 90% of the reserves held by the BWC.

One important comment regarding the data used by Oliver Wyman is worthy of note. Case reserve estimates on Ohio Workers’ Compensation claims are currently developed, and have been since 1997, using the MIRA reserving system marketed by *Fair Isaac Corp.* A discussion of the MIRA system is outside the scope of this report, however, it is important to note that the case reserve estimates so produced are used mainly by the BWC in the calculation of experience modification factors. The case reserves are not explicitly considered by Oliver Wyman in their reserve analysis. As such, the Oliver Wyman analysis relies almost exclusively on paid loss data.

The Oliver Wyman reserve analysis for the SIF is performed separately for three employer groups: Private Employers (“PA”), Public Employers – taxing districts (“PEC”) and Public Employers – state agencies (“PES”). The rationale for this breakdown is that each of these groups is required by law to be rated separately, and Oliver Wyman uses the results of the reserve analysis in their ratemaking work. Within each of the three employer groups, separate reserve estimates are developed for the following benefit types: Medical, Temporary Total, Permanent Total, Death and Other Compensation Benefits. Still another breakdown occurs in the Medical category, where reserves for lost time claims are developed separately for Hospitals, Physicians, Pharmacies, Chiropractors, Rehabilitation and Other health-related expenses. Reserves for Medical Only claims are computed for all provider types combined. In the June 30, 2006 analysis, the reserve estimates are discounted using an interest rate of 5.25%.

For the Medical, Temporary Total, Death and Living Maintenance (part of Other Compensation) benefit types, Oliver Wyman develops reserve estimates using a “persistency” method. In this approach, historical persistency factors are calculated as the ratio of calendar year payments for a particular age of development to payments made for the prior age of development. Typically, the historical persistency factors are calculated using payments adjusted by an index such as claim counts or some measure of exposure. Based on the historical

factors, persistency factors are selected for each development period. Future payments, or reserves, are estimated for each accident year by multiplying the payments made (or projected to be made) in the prior fiscal year by the appropriate persistency factor.

In general, the persistency method is a reasonable approach to reserve estimation for the subject benefit types. However, we make the following comments and observations regarding the Oliver Wyman analysis valued as of June 30, 2006:

1. In the Medical, Temporary Total, Death and Living Maintenance analyses, Oliver Wyman selects constant persistency rates for many of the development periods between ages 6 and 29. It appears that there is sufficient data to allow for the selection of individual persistency factors for at least some of these development periods.
2. In the Medical analysis, the persistency rate beyond the 29th development period is assumed to be a constant percentage of the theoretical Permanent Total mortality rate, where the percentage varies by provider. Given the information provided in the Oliver Wyman reports, we are not able to determine the actual percentages used nor are we able to determine the age assumed for the mortality rate. Although the logic underlying these calculations appears reasonable, Oliver Wyman's report contains insufficient detail for us to reproduce them.

For the Permanent Total and Other Compensation (excluding Living Maintenance) benefit types, Oliver Wyman uses a "weeks of benefits" method. In this approach the reserve calculation essentially reduces to the product of the remaining number of weeks per claim, the ultimate number of claims and the average weekly benefit by injury type and accident year.

In our opinion, the weeks of benefits method is a reasonable approach to reserve estimation for the subject benefit types. However, we have one comment on the Oliver Wyman analysis valued as of June 30, 2006:

1. The Permanent Total analysis relies on a rather large tail factor (139.94), whose derivation is undocumented. The tail factor has a material impact on the Permanent Total reserve estimates.

An Alternative Method

Most organizations employ a variety of actuarial methods in the determination of reserves. Some methods rely mainly on paid losses and some methods rely mainly on incurred losses. As stated in the previous section, the BWC incurred

losses are not deemed usable for reserve estimation purposes. Our discussion of alternative reserving methods is therefore limited to those methods that use paid loss data. In this section, we introduce an alternative method for estimating reserves using paid loss data.

The software package known as ICRFS-PLUS (“ICRFS”) is used to implement the alternative reserve estimation method. ICRFS is marketed by *Insureware Pty Ltd*, a company based in Australia.

ICRFS allows the user to build probabilistic models that estimate the distribution of values in each cell of a paid loss development array. ICRFS models capture and describe four components of the underlying data. The first three components are the trends in the three directions contained in any loss development triangle: development period (horizontally), accident period (vertically) and calendar period (diagonally). The fourth component is the random fluctuation about the trends. The random fluctuation component, or process variance, is just as important as the three trend components and is an integral part of the model. The ICRFS models thus decompose the data as follows:

Data = Trends + Random Fluctuations

All models identified are tested to ensure that the assumptions are consistent with the data, including validation testing by removal of years. The underlying paid loss triangle is regarded as a sample path from the fitted model. Thus data simulated from an optimal model should not be distinguishable from the original data in respect of trend structure and volatility about the trend structure. An identified model forecasts distributions in every cell in the future, conditional on a set of explicit and easily interpretable assumptions that can be directly related to the historical experience. Immediate benefits are easy calculation of Value-at-Risk and percentile tables that can be used to calculate reserve distributions and to match liabilities with assets.

ICRFS also contains a module that allows the user to design an optimal composite model for multiple loss development arrays. The composite model describes the variability in each loss development array and the relationships between them. This framework has applications to modeling multiple lines of business, multiple segments and multiple layers. A composite model produces additional information including correlations in reserve distributions and capital allocation by line of business or segment, with possible applications to surplus adequacy and dividend analyses investigated under Task B. Reserve distributions for aggregates of the segments are also obtained.

Application to BWC Data

In conjunction with the consultants at *Insureware*, we have performed a reserve analysis on the PA, PEC and PES segments using the ICRFS software. Individual models were designed for total PA losses, total PEC losses and total PES losses. For the PA segment, we also modeled the individual benefit types in order to determine if the underlying trend structures are different enough to justify analyzing them separately, as Oliver Wyman does currently. Finally, we produced a composite model for the three segments to measure the correlations among the segments and how they can impact the total reserve distribution and capital allocation. In this section, we present the results of our analysis.

Table 1 below contains a comparison of the mean reserve estimates produced in our ICRFS analysis with the estimates posited by Oliver Wyman in their June 30, 2006 analysis. All amounts are shown in millions of dollars and are discounted at 5.25%.

| Segment | ICRFS Mean Reserve | Oliver Wyman Reserve | Dollar Difference | Percentage Difference |
|--------------|--------------------|----------------------|-------------------|-----------------------|
| PA | \$11,894 | \$11,236 | \$658 | 5.9% |
| PEC | \$2,054 | \$2,560 | -\$506 | -19.8% |
| PES | \$463 | \$836 | -\$373 | -44.6% |
| Total | \$14,411 | \$14,632 | -\$221 | -1.5% |

Table 1

Based on the results, there is strong evidence that the Oliver Wyman reserve estimate is too low for the PA segment and too high for the PEC and PES segments. On a percentage basis, the differences are much larger for the smaller segments, PEC and PES. However, given the magnitude of the reserve for the PA segment, even a small percentage difference can result in a significant dollar impact to the BWC. For the three segments combined, the Oliver Wyman reserve estimate is slightly higher than our mean reserve estimate.

We modeled the individual benefit types for the PA segment separately. We found that there is a diversity of trend structures present in the individual benefit types. As an example, we found that Pharmacy medical payments display a much different calendar year trend pattern than other medical payments. One of the reasons for the trend differences could be that legislated benefit changes impact the individual benefit types differently. Analyzing each benefit type facilitates the understanding of legislative and other systemic changes. Our

conclusion is that the individual benefit types should continue to be analyzed separately.

The composite modeling exercise shows that there is significant positive correlation among the three segments. Table 2 below shows the reserve correlations estimated by our composite model.

| | PA | PEC | PES |
|------------|-----------|------------|------------|
| PA | 1.00 | 0.25 | 0.19 |
| PEC | 0.25 | 1.00 | 0.14 |
| PES | 0.19 | 0.14 | 1.00 |

Table 2

The existence of positive correlation indicates that the variance of the total combined reserve estimate is greater than the sum of the variances of the reserve estimates for the individual segments. If the BWC reserving philosophy is to record liabilities at a confidence level higher than the mean estimate, then additional capital is required to account for the positive correlation.

As a byproduct of the correlation analysis, ICRFS can generate capital allocation percentages. Table 3 below presents two sets of capital allocation percentages by segment. The first set ignores the existence of correlations (i.e. assumes independence) among the segments. The second set considers the existence of correlations. This information would be very useful to the BWC in developing and executing a dividend plan.

| Segment | Capital Allocation % | |
|----------------|-----------------------------|--------------------------|
| | Without Correlations | With Correlations |
| PA | 87.8% | 80.3% |
| PEC | 7.8% | 12.3% |
| PES | 4.4% | 7.4% |

Table 3

Finally, Table 4 on the next page presents the reserve distribution for the three segments combined, as generated by the composite model. Once again, all amounts are presented in millions of dollars and are discounted at 5.25%.

| Confidence Level | Total Reserve Estimate |
|-------------------------|-------------------------------|
| 50.0% | 14,535 |
| 60.0% | 14,542 |
| 70.0% | 14,549 |
| 80.0% | 14,557 |
| 90.0% | 14,570 |
| 95.0% | 14,579 |
| 99.0% | 14,597 |

Table 4

Given, these results, it is our conclusion that the total reserve estimate put forth by Oliver Wyman in their June 30, 2006 analysis for the PA, PEC and PES segments combined is at the very high end of the reserve distribution.

V. Data

In our analysis, we have relied upon the information listed below. The information was obtained from the BWC, Oliver Wyman and external sources.

Ratemaking

1. Oliver Wyman Historical Rate Recommendations for the Ohio BWC
2. Ohio BWC State Insurance Fund Manual 2006-2007
3. Indiana NCCI Rate Filing
4. West Virginia NCCI Rate Filing
5. California WCIRB Rate Filing
6. California State Fund Filing
7. Massachusetts Workers' Compensation Rate Filing
8. New York Workers' Compensation Rate Filing

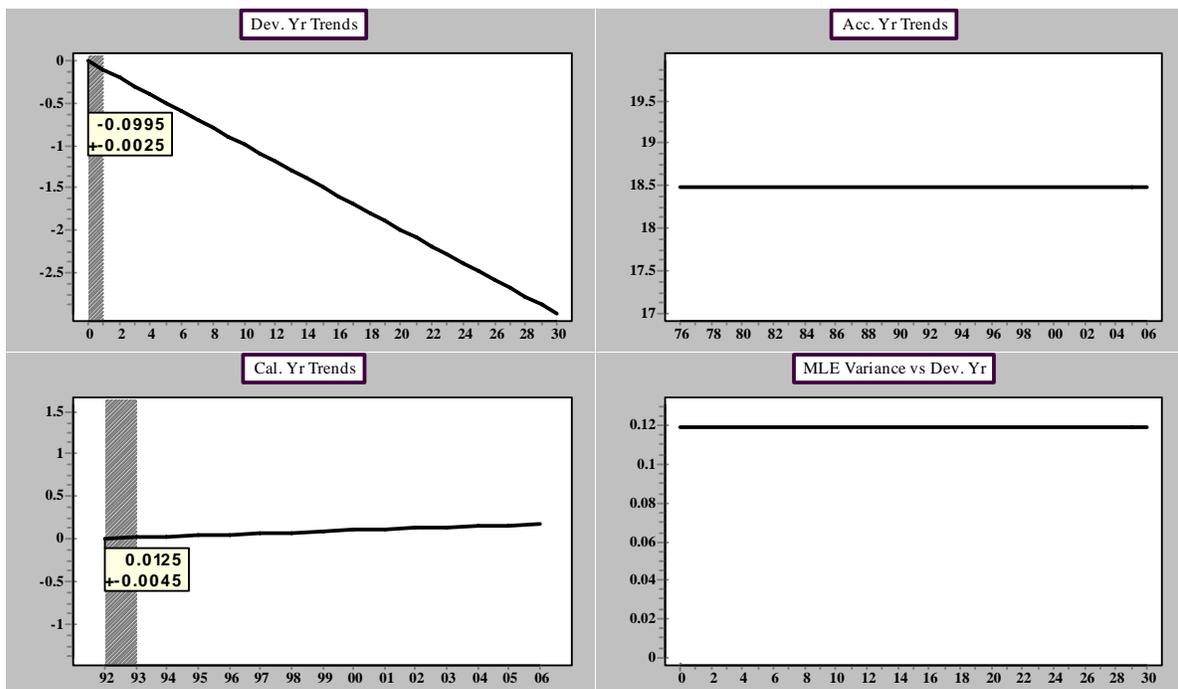
Reserve Development

1. *Actuarial Audit of the Workers Compensation State Insurance Fund and Related Funds Administered by the Ohio Bureau of Workers' Compensation as of June 30, 2006*, produced by Oliver Wyman
2. *Actuarial Audit of the Workers Compensation State Insurance Fund and Related Funds Administered by the Ohio Bureau of Workers' Compensation as of June 30, 2005*, produced by Oliver Wyman
3. *Actuarial Opinion of the Reserves for Compensation and Compensation Adjustment Expenses for the Ohio State Insurance Fund and Related Funds as of June 30, 2005*, produced by Pinnacle Actuarial Resources, Inc.
4. Paid loss triangles in electronic format by type of benefit for the PA, PEC and PES employer groups
5. Historical payroll in electronic format for the PA, PEC and PES employer groups

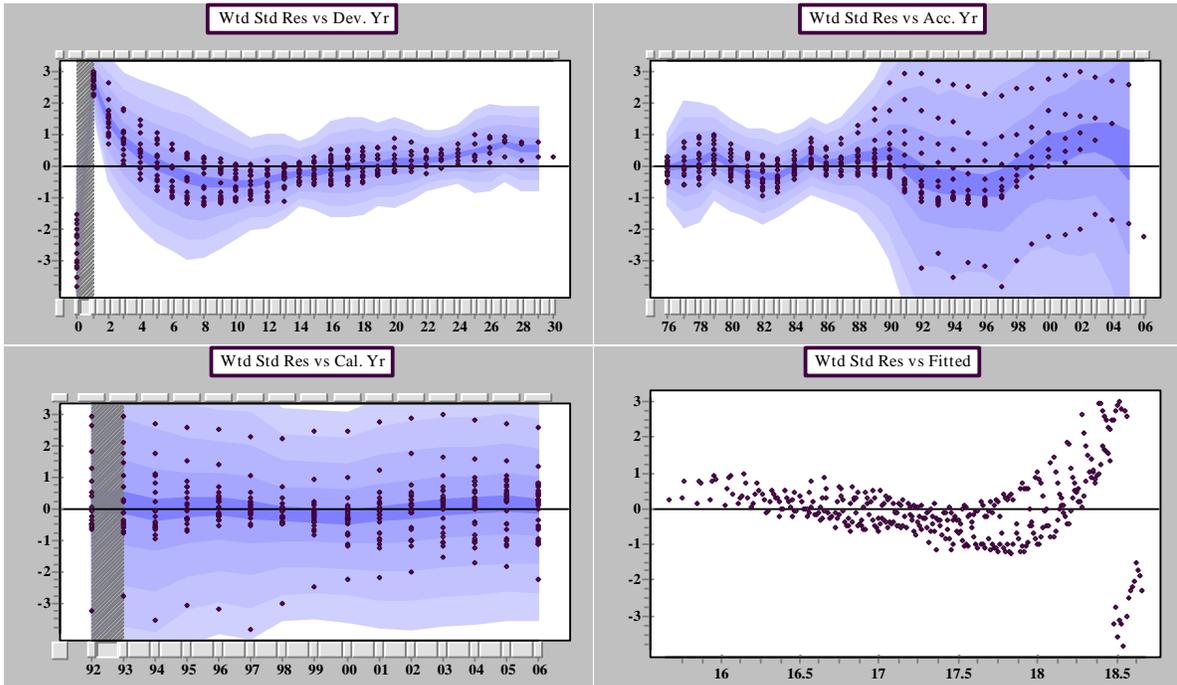
VI. Appendix – The ICRFS Model for PA

The purpose of this Appendix is to describe and display some of the steps used in building a probabilistic model around a paid loss data set with ICRFS. We have used the actual reserve model developed for the PA segment for illustrative purposes.

The initial default model used by ICRFS is a model with a single trend parameter in both the development year and calendar year directions. The initial model assumes that all accident years have the same average ultimate loss level. The default model is symbolized in ICRFS in the display below. The gray bars indicate the location of the parameters.

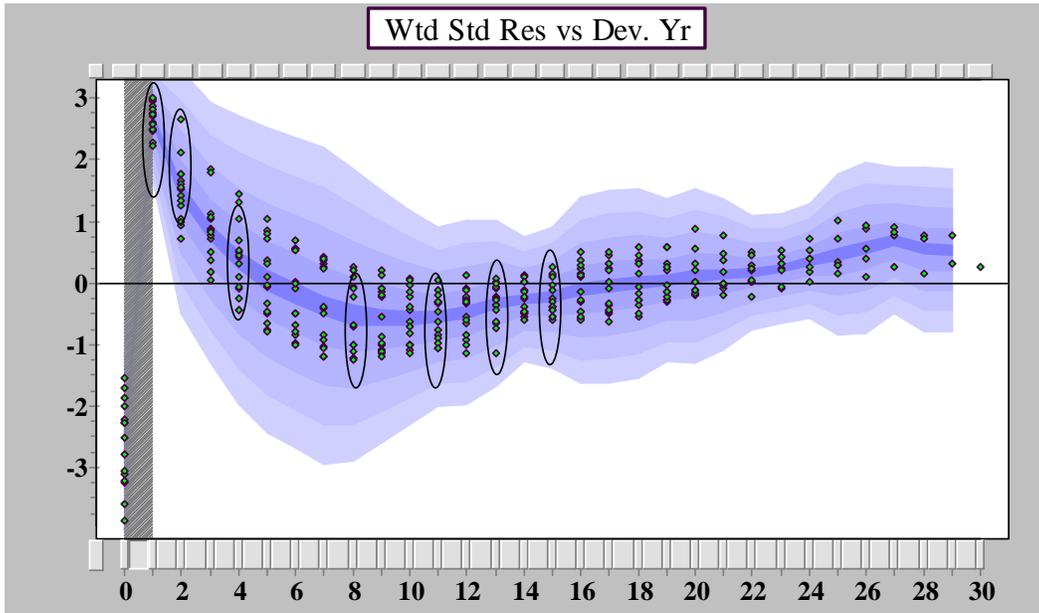


The resulting residuals under the default model are examined for changes in direction, or trends. Residuals are calculated as the difference between actual paid losses (per unit of exposure) minus the paid losses estimated by the model. The residual plots for the default model are shown on the next page.

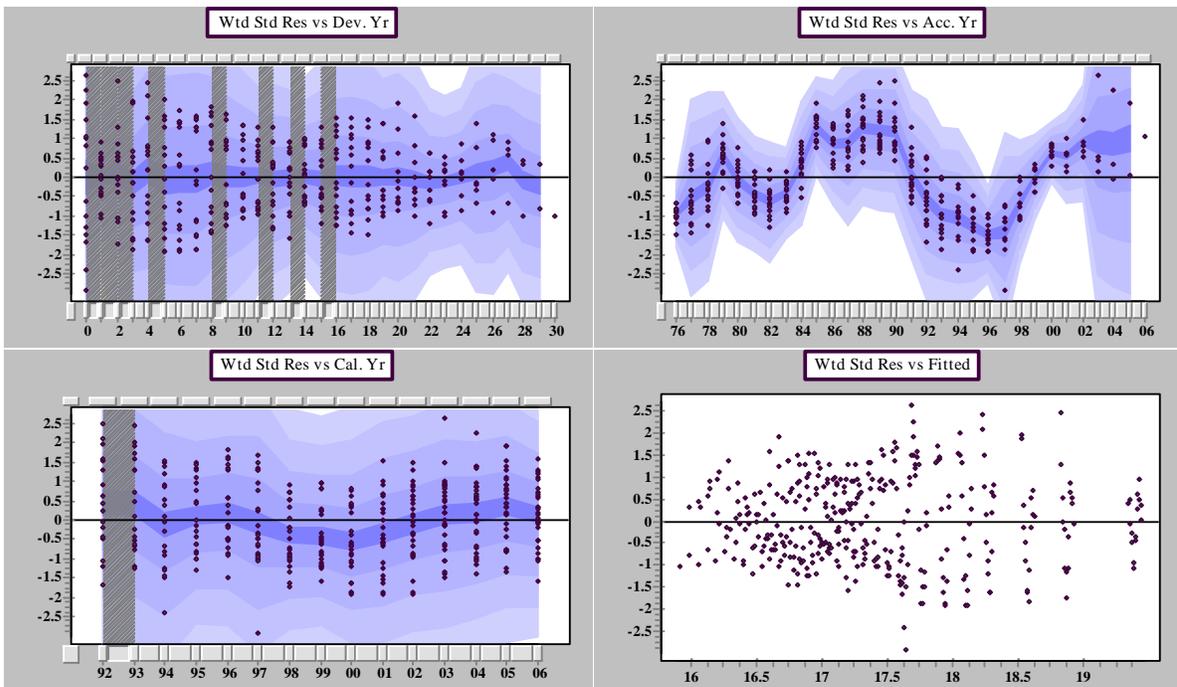


The goal in the modeling process is for the residuals to be randomly scattered around zero so that there are no remaining discernible trend or level changes. Obviously this goal is not accomplished with the default model.

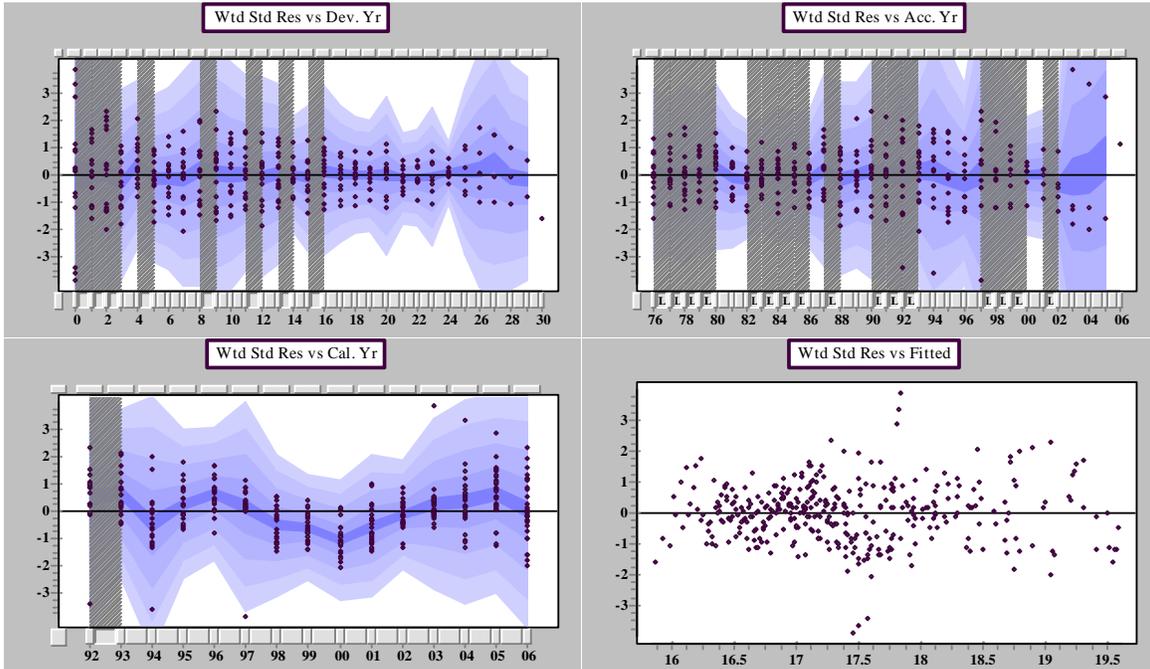
We therefore add parameters to the model based on where we see changes in direction of the residuals relative to the fitted single trend (or level for accident years). We focus on development period trend changes first and then add either accident year level changes or calendar year trend changes depending on which directions has the greatest change. The residuals in the development year direction under the default model are reproduced below.



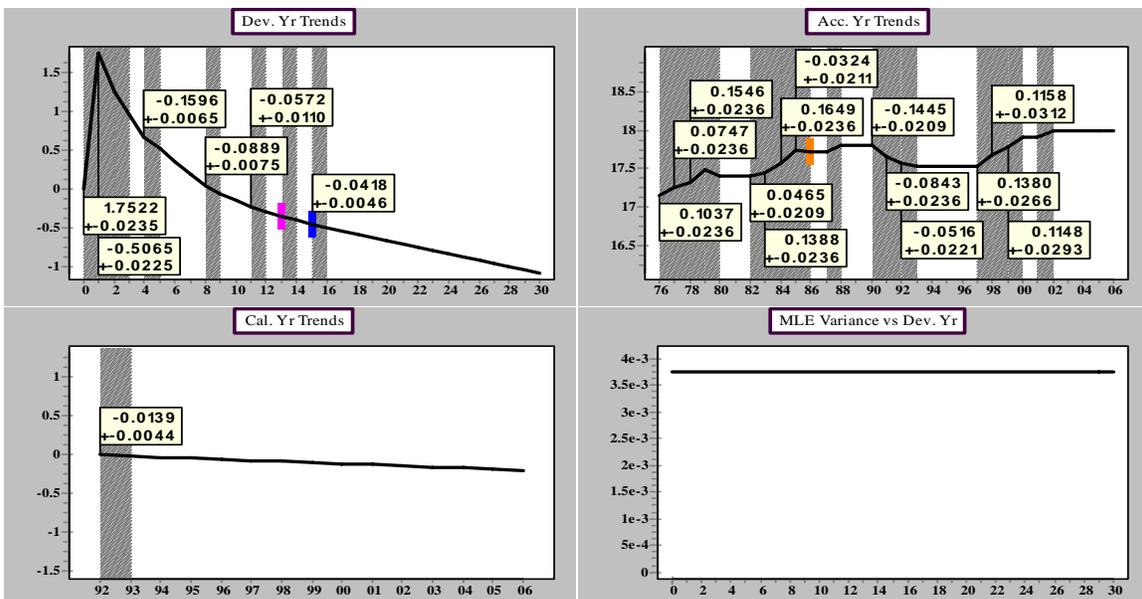
From this chart, using the central dark blue line, we can see that there is a change of direction in the residuals for the circled development years. After adding a few development parameters (the ones circled plus a few more), we end up with the following residual plot.



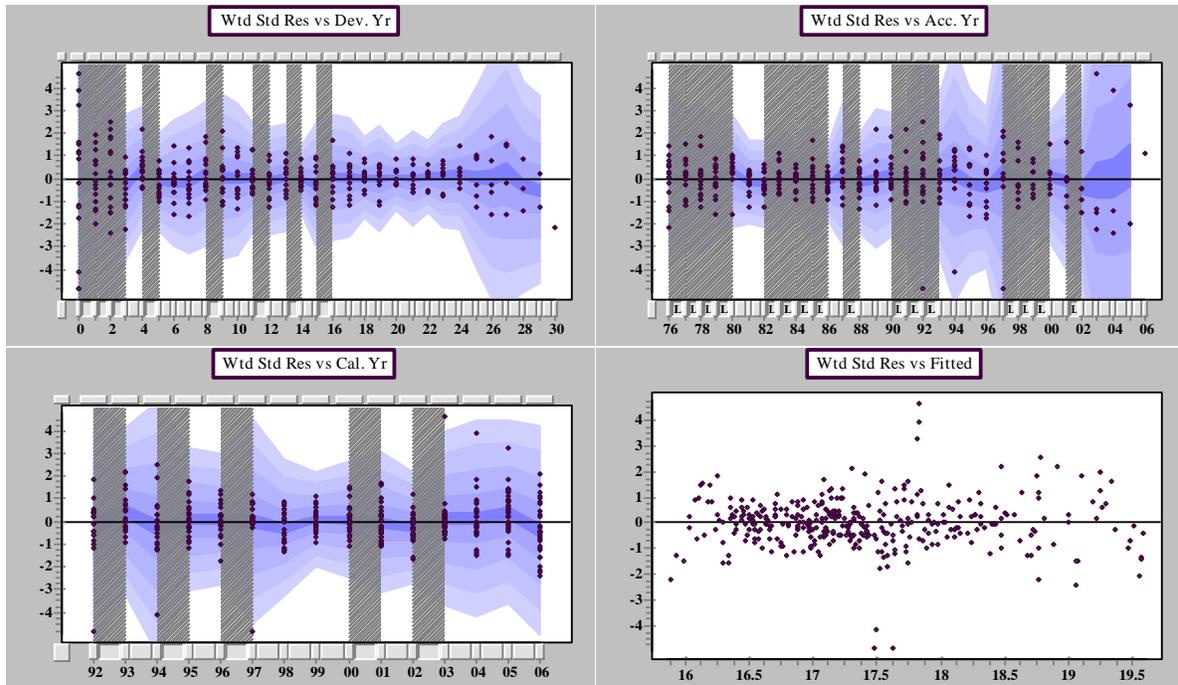
The structure in the development direction is now quite flat, however, we now observe significant level changes in the accident year direction. We therefore add parameters in the accident year direction to quantify the structure observed in the residuals. The next iteration of residuals appears in the chart below.



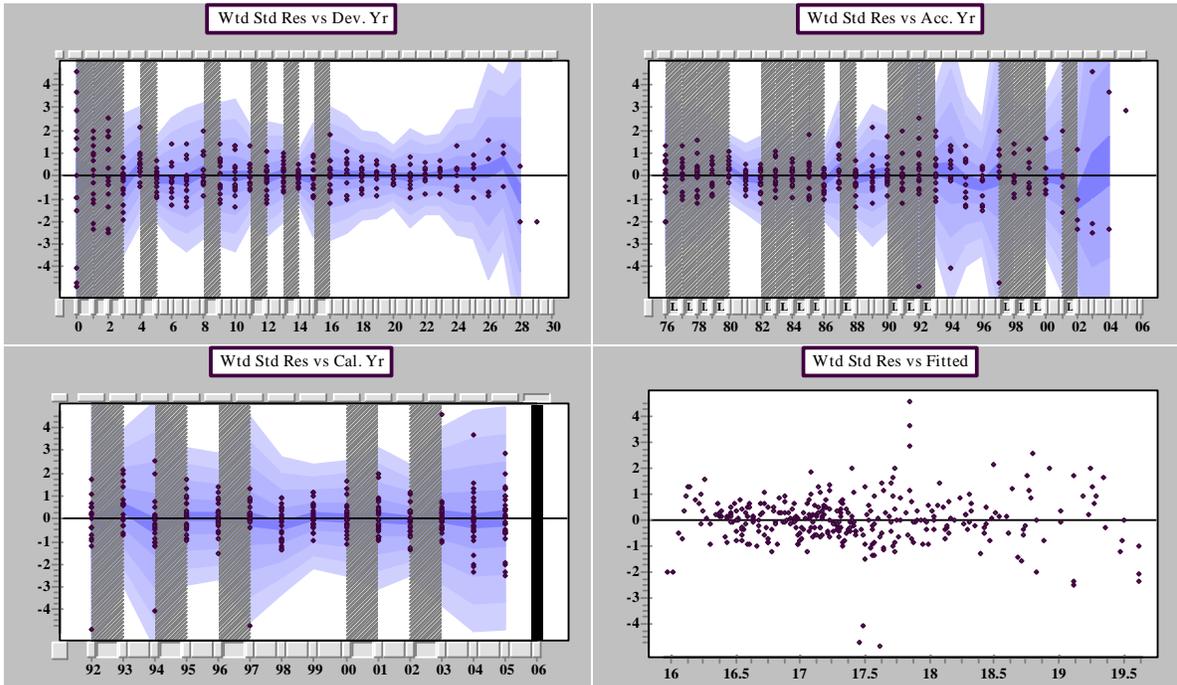
A depiction of model at this stage is displayed below.



After addressing the calendar year trend changes in a similar manner, the residuals appear as follows.



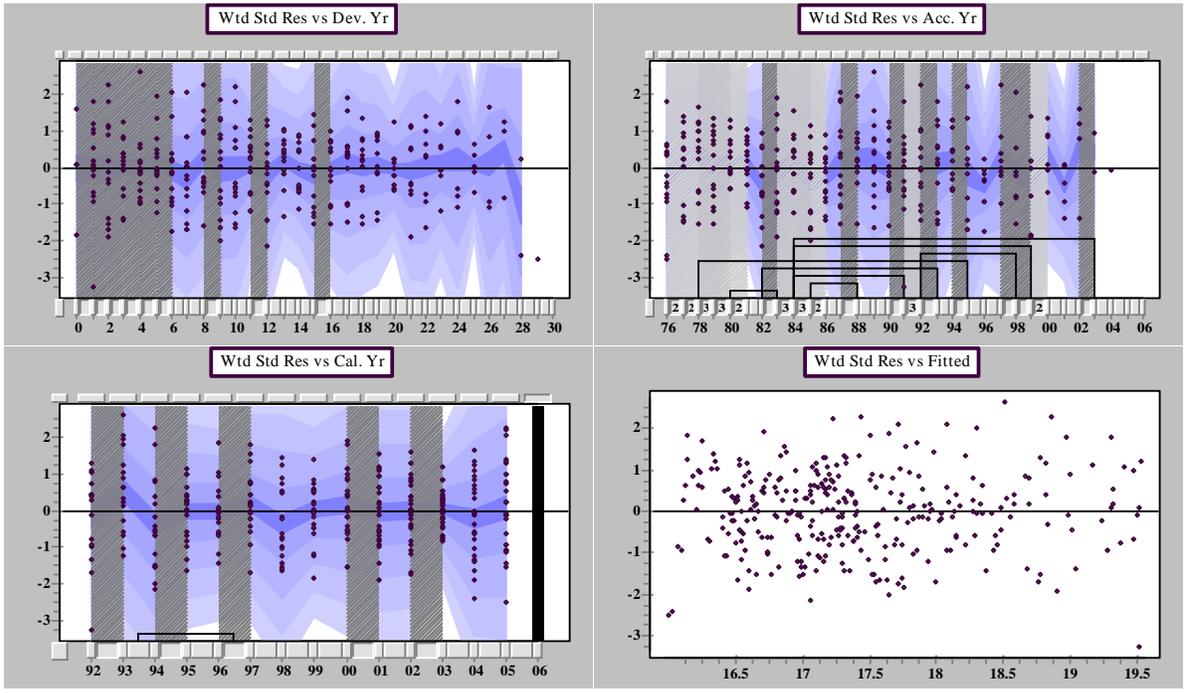
There appears to be a negative trend in the final calendar year. This makes sense given the fact the data used in our model is valued as of June 30, 2006 and therefore reflects only half of calendar year 2006 payments. As such, we exclude the calendar year 2006 data from our analysis. The residuals now appear as shown on the next page. The black bar indicates that calendar year 2006 data has been removed.



There are other adjustments that are now made in order to optimize the model. While the specific adjustments made are not detailed herein, a partial list would include:

1. Removal of outliers
2. Adjustment for heteroscedascity
3. Removal of insignificant parameters

After these adjustments are made, the residuals appear as shown on the next page. As shown, the residual patterns are now quite flat in all directions.



The final model display is as follows.

