Ohio Bureau of Workers' Compensation Board
Executive Summary: Comprehensive Study Group 4 Tasks
December 2008

This document briefly summarizes the results of Deloitte's Comprehensive Study on Group 4 tasks. The tasks included in Group 4 include: Actuarial Department Organization, NCCI classification plan; Experience Aggregation; Minimum Premium; Coal Workers Pneumoconiosis Fund; Marine Industry Fund; DWRF; Appeals; Out-of-State Employers; and Rehabilitation Program. Findings on the Group 4 task regarding the Handicap Reimbursement program were provided with the Group 3 results.

Actuarial Department Organization (Task # 36)

Situation: Current law requires that BWC contract with one or more actuarial firms to perform actuarial services for the actuarial audit reserve, rate adequacy, program pricing reviews, and other matters. In addition, House Bill 100 also required that BWC contract with one or more actuarial firms to assist in measuring the performance of Ohio's workers' compensation system and in comparing it to other state and private workers' compensation systems (the Comprehensive Study). There is limited internal capacity to analyze data, trends and findings relative to rates, programs pricing and reserving. As a result, there is almost a complete reliance on outside actuarial resources for all traditional actuarial functions, with limited internal review and analysis of findings.

BWC is interested in expanding its internal actuarial functions to include core actuarial functions. However, its status as a state agency could create some hiring challenges for actuarial talent; for example, providing a professional development program that is comparable to other actuarial positions or the ability to offer reimbursement of relocation expenses for newly hired actuaries.

Methodology: Our analysis included a review of the current actuarial organization at BWC, as well as a discussion of suggested actuarial organization functions which have been outlined by the BWC Chief Actuary. We also assessed the impact on actuarial workloads and requirements based on BWC's current capabilities and the recommendations for other tasks in the Comprehensive Study. We also researched relevant industry sources for comparison to the BWC, as well as to gain a better understanding of trends in the actuarial profession. Additionally, we incorporated our understanding and experiences with actuarial organizations from a variety of workers compensation providers across the country, including state funds, and used this information when inventorying prevailing practices and developing recommendations. Throughout our analysis and in the development of our recommendations, we considered the mission of the BWC and how the actuarial organization can and should support that mission.

Conclusions: We envision the BWC actuarial organization as having a mission to be a significant contributor to assess the effectiveness and efficiency of the Ohio workers' compensation system and to recommend and/or drive efforts to improve the financial security and stability of the system. Accordingly, their responsibilities would include:

- Analyzing and assessing loss reserves and net asset level needs.
- Establishing appropriate rate levels and pricing programs.

- Designing and analyzing programs that incent employer behavior and/or impact premium levels, such as the Safety Grant Program.
- Monitoring and assessing the impact of BWC cost control efforts such as MCOs.
- Analyzing system benefits relative to the intended application and BWC mission.
- Ensuring analysis performed by internal and external resources is based on appropriate data and assumptions.

In support of this mission, we recommend that BWC establish internal actuarial functions for rates, pricing, reserving and net asset analysis, as well as to obtain more data and information and to improve the analysis and integrity of such data and information. In addition, the actuarial function would work with other BWC areas such as the office of the COO and the CFO to assist them in achieving their missions. Focus should be put on building these core competencies and building the associated organization within the existing Actuarial Division, which would ultimately report to the Administrator. We recommend the future organization be organized around four functions each representing a team reporting to the chief actuary:

- <u>Rate Levels and Programs Pricing</u> - Establish a team and begin building in–house capability while expanding the capability to support the implementation of recommendations made in other Comprehensive Study task recommendations, such as performing rate level studies, designing and analyzing the performance of programs pricing, and conducting loss cost studies. This group would also liaise with external actuarial resources needed to perform independent reviews, as well as to provide additional expertise, specialized experience or additional capacity in this area. By focusing on these functions, BWC will be able to immediately advance the organization above the current capabilities level. Additionally, this would allow the BWC to build the capacity to address some of the task recommendations internally, while building necessary knowledge to manage this function more effectively on an ongoing basis.
- <u>Reserving & Net Asset Analyses</u> - Establish Director/Manager function and begin to build the capability and capacity to perform some of these analyses and to review the results of any outside studies. In doing so the organization would have primary responsibility for reserving and net asset level analyses, including reinsurance evaluation and coordination and analysis of external studies, as well as for support of the claim operations and development of claim diagnostics. This responsibility would include appropriate oversight of any outside assistance that is needed due to expertise, capacity or independent opinion. Initially, the BWC should focus on understanding and interpreting the current reserving and net asset analysis performed by outside actuarial resources, transitioning to additional secondary studies and variance analysis over time, and hiring staff to support these functions as they are built out. In the longer term, the BWC actuarial function should be expanded to perform much of the standard reserving and net asset analyses, and use external resources for a second opinion to determine reserve and net asset levels, to provide for the appropriate control and

independent support, and to meet state requirements for independent actuarial review.

- Data Management – Establish a function with the initial responsibility to improve the depth of data, data quality, and understanding of data, as well as to provide data needed for internal and external actuarial studies. This group would be responsible for the development of actuarial data bases and reporting tools to facilitate review and analysis by the actuarial resources. We also recommend that the Rate Adjustment Team transition to this group since much of the function surrounds data, including adjustment of employer and/or group claim experience and data management for MIRA, including the provision review and investigation of this data.
- Rating – Continue the current function performed by the private employer and public employer (taxing districts and state agencies) teams, focusing on calculation of rates and ensuring accuracy. However, the current support that these teams provide around data gathering should be transitioned to the data management function as noted above. Additionally, any support provided to the review and validation of actuarial studies should be transitioned to the function responsible for rate level and programs pricing or the function responsible for reserving & net analyses.

Once these functions have been established, external resources should be used to supplement BWC actuarial resources, perform special analysis or a deeper review, and to provide industry perspective and specific expertise. Additionally, we recommend external actuarial resources still be engaged to provide independent review of pricing and rate assumptions, as well as provide a second opinion on reserves and net asset levels on an annual basis, meeting both state and Board requirements while providing additional controls on the actuarial process.

In order to make this organizational expansion successful over time, we recommend that BWC take certain actions to enhance its ability to attract and retain actuarial talent.

- Create a job classification(s) for actuarial students which support professional requirements regarding exam passage and training by including the requirement to study and sit for exams, balanced with job performance and capabilities. (The term actuarial student does not mean that the employee is a college student, but rather that they are a studying to become a qualified actuary, including on-the-job time to study for the professional actuarial exams, etc.)
- Provide study materials and pay for exam fees.
- Foster an environment that exposes the actuarial student to different projects and functions to replace formal rotational program.
- Focus recruiting efforts to mitigate competition with large, established private employers that can provide enhanced programs and pay scale (e.g., small liberal arts schools with a strong math/science program but without a formal actuarial program).
- Emphasize benefits and quality of life aspects of BWC employment.

NCCI Classification System for Rating Calculations (Tasks #3)

Situation: Ohio (BWC) has adopted the National Council of Compensation Insurance ("NCCI") guidelines for the purposes of assigning classifications to employers. BWC has 28 classification codes that are state specials.

Methodology: We reviewed BWC's classification rules for rating calculations and compared these rules to common industry practice. In addition, we reviewed BWC's payroll distribution by class code to determine whether any apparent anomalies exist.

Analysis: BWC has largely adopted the NCCI classification system in a manner consistent with other states.

Conclusions and Recommendations:

- **Assignment of Classifications:** We recommend the BWC continue to use the NCCI classification system with respect to basic classifications, standard exception classifications, and other classification rules.
- **Public Taxing Districts Classification System:** BWC has created 14 state specials (9400 codes) for public employees which serve only to segment out standard exception class employees for organizations such as Public Libraries & Local School Districts. Ohio has more state specials for public employees than all other states. The current state specials add unneeded complexity and, more importantly, reduce the credibility of the loss experience of each class. As a comparison, Oregon has four state specials for public employees, and Utah has three compared to 14 in Ohio. It is our recommendation that Ohio consider using the NCCI classification system for public taxing districts and consolidate the number of state special class codes for these employers. We believe that this will allow BWC to better reflect the relative hazard level by employee job class for the public taxing districts.
- **Construction Classification System:** We find that BWC's use of class code 5605 (construction estimators) is not necessary. A review of state loss costs shows that code 5605 matches the other low loss cost code in the construction industry; 5606: Contractor – Project Manager, Construction Executive, Construction Manager, or Construction Superintendent. Approximately 14% of payroll for all construction classes is coded to 5605, compared with approximately 5% coded to 5606. The payroll in 5605 appears to be disproportionately high given the class definition. This is potentially a payroll audit issue for the misallocation of payrolls by construction employers to a lower rated class. Adherence to the NCCI Scopes Manual should alleviate the potential problems. We recommend that BWC monitor the procedures in place to ensure that only appropriate payroll is coded to both 5605 and 5606.

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- **Process of employer's reporting payroll, premium auditing process and the procedures for non-reporting of payroll:** BWC's policy and procedures for premium auditing are well documented based on a comparison to industry and other state funds. We recommend no change to the policies and procedures currently in place. However, we understand that BWC has audited approximately 30,000 employers since April, 2006 compared to approximately 300,000 employers in Ohio. This is a far below common industry practice. We recommend that BWC establish specific audit objectives, including developing an expanded approach that will audit most employers every three to five years and possibly more frequently (every one to two years) for large employers and certain other types of employers. We also recommend increasing the scope of the premium audit function to introduce different levels of audits and more focused or targeted audits. We recommend that BWC consider an audit scoring system as a tool to prioritize potential premium audits by employer and to improve the effectiveness and efficiency of BWC's premium audit resources.

Experience Aggregation Approach (Task #32)

Situation: BWC does not apply the common majority ownership principle in calculating individual employer experience modification factors. Entities are "tracked" and assigned experience based upon federal tax identification numbers. Although BWC may decline to issue a new policy for what is essentially the same business as an existing policy, they do not blend the experience of commonly owned but separate businesses. In cases of partial or whole succession, BWC does transfer experience to the succeeding or acquiring entity.

Methodology: We reviewed BWC's approach to experience aggregation for experience rating and compared it to common industry practice.

Analysis: The industry standard (NCCI) uses an approach that captures ownership. Applications are not typically finalized until 100% of a business's ownership is accounted for. The *ACORD 130- W*orkers Compensation Application is used by almost all private carriers and many state funds. In the Individuals Included/Excluded section, the form requests names, birth dates, titles, and ownership percentages for partners, officers, and relatives.

A potential issue that is created by grouping entities by tax identification numbers rather than common majority ownership is that employers with historical experience that would result in debits from the experience rating process are provided an opportunity to create new entities in order to be base rated.

Conclusions: It is our recommendation that BWC adopt the NCCI approach of capturing common majority ownership in the aggregation for experience rating, to be more consistent with industry practice. This would require discontinuing BWC's practice of relying on the federal tax identification number to identify separate employers.

Minimum Premium Review (Task #5)

Situation: For accounts that do not report payroll, a minimum premium of $50 is charged for each six months of coverage. Similarly, for those accounts that do report payroll, but for which calculated premium is less than $50, the minimum premium of $50 is charged for each six months of coverage.

Methodology: We reviewed information provided by BWC on the number of accounts which had minimum premiums for each six month policy period from January 1 – June 30, 2003 through July 1 – December 31, 2007. We also compared BWC's minimum premium amount to those typically seen in the industry.

Review and Analysis: As shown in the table below, minimum premium accounts have experienced high loss ratios since 2003, when the minimum premium was $10 per six months of coverage.

Summary of To-Date Loss Ratios for Minimum Premium Policies (excludes PEO's)

Policy Period	Minimum Premium Amount	Policy Count	Premium	Claim Count	Incurred Loss	Loss Ratio
1/1/2003	10	65,825	658,250	343	9,011,609	1369.0%
7/1/2003	10	64,406	644,060	351	8,997,300	1397.0%
1/1/2004	10	69,743	697,430	380	7,437,931	1066.5%
7/1/2004	10	67,210	672,100	303	4,788,673	712.5%
1/1/2005	10	71,012	710,120	274	5,049,070	711.0%
7/1/2005	10	68,177	681,770	310	5,048,506	740.5%
1/1/2006	10	70,273	702,730	319	4,518,260	643.0%
7/1/2006	50	79,555	3,977,750	357	6,664,485	167.5%
1/1/2007	50	78,424	3,921,200	377	4,891,822	124.8%
7/1/2007	50	72,245	3,612,250	380	5,572,541	154.3%
Totals			16,277,660		61,980,197	380.8%

Note: Incurred losses are undeveloped.

Conclusions: It appears from the chart above that BWC needs to charge minimum premium of approximately $75 - $100 per 6 month period in order to cover the losses associated with minimum premium accounts. BWC's minimum premium level is significantly lower than industry levels, which generally range from $500 - $750 per year. Given that the current minimum premium appears to be insufficient to cover losses, and the disparity between BWC's minimum premium and industry levels, we recommend that BWC examine the feasibility of raising the minimum premium to a level that is more likely to be in line with the expected losses. Some phase-in of increases in minimum premiums might be appropriate.

In addition, we recommend that BWC increase the involvement of the premium audit function with respect to accounts that report no payroll but experience claims. There are typically 200 to 300 such accounts in each 6 month period. Since April, 2006, 292 payroll audits have been performed on these accounts. We recommend that BWC perform some level of audit of most of these accounts in order to evaluate the possibility of fraud and to help determine whether the minimum premium is appropriate. We also recommend that BWC consider the use of a per capita exposure base rather than payroll for certain classes such as domestic workers. This is consistent with NCCI practice for these classes where payroll is not readily available. This NCCI approach should prevent or mitigate issues regarding how minimum premiums are applied to employers in these classes.

Rating – Disabled Workers Relief Fund (DWRF I and DWRF II), Marine Industry Fund (MIF), and Coal Workers Pneumoconiosis Fund (CWPF) (Task # 7, 10, 13)

Situation: Oliver Wyman (OW) prepares annual rate recommendations for the DWRF, MIF, and CWPF. The DWRF provides supplementary payments to workers whose combined PTD plus Social Security Disability benefits are lower than a specified entitlement amount, which is indexed to the CPI each year. The MIF insures maritime employers from exposure arising from federal USL&H. The CWPF insures employers with mining operations from exposure to black lung claims subject to federal benefits.

Methodology: We were provided with the rate reviews for the July 1, 2003 year through the July 1, 2007 year. We reviewed OW's rate reviews, supporting reserve reviews, and supplemental schedule of revenues, expenses, changes in net assets, and balance sheet related to these funds in BWC's financial statements.

DWRF

Review and Analysis: DWRF revenue is derived from assessments on employers' payrolls or premiums. Two separate assessments are applied to employers, one related to accidents occurring prior to 1987 ("DWRF I") and another for accidents occurring in 1987 and subsequent ("DWRF II"). DWRF I assessments are based on a rate applied to the employer's payroll. This rate is limited by current law to no more than $0.10 per $100 of payroll. DWRF II assessments are based on a rate applied to the employer's base-rated premium.

Under current law, DWRF is funded on a pay-as-you-go basis. Assessments are typically based on projected payments for the next 12 months. House Bill 100 permits BWC to assess employers in future periods for amounts needed to fund DWRF. As a result, BWC reflects an asset for unbilled assessments receivable in both the June 30, 2007 and June 30, 2008 financial statement. The amount of the unbilled assessments receivable is approximately $1.6 billion as of June 30, 2007 and $1.5 billion as of June 30, 2008. The net assets of DWRF are $800 million as of June 30, 2007 and $849 million as of June 30,

2008. Consequently, without the accrual for the unbilled assessments receivable, DWRF would be in a significant deficit position of $650 million as of June 30, 2008.

The table below displays the assessment income reflected in BWC's financial statements for the past four fiscal years:

Fiscal Year ending	DWRF Assessment Income ($ Thousands)
June 30, 2005	115,933
June 30, 2006	130,644
June 30, 2007	130,790
June 30, 2008	23,389

For the past several fiscal years, receipts from assessment income have exceeded disbursements related to DWRF benefits. As a result, Oliver Wyman has recommended reductions in the assessment rate for DWRF I. For DWRF II, where the indicated assessment rate (0.7% of base premium) is higher than the actual rate (0.1% of base premium), Oliver Wyman recommends no change in the rate level.

Conclusions and Recommendations: The asset of $1.5 billion on BWC's balance sheet for unbilled assessments is based on BWC's statutory right to assess employers in future periods for DWRF funding. It is our understanding that there is no corresponding liability reflected on the balance sheet of employers who will be subject to these assessments. Therefore, considering the state of Ohio as a whole, there is an unrecognized obligation of employers for their collective potential future premium liability related to this Fund equal to $1.5 billion. For BWC, the unbilled assessment receivable for this accrual represents 177% of the DWRF net assets as of June 30, 2008

We believe it is inappropriate to reduce the DWRF assessment rates to a level which produced less income for the year than the expected payment level. This will cause the unfunded liability for DWRF to increase, creating a larger burden for employers to bear in future periods. We recommend that BWC set the DWRF assessment rates at a level sufficient to absorb expected payments for the upcoming year.

In general, the methodology used by OW to estimate expected payments appears to be appropriate. However, the statute that requires DWRF to fund on a pay-as-you-go basis is inconsistent with the concept of actuarial soundness, as indicated in actuarial principles and standards, which state that a premium rate should be sufficient to fund for the expected costs incurred during the period, rather than those costs expected to be paid during the period. At a minimum, we recommend setting the level of assessments equal to the expected payments in the next year in order to prevent increasing the unfunded amount in the DWRF.

We recognize that any change to the funding basis of the DWRF would require legislative change. We recommend a change in legislation, considering the large amount of unfunded and unrecognized obligations, the lack of a good, clear, and long term public

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policy rationale for pay-as-you-go funding for these benefits. The policy rationale should also address the need to have a separate fund rather than being funded through the SIF, and the issues of fairness and equity between past, current and future employers, who pay the assessments for the DWRF benefits. Separate funds creates an obligation for the BWC to manage them, creating duplicative processes and inefficiencies. It also creates additional risks for each fund, and additional responsibilities to maintain each fund's financial strength and stability, which could be better accomplished under a combined fund. BWC does not have a process for evaluating the continued need and relevance of separate funds or for combining or closing a fund. Therefore, we recommend further research to support possible legislative change to combine the funds of BWC. As a separate fund, we recommend the development of a funding policy for DWRF, similar to our recommendations for the SIF.

MIF

Review and Analysis: The MIF is fully funded. The premium and loss experience of the MIF is presented below:

Marine Industry Fund - Results as of 12/31/07
Dollars in Thousands

Accident Year	Earned Premium	Earned Premium at 7/1/07 Rates	Discounted Incurred Losses as of 12/31/07
1995	1,439	1,025	1,104
1996	986	703	777
1997	777	583	390
1998	732	579	180
1999	762	604	297
2000	719	570	138
2001	701	555	17
2002	752	595	3
2003	825	653	108
2004	819	690	952
2005	799	719	-
2006	677	641	337

It can be observed that as of 12/31/07, premium has exceeded discounted incurred loss in all years from 1995 to 2006 with the exception of 2004. Rates have been reduced several times during the period displayed above, including a 10% rate decrease effective 7/1/97, a 12% rate decrease effective 7/1/05, and a 10% rate decrease effective 7/1/07.

In Oliver Wyman's 7/1/08 rate analysis for the MIF, two scenarios are presented. The first is based on the results above, using accident years 1996 to 2005. The indicated rate change using this approach is approximately -27%. A second scenario is based on accident years 2002 to 2005. This scenario results in an indicated rate change of -48%.

As a result of this analysis, Oliver Wyman notes the variability of results from year to year and recommends a rate change of 0% to -20%.

Conclusions and Recommendations: The MIF is a small fund, which presents challenges in providing rate recommendations as losses can vary significantly from year to year. Despite indications that rates have been redundant for the past several years with the exception of 2004, BWC is subject to large claims in the MIF. We believe it is appropriate to exercise prudence in reducing rates that may appear to have a degree of redundancy, given the potential for large claims relative to the annual premium volume. Thus, we believe that OW's methodology and rate recommendations for the MIF are appropriate.

The net assets of the MIF appear to be more than sufficient to meet the obligations of that fund. However, separate funds creates an obligation for the BWC to manage them, creating duplicative processes and inefficiencies. It also creates additional risks for each fund, and additional responsibilities to maintain each fund's financial strength and stability, which could be better accomplished under a combined fund. BWC does not have a process for evaluating the continued need and relevance of separate funds or for combining or closing a fund. Therefore, we recommend further research to support possible legislative change to combine the funds of BWC.

As a separate fund, we recommend the development of a funding policy for MIF, similar to our recommendations for the SIF, in particular to address the most appropriate approach to deal with a net asset level that appears to be excessive.

CWPF

Review and Analysis: The history of the CWPF is displayed below:

Coal Workers Pneumoconiosis Fund
Dollars in Thousands

Year	Assets	Liabilities	Fund Balance	Loss+LAE Reserves	Premiums
1997	141,647	43,357	98,290	34,500	264
1998	149,317	35,858	113,459	35,600	260
1999	148,102	37,043	111,059	36,782	(16)
2000	152,326	38,249	114,077	38,021	3
2001	187,512	53,271	134,241	37,026	-
2002	186,115	50,758	135,257	50,190	1,232
2003	211,290	63,398	147,891	52,600	267
2004	220,527	68,809	151,718	55,700	256
2005	224,739	63,320	161,419	57,500	824
2006	221,894	61,756	160,138	61,100	921

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It can be seen that the net assets of the CWPF are generally increasing over time. This is despite the fact that the BWC has collected premium only for new employers seeking coverage from the CWPF for the past several years, and for a period of time collected no premium at all.

Oliver Wyman recommends a continuation of the practice of charging premium only to new employers, due to the relatively large net assets in the CWPF. As a result of this practice, BWC has been collecting premium that is less than the expected losses for the past several years. Estimated discounted ultimate losses for the CWPF average approximately $1.5 million each year, and as can be seen above, annual premiums are less than this. Net assets have grown despite this fact due to the investment income generated by the existing asset base, which exceeds the shortfall in annual premium accumulated over the past several years.

Recommendations and Conclusions: The OW recommendation to charge premiums less than expected losses appears to be a result of the relatively high level of net assets and associated investment income in the CWPF. We believe that this practice is understandable from the perspective of its convenience. However, while the net assets of the CWPF appear to be more than sufficient to meet the obligations of that fund, the current practice of only charging premium to new employers can create issues of equity and fairness among past current and future employers who need this coverage.

Separate funds creates an obligation for the BWC to manage them, creating duplicative processes and inefficiencies. It also creates additional risks for each fund, and additional responsibilities to maintain each fund's financial strength and stability, which could be better accomplished under a combined fund. BWC does not have a process for evaluating the continued need and relevance of separate funds or for combining or closing a fund. Therefore, we recommend further research to support possible legislative change to combine the funds of BWC.

As a separate fund, we recommend the development of a funding policy for CWPF, similar to our recommendations for the SIF, in particular to address the most appropriate approach to deal with a net asset level that appears to be excessive.

Changing of Individual Employer Rates due to Administrative Appeals or Clerical Errors by the BWC (Task #14)

Situation: BWC equates the term "employer rate" to an employer's experience modification factor, or the premium rate after the application of the experience modification factor. The industry standard for "employer rate", however, refers to the dollars of premium charged per exposure for a given classification.

Some of the adjustments that BWC's makes to an employer's experience modification factor have no time constraint or have an overly extended reporting period. This adds to

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the administrative burden required of the BWC staff in order to process multiple changes to employer experience.

Other monopolistic states do not make as many mid-term adjustments to experience modification; nor do the NCCI guidelines permit such practice. A significant amount of claim updates are communicated from the Claims department to the Employer Rate Adjustments Department manually rather than via BWC's IT systems.

Methodology: Given the fundamental difference in interpretation of "employer rate", we have focused its research and conclusions on events that would "trigger" the recalculation of an experience modification and ultimate premium.

Our research focuses on how BWC defines "employer rate" relative to the industry standard and the types of triggers that cause an insurer (state fund or private company as per NCCI standards) to recalculate an experience modification and ultimate premium.

In addition to researching other monopolistic states' practices and NCCI conventions, we utilized information obtained from the BWC State Fund Manual and interviews with BWC staff. We also reviewed process documentation provided in response to data requests.

Conclusions: Our major recommendations in this area are:

- Redefine the criteria for allowing mid-term experience adjustments so that the majority of such adjustments take place only once a year.
- For adjustment requests that currently have no time constraint or have an overly extended reporting period, establish shorter and clearly defined time constraints.
- Adopt the industry standard definitions for "employer rate".
- Enhance the interface between BWC's Claims system and Policy/Rating system to better automate updates to employers' experience.

Calculation of Experience Modifications for Out-of-State Employers Who Wish to Enter Ohio (Task #16)

Situation: Current language in the State Fund Manual is vague about the payroll requirements for experience rating – the current interpretation is that a company's non-Ohio payroll can qualify it for experience rating in Ohio even if the Ohio-only payroll would not ordinarily qualify the company for experience rating.

The other monopolistic states and NCCI have a premium level requirement, time in business requirement, or a combination of these two to qualify for experience rating. Ohio is the only state that uses expected losses as a requirement to qualify for experience rating.

As compared to the other monopolistic states, Ohio is the only state to use out of state payrolls and exposures to calculate an experience modification for an in-state employer.

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Methodology: As part of industry benchmarking, we surveyed how the other monopolistic states calculate experience modification for Ohio risks with out of state exposure. We also surveyed the NCCI standard as that is used in many competitive states.

In addition to researching other monopolistic states' practices and NCCI conventions, we utilized information obtained from the BWC State Fund Manual and interviews with BWC staff. We also reviewed process documentation provided in response to data requests.

Conclusions: Our major recommendations in this area are:

- Utilize only the Ohio based information to determine eligibility for experience rating in Ohio (i.e., does the Ohio exposure alone qualify for experience rating).
- Adopt the industry standard of using premium level instead of expected losses as the eligibility criteria for experience rating and retain the time frame requirement. Document in the State Fund Manual the specific amount of premium required to qualify.
- Consider specific checks and balances to experience rating similar to those used in other monopolistic states such as Wyoming.

Vocational Rehabilitation Program (Task #28)

Situation: BWC offers vocational rehabilitation ("voc rehab") to workers in order to accelerate the return-to-work process and reduce lost time claim costs. Injured workers who have stabilized are referred to a field case manager. The case manager is overseen by two parties: a disability management coordinator ("DMC") from BWC, and an MCO. The DMC and MCO have the ability to authorize rehabilitation services. The role of the DMC is to oversee both the field case manager and the MCO.

Methodology: BWC provided us with the following information related to the voc rehab program:

- BWC Internal Audit report on the voc rehab program, dated October, 2007
- Monthly and rolling 12 month summary of voc rehab utilization for periods from December, 2003 to October, 2008
- A 2007 study on the impact of voc rehab on claim costs
- A description of the rules associated with the inclusion (or exclusion) of costs associated with voc rehab, such as living maintenance payments, on an employer's experience rating
- A study of the impact of these rules on the amount of losses excluded from the experience rating process

Review and Analysis: As discussed in BWC's Internal Audit report, the structure of the voc rehab program potentially creates a conflict of interest for MCO's, due to the fact that there is no restriction against MCO's referring cases to affiliated companies. This is categorized as a material weakness in the Internal Audit report.

Incentives are provided to employers to place injured employees in the voc rehab program. The rules associated with the treatment of living maintenance ("LM") payments in experience rating are shown below. LM represents payments made to an injured worker in a voc rehab program. LM payments are generally equivalent to the temporary total indemnity that the worker would receive.

Living Maintenance Reserve Reduction: Any claim where living maintenance or living maintenance wage loss is the latest type of indemnity paid, with the exception of Permanent Total Disability or Death benefits, will have its reserve reduced by half (50%).

Salary Continuation followed by Living Maintenance: Any claim where salary continuation is immediately followed by living maintenance or living maintenance wage loss, and only these two types of indemnity have been paid in the claim, will have their reserves suppressed.

Based on a study conducted by BWC in September 2007, the impact of these rules is to exclude approximately $30 million per year from the experience rating process. This amount is effectively spread to all employers through the class rating process. Thus the cost of providing incentives to employers to have their injured employees enroll in the voc rehab program is borne by all employers in the state.

BWC conducted another study in 2007 to gauge the effectiveness of the voc rehab program. Results are shown below:

CY	# Claims		Avg Med Cost/Claim		Avg Comp Amt Post Rehab	
	Successful RTW	Unsuccessful RTW	Successful RTW	Unsuccessful RTW	Successful RTW	Unsuccessful RTW
2006	1,467	2,205	$3,847	$2,190	$2,149	$6,367
2005	1,785	2,247	$5,179	$3,462	$5,066	$10,080
2004	1,913	2,095	$5,231	$3,670	$7,036	$12,763
2003	1,987	2,632	$5,099	$3,708	$7,798	$14,301
2002	3,268	4,157	$4,674	$3,636	$7,526	$17,736
2001	3,679	4,630	$4,119	$3,589	$7,959	$19,274

These results suggest that the voc rehab program has the intended effect of reducing future lost time claim costs when an employee successfully returns to work after participating in the program.

Conclusions and Recommendations: We agree with the recommendation to have sole authority for recommended rehabilitation services rest with BWC rather than the MCO's. This will mitigate conflict of interest concerns expressed by system stakeholders. In addition, it will afford BWC an opportunity to manage, track and rate voc rehab service provider performance, and leverage existing BWC voc rehab staff to eliminate existing redundancies in the authorization and referral processes between MCOs and the BWC.

We believe that offering incentives to employers to encourage their injured employees to participate in voc rehab is a reasonable practice. The incentives provided by BWC are in the form of rules related to the reduction or suppression of reserves for experience rating purposes when injured workers are receiving living maintenance in lieu of temporary total benefits. This effectively socializes the cost of this program to all employers in the state. We believe this is acceptable, particularly for a program such as voc rehab which is intended to improve the outcome for both injured workers and employers. However, we recommend that BWC make certain that the cost of this socialization is made clear to employers throughout the state, as it does not appear to be transparent based on our review of the ratemaking process.

In addition, we have previously recommended the discontinuation of the salary continuation program. To the extent that this recommendation is adopted, BWC will need to reconsider the rules associated with the treatment of living maintenance losses following salary continuation in experience rating.

Ohio Bureau of Workers' Compensation Board

Executive Summary: Comprehensive Study Group 4 Tasks

Jan Lommele, FCAS, MAAA, FCA
Bob Miccolis, FCAS, MAAA

Deloitte Consulting LLP
December 2008

Deloitte.

Agenda

Introduction

Comprehensive Study Assessment Matrix

Executive Summary Conclusions

Next Steps

Appendix

Introduction

Introduction

Pursuant to House Bill 100, the BWC engaged Deloitte Consulting LLP (Deloitte) to perform a Comprehensive Study to:

Measure the performance of Ohio's workers' compensation system;

and

Compare Ohio's workers' compensation system to other state and private compensation systems.

Introduction

The Comprehensive Study includes 36 tasks described in the Actuarial Consulting Services RFP. Deloitte divided these tasks into the following categories:

- Pricing & Programs
- Loss Reserves
- Net Assets & Reinsurance
- Self-Insured Regulations
- Claims
- Underwriting
- Actuarial Department Functions & Resources

The categories organize the tasks detailed in the RFP into related work streams

Introduction

The tasks in the Comprehensive Study were prioritized and placed into 4 groups with the following scheduled completion dates:

Ranking	Areas Included	Completion Date
Group 1	Rating program review; rate setting; experience rating; group rating; MIRA/MIRA II case reserving; subrogation; self-insurance; SIEGF assessments; salary continuation; and $15,000 medical only program.	June 2008
Group 2	Benefit comparisons; administrative cost calculation; net asset levels; excess insurance/reinsurance needs; actuarial audit reserves and expected payments.	August 2008
Group 3	PES rate setting; retrospective rating; Safety Grant program; safety & hygiene programs; MCO effectiveness, medical payment structure comparison and other cost controls.	October 2008
Group 4	NCCI classification system; minimum premium; Coal-Workers Pneumoconiosis Fund; Marine Industry Fund; Disabled Workers' Relief Fund; change of employer experience rates; out-of-state employers experience rating; handicap reimbursement; vocational rehabilitation program; experience aggregation; and Actuarial Department organization.	December 2008

Comprehensive Study Assessment Matrix

Comprehensive Study Assessment Matrix

We are assessing the performance of the workers' compensation system for four overarching themes:

Effectiveness & Efficiency	How well does the Ohio workers' compensation system utilize its resources and administer benefits?
Financial Strength & Stability	Is the Ohio workers' compensation system fiscally sound? Does the system promote pricing stability?
Transparency	Can the public understand the workings of the Ohio workers' compensation system?
Ohio Economic Impact	Does the workers' compensation environment encourage business growth and development in Ohio?

Comprehensive Study Assessment Matrix

We have also mapped the various tasks in the RFP into several broad study elements:

- Ohio Benefit Structure
- Pricing Process
- Cost Controls
- Financial Provisions
- Actuarial Department Functions & Resources

The four themes can be overlaid onto Comprehensive Study Elements to create a matrix that displays their relationship.

Our performance assessment is made on each element in the context of its contribution to supporting the overarching themes.

Comprehensive Study Assessment Matrix

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Ohio Benefit Structure				
Pricing Process				
Cost Controls		**Conclusions**		
Financial Provisions				
Actuarial Dep't. Functions & Resources				

Note: Not all areas may involve specific conclusions/recommendations for each theme.

Comprehensive Study Assessment Matrix

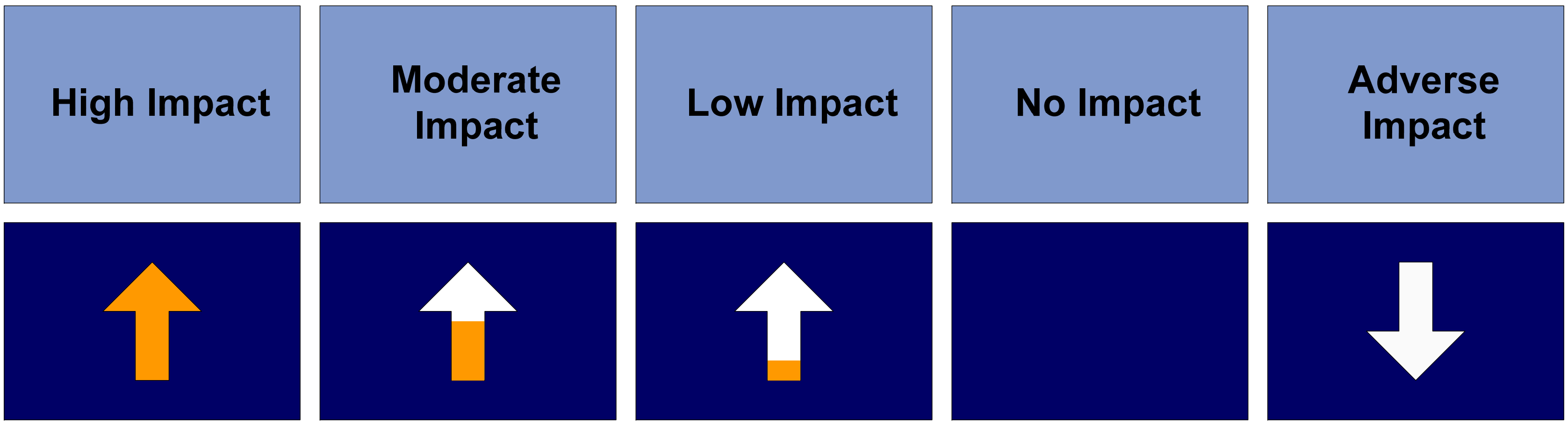
In the context of the matrix, we provide the following high level summary conclusions, performance assessments, and comparison notes.

For performance assessments, the following scoring method applies:

●	Strongly supports system performance
◕	Supports system performance
◑	Some support for system performance
◔	Some opportunity for system performance change/enhancement
○	Significant opportunity for system performance change/enhancement

Recommendation Impact

Our recommendations are provided for each area in priority order. The impact of each recommendation as it relates to each of the four overarching themes is also provided, using the following scoring method:



These indicators show how much impact each recommendation has relative to each theme area

Executive Summary
Conclusions

Executive Summary Conclusions

- Group 4 includes the following study elements:

Actuarial Department Functions & Resources	Pricing Process	Cost Controls
▪ Actuarial Department Organization	▪ NCCI Classification ▪ Experience Aggregation Approach ▪ Minimum Premium Review ▪ Change of Employer Experience Rates ▪ Out of State Employers Experience Rating ▪ Ancillary Funds (DWRF, MIF, CWPF)	▪ Vocational Rehabilitation Program

- For each sub-heading, we will present:
  - The background situation;
  - Review and analysis;
  - A performance assessment for each applicable theme as compared to peers and industry standards; and
  - Our conclusions.

Actuarial Organization

The Situation:

- Current law requires that BWC contract for one or more actuarial firms to perform actuarial services for the actuarial audit reserve, rate adequacy, program pricing reviews, and other matters.
- Also, House Bill 100 calls for one or more actuarial firms to assist in measuring the performance of Ohio's workers' compensation system and in comparing it to other state workers' compensation systems (Comprehensive Study).
- Currently, BWC has limited capacity to analyze data, trends and findings regarding rates, program pricing and reserving.
- Outside actuarial resources are used for most traditional actuarial functions, with limited internal review and analysis of findings.
- BWC is interested in expanding its capacity to perform more core actuarial functions internally.

Actuarial Organization

Review & Analysis:

Comparison to Prevailing Practices

	Ohio	Monopolistic	State Fund	Private Insurer
Actuarial Opinion	Not used	Outside	Outside	Internal
Reserve and Balance Sheet Analysis	Outside	Internal	Internal	Internal/Outside
Claim Analysis and Support	Not used	Not used	Internal	Not used
Pricing and Ratemaking	Outside	Internal/Outside	Internal	Internal
Experience and Retrospecitve Rating	Outside	Internal/Outside	Internal	Internal
Underwriting Support and Analysis	Not used	Not used	Internal	Internal
Data Management	Internal	Internal	Internal	Internal
Data Analytics and Mining	Not used	Not used	Outside	Outside
Predictive Modeling	Not used	Not used	Outside	Outside
Current Actuarial Staffing	**3***	**5**	**3 - 6**	**6 - 12**

Key:

Not used	Function not currently performed
Outside	Function performed by ouside resource
Internal	Function performed by internal resource
Internal/Outside	Function performed by internal resource, with review/second opinion from outside resource
Outside/Internal	Function performed by outside resource, with review/second opinion from internal resource

*BWC full time equivalents doing actuarial analyses. The organization chart on slide 21 additionally includes rating and rate adjustment responsibility.

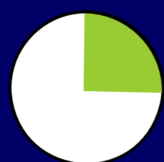
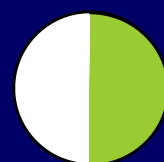
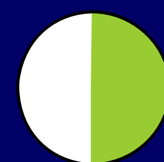
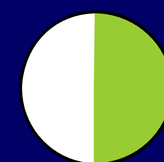
Actuarial Organization

Review & Analysis (continued):

- Typical practice in the industry is to offer a professional development program or support system to employees who are working towards becoming an Associate or Fellow in the Casualty Actuarial Society, including:
  - Study time, exam fees, study courses and study materials.
  - Rotational job opportunities.
  - Strong linkage between progress toward certification (e.g., exam passage) and base salary, salary increases, bonuses and promotion.
- For smaller companies or public entities, these programs are typically less formal or robust, but exist in some form.

Actuarial Organization

Performance Assessment

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Actuarial Organization				

Peers and Industry Standards Considered

Referenced Standards: State funds, industry practices, Deloitte experience

Actuarial Organization

Deloitte Conclusions:

Deloitte recommends:

- Expanding the BWC Actuarial Division to more effectively support its mission:
  – Significantly contribute to the ongoing assessment of the effectiveness and efficiency of the Ohio workers' compensation system.
  – Recommend and/or drive continuing efforts to improve the financial security and stability of the system.
- Expanding the BWC Actuarial Division responsibilities to:
  – Analyze and assess loss reserves and net asset level needs.
  – Establish appropriate rate levels and pricing programs.
  – Design and analyze programs.
  – Monitor and assess the impact of cost control efforts.
  – Analyze system benefits.
  – Ensure analysis is based on appropriate data and assumptions.

Actuarial Organization

Deloitte Conclusions (continued):

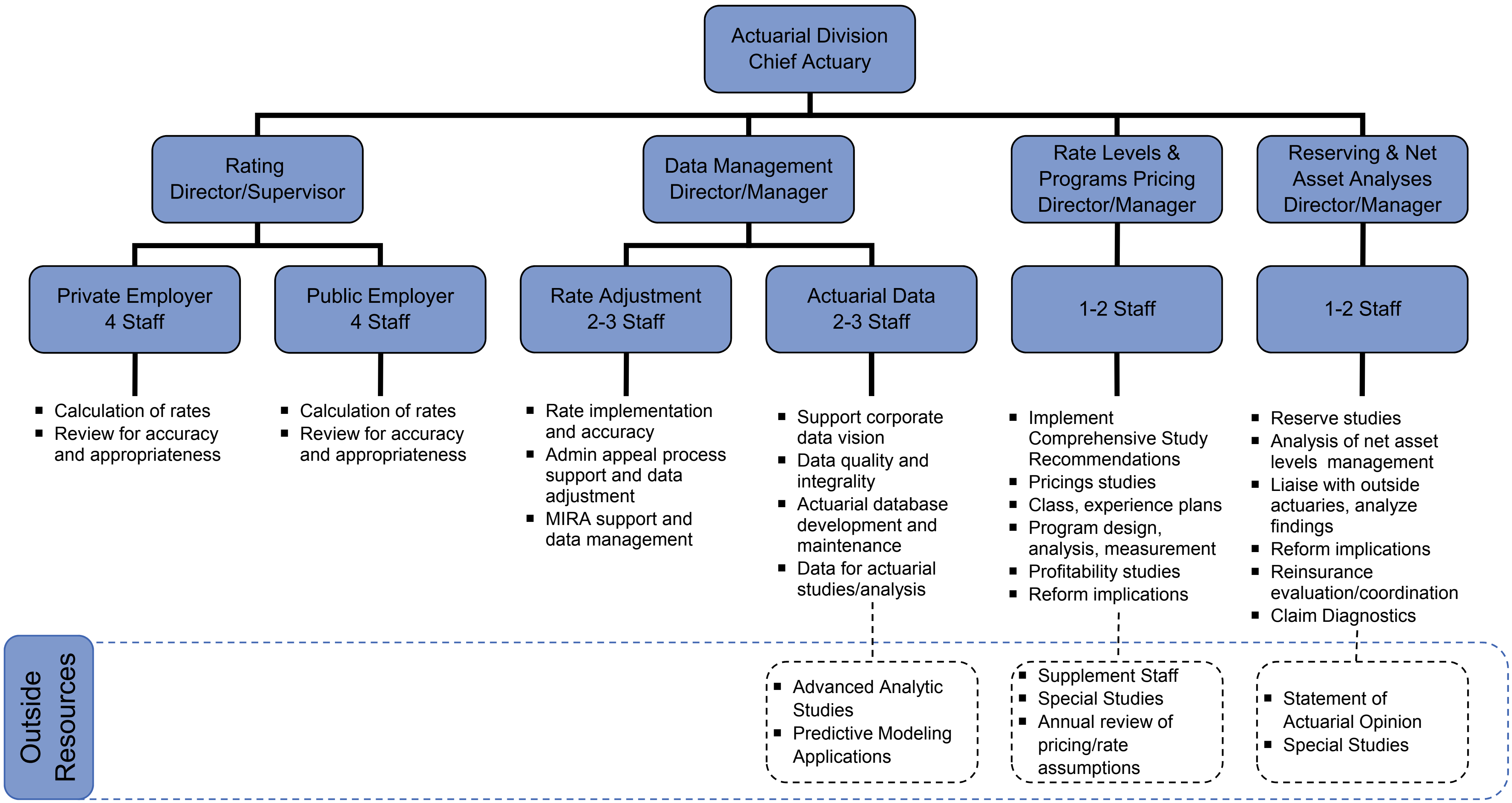
Deloitte recommends:

- Organizing around four functional areas reporting to the chief actuary:
  - Rate Levels & Programs Pricing
  - Reserving & Net Asset Analyses
  - Data Management
  - Rating
- Using external actuarial resources to:
  - Supplement BWC actuarial resources, perform special analysis or deeper review, provide industry perspective and specific expertise;
  - Provide independent review of pricing and rate assumptions and second opinion on reserves and net asset levels annually, to meet state and Board requirements; and
  - Provide additional controls or support for the actuarial functions.

Actuarial Organization

Deloitte Conclusions (continued):

Proposed Long Term Organization and Suggested Staff Levels:



Actuarial Organization

Deloitte Conclusions (continued):

Deloitte recommends:

- Initially, focusing on building core competencies and supporting efforts to advance the Ohio workers' compensation system:
  - Begin building in-house Rate Level & Programs Pricing capability.
  - Hire Director/Manager and staff, allowing BWC to address Comprehensive Study recommendations internally.
  - Fill Reserve & Net Assets Director/Manager position to build understanding / interpretation of outside actuarial studies.
  - Establish Data Management Group, develop vision and begin building processes and hiring staff for this group.
  - Leverage Rate Adjustment Team data knowledge and expertise.

Actuarial Organization

Deloitte Conclusions (continued):

Deloitte recommends:

- Initially, focusing on building core competencies and supporting efforts to advance the Ohio workers' compensation system - continued:
  - Rating Teams continue in current function; however, transition any support for data gathering, actuarial study review/validation to appropriate teams.
  - Over time, expand capacity to perform standard reserving and asset analyses, and build actuarial databases and tools, hiring staff as needed.
  - Communicate to the public, legislature, and the Workers' Compensation Commission to facilitate transparency and transfer of information on matters related to actuarial analysis.

Actuarial Organization

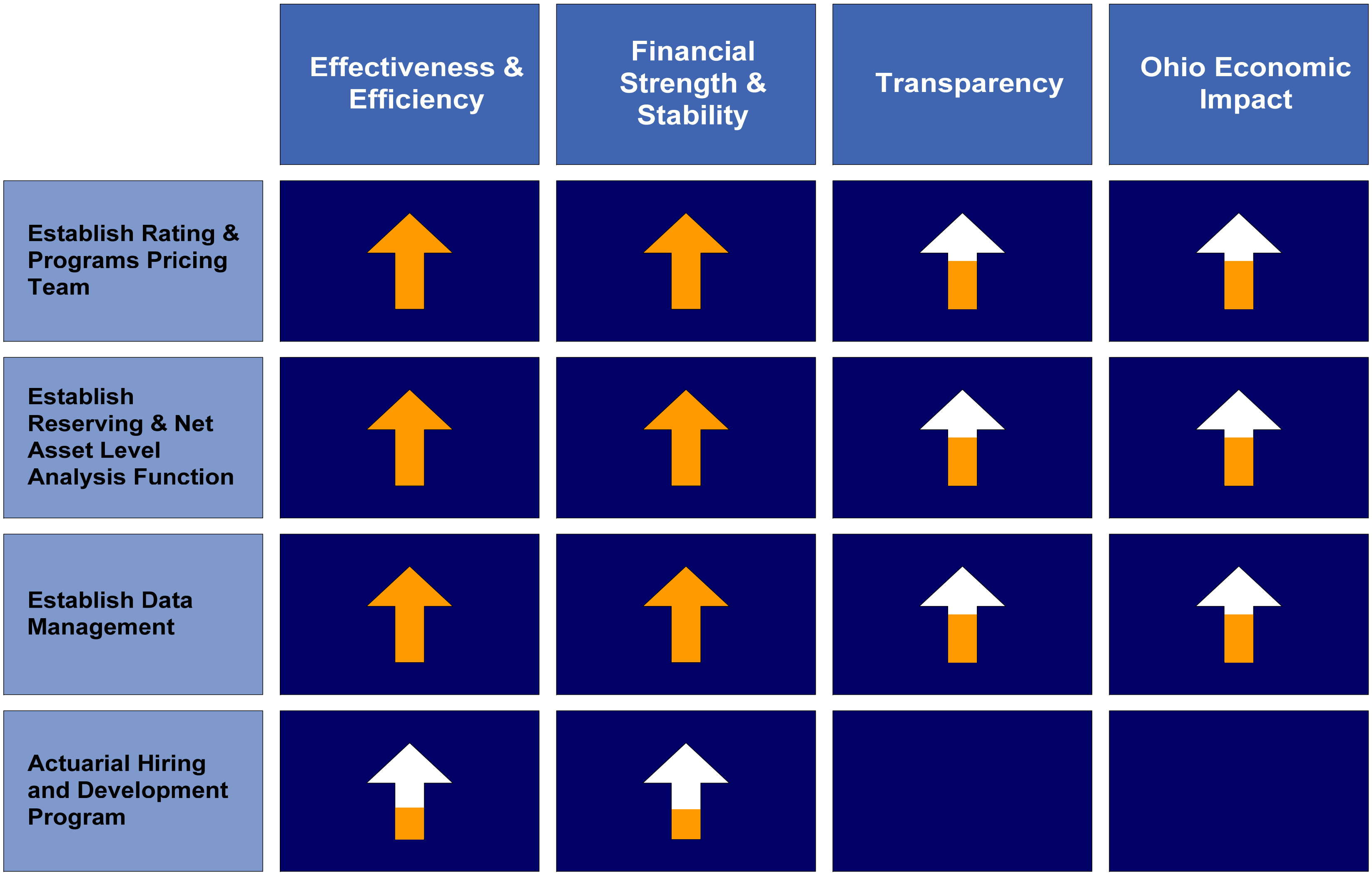
Deloitte Conclusions (continued):

Deloitte recommends:

- Establishing an actuarial hiring and development program to enhance the ability to attract and retain actuarial talent, which will:
  – Create a job classification(s) for actuarial students which support professional requirements regarding exam passage and training by including the requirement to study and sit for exams, balanced with job performance and capabilities.
  – Provide study materials and pay for exam fees.
  – Foster an environment that exposes staff to different projects and functions to replace formal rotational program.
  – Focus recruiting efforts to mitigate competition with large, established private employers that can provide enhanced programs and pay scale.
  – Emphasize benefits and quality of life aspects of BWC employment.

Actuarial Organization

Recommendation Impact



NCCI Classification System

The Situation:

- Ohio (BWC) has adopted the National Council of Compensation Insurance (“NCCI”) guidelines for the purposes of assigning classifications to employers.
- BWC has largely adopted the NCCI classification system in a manner consistent with other states.
- The use of the NCCI classification system provides a useful means of comparing Ohio’s rates to those of other states, as most states and companies also use the NCCI system.

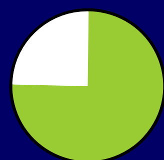
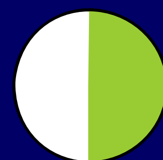
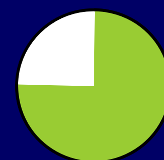
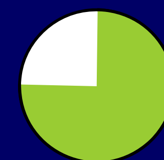
NCCI Classification System

Review & Analysis:

- **Public Taxing Districts**
  - BWC has 14 “state special” codes for public taxing districts.
  - The state specials generally do not differentiate employees by occupation hazard.
  - Instead, the state specials differentiate between city vs. village vs. county, etc.
- **Construction Classes**
  - For NCCI construction classes, BWC has a higher proportion of payroll in a low loss cost class than expected - 14% of construction payroll in class 5605 (Construction Estimators) and 5% in class 5606 (Construction Managers)
  - These classes have much lower loss costs than other construction classes.
  - This is a potential payroll audit issue for misallocation of payrolls to lower cost classes.
- **Premium Auditing Function**
  - BWC’s policy and procedures for premium auditing are well documented based on a comparison to industry and other state funds.
  - BWC has audited approximately 30,000 employers since April, 2006 compared to approximately 300,000 employers in Ohio.
  - This is a much lower proportion compared to typical industry practice.

NCCI Classification System

Performance Assessment

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
NCCI Classification System				

Peers and Industry Standards Considered

Peers: Oregon, Utah, other NCCI states

NCCI Classification System

Deloitte Conclusions:

Deloitte recommends:

- **Public Taxing Districts**
  - Using NCCI class codes for municipal workers by employee job class which would allow for greater differentiation in the relative hazard based on the payrolls for each employee job class, replacing the 14 state specials currently in use.
- **Construction Classes**
  - Designing and implementing audit procedures to ensure that only appropriate payroll is coded to 5605 and 5606, the low loss cost classes within Construction.
- **Premium Audit Function**
  - Establishing specific audit objectives, including developing an expanded approach to audit most employers every three to five years, possibly more frequently (every one to two years) for large employers and certain other types of employers.
  - Increasing the scope of the premium audit function to introduce different levels of audits (telephone, by mail, physical) and more focused or targeted audits.
  - Developing an audit scoring system as a tool to prioritize potential audits by employer and to improve effectiveness and efficiency of premium audit resources.

NCCI Classification System

Recommendation Impact

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Consider Using NCCI Class Codes for Public Taxing Districts	↑	↑	↑	↑
Monitor Procedures used to Code Construction Classes	↑	↑		↑
Establish Specific Premium Audit Guidelines	↑	↑		↑
Increase Scope of Premium Audit Function	↑	↑		↑
Consider an Audit Scoring Tool to Prioritize Audits	↑	↑		↑

Experience Aggregation Approach

The Situation:

- BWC does not apply the common majority ownership principle in defining an individual employer for experience rating.
- Entities are "tracked" and assigned for experience rating purposes primarily based upon their federal tax identification numbers.
- The claims experience of commonly owned but separate businesses is not combined.
- Typical industry practice is to combine such experience and to apply the principle of common majority ownership in defining employers for experience rating purposes, rather than federal tax identification number.

Experience Aggregation Approach

Review & Analysis:

- One concern with the current approach is the potential for abuse from using tax identification numbers to define an employer rather than common majority ownership.
- Employers with poor experience resulting in an experience rating debit have an incentive to create business/ownership structures in order to become base rated.
- However, in cases of partial or whole succession, BWC does transfer experience to the succeeding or acquiring entity.

Experience Aggregation Approach

Performance Assessment

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Experience Aggregation Approach				

Peers and Industry Standards Considered

Referenced Standards: NCCI Experience Rating Manual

Experience Aggregation Approach

Deloitte Conclusions:

Deloitte recommends:

- Adopting the common industry approach of capturing common majority ownership and aggregate data of private entities for experience rating.
- Discontinuing the current practice of relying primarily on the federal tax identification number to identify separate employers.

Experience Aggregation Approach

Recommendation Impact

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Use NCCI Approach of Common Majority Ownership for Experience Rating	↑	↑	↑	↑

Minimum Premium Review

The Situation:

- For accounts that do not report payroll, a minimum premium of $50 is charged for each six months of coverage.
- Similarly, for those accounts that do report payroll, but for which calculated premium is less than $50, the minimum premium of $50 is charged for each six months of coverage.
- Minimum premium levels in the industry typically range from $500 to $750 for a 12 month period of coverage and can vary by primary class.

Minimum Premium Review

Review & Analysis:

- Minimum premium accounts have had very high loss ratios since 2003, when the minimum premium was $10 per six months of coverage.

Policy Period	Minimum Premium Amount	Policy Count	Premium	Claim Count	Incurred Loss	Loss Ratio
1/1/2003	10	65,825	658,250	343	9,011,609	1369.0%
7/1/2003	10	64,406	644,060	351	8,997,300	1397.0%
1/1/2004	10	69,743	697,430	380	7,437,931	1066.5%
7/1/2004	10	67,210	672,100	303	4,788,673	712.5%
1/1/2005	10	71,012	710,120	274	5,049,070	711.0%
7/1/2005	10	68,177	681,770	310	5,048,506	740.5%
1/1/2006	10	70,273	702,730	319	4,518,260	643.0%
7/1/2006	50	79,555	3,977,750	357	6,664,485	167.5%
1/1/2007	50	78,424	3,921,200	377	4,891,822	124.8%
7/1/2007	50	72,245	3,612,250	380	5,572,541	154.3%
Totals			16,277,660		61,980,197	380.8%

- BWC would need to charge a minimum premium of approximately $75 - $100 per 6 month period in order to cover the level of past losses associated with minimum premium accounts.

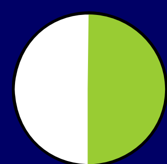
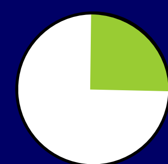
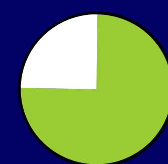
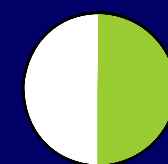
Minimum Premium Review

Review & Analysis (continued):

- There are typically 200 to 300 minimum premium accounts in each 6 month period that have claims.
- Since April, 2006, 292 payroll audits have been performed on these accounts.

Minimum Premium Review

Performance Assessment

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Minimum Premium Review				

Peers and Industry Standards Considered

Peers: Other NCCI states

Minimum Premium Review

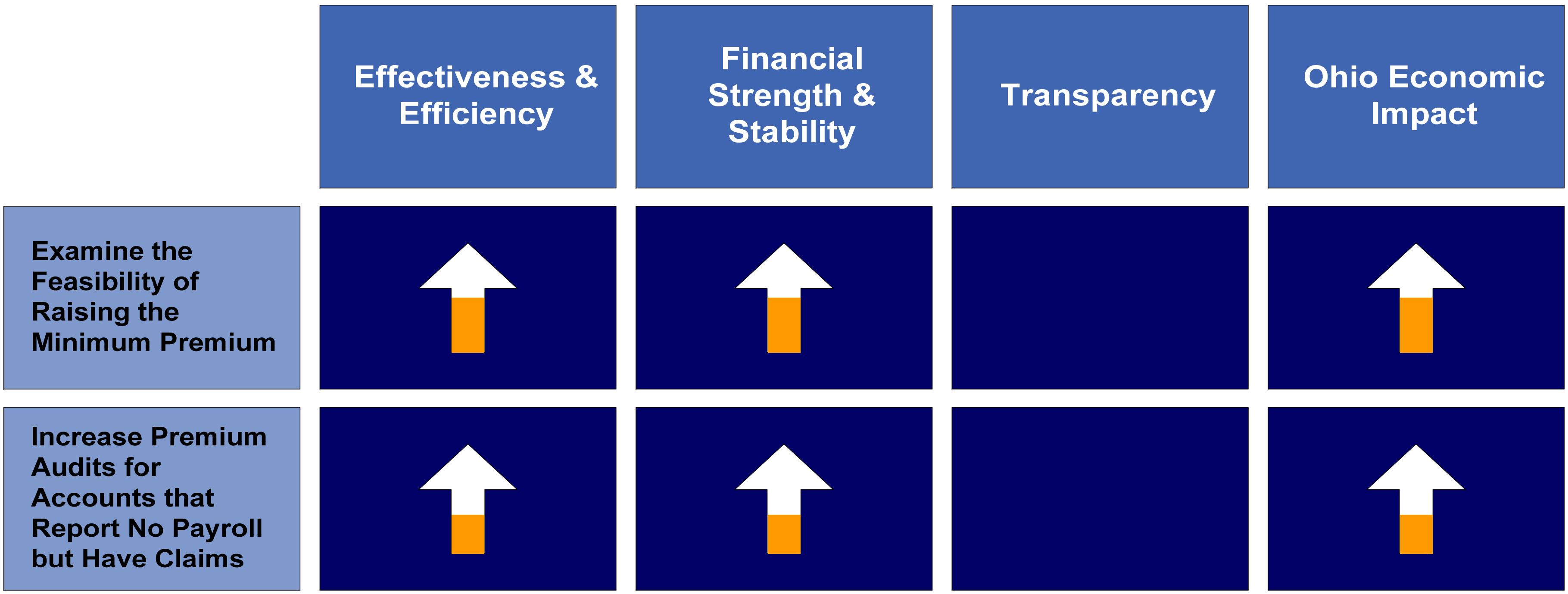
Deloitte Conclusions:

Deloitte recommends:

- Examining the feasibility of raising the minimum premiums to a level that is more in line with expected losses and with industry minimum premium levels, possibly with some differences by class. A phase-in of increases in minimums may be appropriate.
- BWC needs to conduct further analysis on the characteristics of employers who pay the minimum premium.
- Increasing the involvement of the premium audit function with respect to accounts with no payroll, but have claims.
- Performing some level of audit aimed at evaluating the possibility of fraud and to help determine whether the minimum premium levels are appropriate.

Minimum Premium Review

Recommendation Impact



Ancillary Funds (DWRF, MIF, and CWPF)

The Situation:

- The Disabled Workers Relief Fund (DWRF) provides supplementary payments to workers whose combined permanent total disability (PTD) plus Social Security Disability benefits are lower than a specified entitlement amount, which is indexed to the CPI each year.
- The Marine Insurance Fund (MIF) insures maritime employers from exposure arising from Federal USL&H.
- The Coal Workers Pneumoconiosis Fund (CWPF) insures employers with mining operations from exposure to black lung claims subject to federal benefits.
- The independent actuary prepares annual rate recommendations for the DWRF, MIF, and CWPF.

Ancillary Funds (DWRF, MIF, and CWPF)

Review & Analysis - DWRF:

- DWRF revenue is derived from assessments on employers' payrolls or premiums.
- Two separate assessments are applied to employers, one related to accidents occurring prior to 1987 ("DWRF I") and another for accidents occurring in 1987 and subsequent ("DWRF II").
- DWRF I assessments are based on a rate applied to the employer's payroll.
- This rate is limited by current law to no more than $0.10 per $100 of payroll.
- DWRF II assessments are based on a rate applied to the employer's base-rated premium.

Ancillary Funds (DWRF, MIF, and CWPF)

Review & Analysis – DWRF (continued):

- Under current law, DWRF is funded on a pay-as-you-go basis.
- Assessments are typically based on projected payments for the next 12 months.
- House Bill 100 permits BWC to assess employers in future periods for amounts needed to fund DWRF.
- As a result, BWC reflects an asset for unbilled assessments receivable in both the June 30, 2007 and June 30, 2008 financial statements.
- The amount of the unbilled assessments receivable is approximately $1.6 billion as of June 30, 2007 and $1.5 billion as of June 30, 2008.
- The net assets of DWRF are $800 million as of June 30, 2007 and $849 million as of June 30, 2008.
- Consequently, without the accrual for the unbilled assessments receivable, DWRF would be in a significant deficit position of $650 million as of June 30, 2008.

Ancillary Funds (DWRF, MIF, and CWPF)

Review & Analysis – DWRF (continued):

- The asset of $1.5 billion on BWC’s balance sheet for unbilled assessments is based on BWC’s statutory right to assess employers in future periods for DWRF funding.
- It is our understanding that there is no corresponding liability reflected on the balance sheet of employers who will be subject to these assessments.
- Therefore, considering the state of Ohio as a whole, there is an unrecognized obligation of employers for their collective potential future premium liability related to this Fund equal to $1.5 billion.

Ancillary Funds (DWRF, MIF, and CWPF)

Review & Analysis – DWRF (continued):

- For the past several fiscal years prior to June 30, 2008, receipts have exceeded disbursements related to DWRF I benefits (see table).

Fiscal Year ending	DWRF I Receipts	DWRF I Disbursements
June 30, 2005	109,890	102,316
June 30, 2006	111,717	101,298
June 30, 2007	107,318	95,416
June 30, 2008	110,849	92,584

- As a result, reductions in the assessment rate for DWRF I have been recommended.
- For DWRF II, where the indicated assessment rate (0.7% of base premium) is higher than the actual rate (0.1% of base premium), no change has been recommended in the assessment rate.

Ancillary Funds (DWRF, MIF, and CWPF)

Review & Analysis – MIF:

- The MIF is funded by premiums that are intended to be sufficient to cover incurred losses and all outstanding liability for unpaid claims.
- The premium and loss experience of the MIF is presented below.

Marine Industry Fund - Results as of 12/31/07
Dollars in Thousands

Accident Year	Earned Premium	Earned Premium at 7/1/07 Rates	Discounted Incurred Losses as of 12/31/07
1995	1,439	1,025	1,104
1996	986	703	777
1997	777	583	390
1998	732	579	180
1999	762	604	297
2000	719	570	138
2001	701	555	17
2002	752	595	3
2003	825	653	108
2004	819	690	952
2005	799	719	-
2006	677	641	337

- As can be seen above, premium has exceeded discounted incurred losses in all years from 1995 to 2006 with the exception of 2004.

Ancillary Funds (DWRF, MIF, and CWPF)

Review & Analysis – MIF (continued):

- Rates have been reduced several times from 1995 to 2007, including a 10% decrease effective 7/1/97, a 12% decrease effective 7/1/05, and a 10% decrease effective 7/1/07.
- In the 7/1/08 rate analysis for the MIF, two scenarios are presented, which indicate rate changes of -27% and -48%.
- As a result of this analysis, and the likely variability of results from year to year, the recommended rate change was 0% to -20%.
- This is consistent with the rate analysis from prior years, in which large decreases were indicated and the rate change recommendation reflected a smaller, or no rate change.

Ancillary Funds (DWRF, MIF, and CWPF)

Review & Analysis – CWPF:

- The history of the CWPF is shown below:

Coal Workers Pneumoconiosis Fund
Dollars in Thousands

Year	Assets	Liabilities	Fund Balance	Loss+LAE Reserves	Premiums
1997	141,647	43,357	98,290	34,500	264
1998	149,317	35,858	113,459	35,600	260
1999	148,102	37,043	111,059	36,782	(16)
2000	152,326	38,249	114,077	38,021	3
2001	187,512	53,271	134,241	37,026	-
2002	186,115	50,758	135,257	50,190	1,232
2003	211,290	63,398	147,891	52,600	267
2004	220,527	68,809	151,718	55,700	256
2005	224,739	63,320	161,419	57,500	824
2006	221,894	61,756	160,138	61,100	921

- The net assets of the CWPF have been generally increasing over time.
- This is despite the fact that the BWC has collected premium only for new employers seeking coverage from the CWPF for the past several years, and for a period of time collected no premium at all.

Ancillary Funds (DWRF, MIF, and CWPF)

Review & Analysis – CWPF (continued):

- There is currently a recommendation to continue the practice of charging premium only to new employers, due to the relatively large net assets in the CWPF.
- As a result of this practice, BWC has been collecting premium that is less than the expected losses for the past several years.
- Estimated discounted ultimate losses for the CWPF average approximately $1.5 million each year, and annual premiums have averaged approximately $700 thousand for the past five years.
- Net assets have grown despite this fact due to the investment income generated by the existing asset base, which exceeds the shortfall in annual premium accumulated over the past several years.

Ancillary Funds (DWRF, MIF, and CWPF)

Performance Assessment

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Rating (DWRF)	◔	○	◔	◔
Rating (MIF)	◑	◑	◑	◑
Rating (CWPF)	◑	●	◑	◑

Peers and Industry Standards Considered

Peers: NCCI
Referenced Standards: Statement of Principles Regarding Property and Casualty Ratemaking and Actuarial Standards of Practice

Ancillary Funds (DWRF, MIF, and CWPF)

Deloitte Conclusions - DWRF:

Deloitte recommends:

- Addressing the large amount of unrecognized and unfunded obligations, including possible long term funding.
- Changing the legislation that requires DWRF to operate as on a pay-as-you-go basis to something more supportive of reducing DWRF's unfunded obligations over time.
- Setting the DWRF assessment rates at a level to cover the expected payments for the upcoming year and possibly additional amounts to reduce the burden to future employers for the DWRF unfunded liability.
- Establishing a good, clear, and long term public policy rationale for the funding of these benefits.
- Establishing a policy rationale that also addresses the issues of fairness and equity between past, current and future employers, who pay the assessments for the DWRF benefits.

Ancillary Funds (DWRF, MIF, and CWPF)

Deloitte Conclusions – MIF:

- When rates appear to be redundant, it is appropriate to exercise prudence in reducing rates by small amounts, given the potential for large claims relative to the small annual premium volume.
- The current methodology and recommended rate changes for the MIF are appropriate.

Ancillary Funds (DWRF, MIF, and CWPF)

Deloitte Conclusions – CWPF:

- The rationale for current approach to charge CWPF premiums less than expected losses appears to be justified by the relatively high level of net assets and associated investment income in the CWPF.
- The rationale for this practice is understandable from the perspective of the practicality of only charging new employers who have not paid in previously.
- However, while the net assets of the CWPF appear to be more than sufficient to meet the obligations of that fund, the current practice of only charging premium to new employers can create issues of equity and fairness among past, current, and future employers who need this coverage.

Ancillary Funds (DWRF, MIF, and CWPF)

Deloitte Conclusions – CWPF (continued):

Deloitte recommends:

- Charging some premium to both on-going and new employers seeking this coverage, perhaps with appropriate reductions, credits or dividends for employers who have paid into CWPF for a long time.

Ancillary Funds (DWRF, MIF, and CWPF)

Deloitte Conclusions – DWRF, MIF, and CWPF:

Deloitte recommends:

- Reconsidering whether DWRF, MIF and CWPF should be separate funds or be combined with the SIF, noting that:
  - Separate funds create an obligation for the BWC to manage them separately, creating duplicative processes.
  - Separate funds also create additional responsibilities to manage the risks to each fund and to maintain each fund's financial strength and stability, which could be better accomplished under a combined fund.
- Evaluating the continued need and relevance of separate funds, and how combining or closing a fund could be done.
- Conducting further research to support possible legislative change to combine the funds of BWC.
- Developing a funding policy for DWRF, MIF and CWPF as separate funds, similar to our recommendations for SIF.

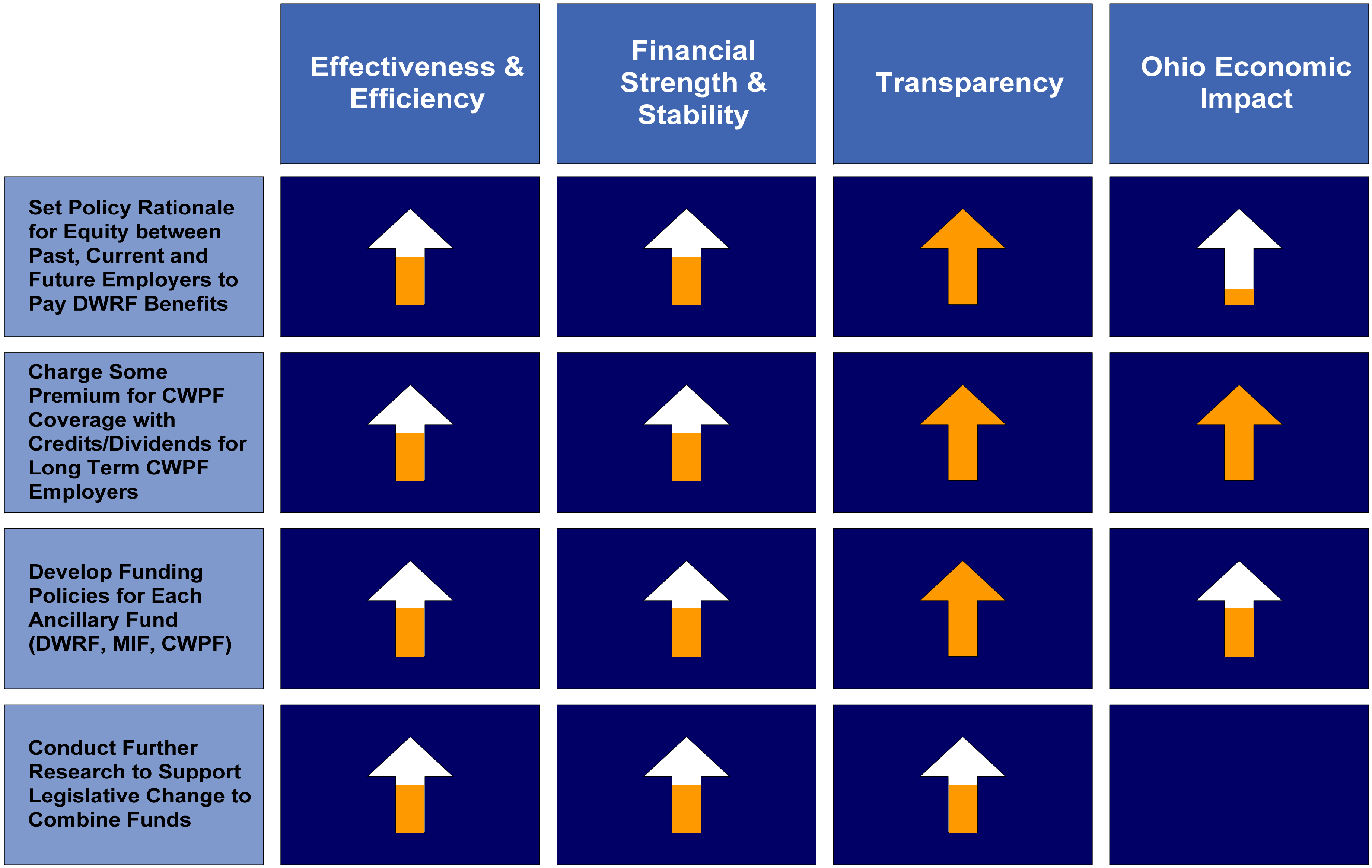
Ancillary Funds (DWRF, MIF, and CWPF)

Recommendation Impact

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Set DWRF Rates to Meet Payments and Reduce Burden to Future Employers for DWRF Benefits	↑	↑	↑	↑
Address Large Unfunded Obligation Including Possible Long Term Funding	↑	↑	↑	↑
Change DWRF from Pay-AsYou-Go Basis to Support Reducing Unfunded Obligations	↑	↑	↑	↑
Establish a Good, Clear, and Long Term Rationale for Funding DWRF Benefits.	↑	↑	↑	↑

Ancillary Funds (DWRF, MIF, and CWPF)

Recommendation Impact (continued)



Change of Employer Experience Rates

The Situation:

- Employers experience rating modification factor is changed retroactively based on certain changes to claims, e.g., a subrogation recovery on a claim, handicapped claims, fraudulent claims, dismissed claims, and disallowed claims.
- Some of these retroactive changes to an employer's experience rating have no time constraint or have a long extended reporting period.
- Current practice involves the recalculation of an employer's experience rating factors for prior years and affected employers receive a premium refund adjustment for each prior year impacted.
- Other WC state funds do not make such retroactive adjustments to experience rating; nor do the NCCI guidelines permit such practice.
- Under BWC's current process, there are very few retroactive adjustments for increases in claim values.
- BWC can make retroactive adjustments that increase premiums, e.g., to include an acquisition that was not reported when required.

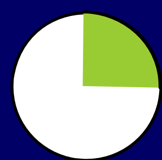
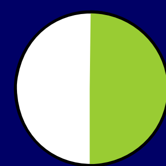
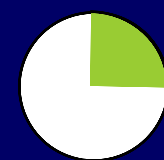
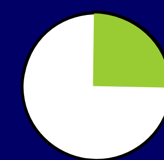
Change of Employer Experience Rates

Review & Analysis:

- The current rules and procedures are structured to produce recalculations that typically result in premium refunds for past years or reductions for the current year.
- The premium refunds or reductions from these recalculations are used by BWC in estimating a “premium slippage” factor that is included in the base rates.
- Our research found no comparable practice in the industry that recalculates an experience modification based on these types of changes in claim values which would change premiums for a previous year. However, it is common practice if an employer finds an error in a claim value, they would normally have some finite period of time to ask for a correction of that error.

Change of Employer Experience Rates

Performance Assessment

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Change of Employer Experience Rates				

Industry Standards Considered

Referenced Standards: Other WC Monopolistic State Funds, NCCI

Information Sources: BWC State Fund Manual, BWC staff interviews, process documentation

Change of Employer Experience Rates

Deloitte Conclusions:

Deloitte recommends:

- Eliminating or restricting changes in an employer experience rate for prior years due to subrogation recoveries, handicapped claims, fraudulent claims, dismissed claims, disallowed claims, or other factors.
- Restricting the time period for the reporting of errors for changes to employer experience rates to follow typical industry practice.
- Establishing shorter and more clearly defined time constraints, similar to industry practices elsewhere, to replace current rules where there is no time constraint or an extended reporting period.

Change of Employer Experience Rates

Recommendation Impact

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Eliminate / Restrict Changes to Employer Rates Due to Changes in Claims	↑	↑	↑	↑
Establish Shorter and Clearly Defined Time Constraints, and Restrict Time to Report Errors	↑	↑	↑	↑

Out-of-State Employer Experience Rating

The Situation:

- Current language in the State Fund Manual contains payroll requirements for experience rating – a company which is new to Ohio can use projected Ohio payrolls to qualify for using a non-Ohio experience rating factor for their Ohio business.
- Other monopolistic states and the NCCI have a premium level requirement, time in business requirement, or a combination of these two to qualify for experience rating. Ohio is the only state that uses expected losses as a requirement to qualify for experience rating.
- Compared to other monopolistic states, Ohio is the only state to allow the use of an out-of-state experience modification factor for determining the premium of an employer who is new to that state.

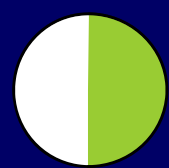
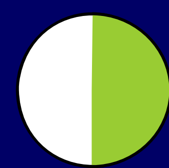
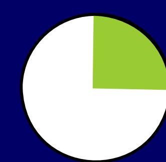
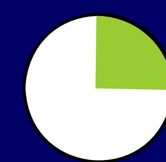
Out-of-State Employer Experience Rating

Review & Analysis:

- In other states, out-of-state experience is only used for experience rating as part of the NCCI interstate experience rating plan. Many non-NCCI states, such as PA, DE, and CA, have intra-state experience rating plans that only use an employer's in-state claims experience.
- Several technical and practical issues arise when using out-of-state experience to determine an experience rate for premiums appropriate for in-state exposures, such as:
  - An employer's out-of-state operations can be much different than in-state, e.g., sales or distribution in one state, but manufacturing in another.
  - An employer may own different types of businesses in different states.
  - WC benefits follow laws, courts, and rules which differ by state.
- The NCCI interstate rating plan is predicated on one insurer who will be providing coverage for the employer in all of the states where that employer's claims experience was used for the experience rating.

Out-of-State Employer Experience Rating

Performance Assessment

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Out-of-State Employer Experience Rating				

Peers and Industry Standards Considered

Peers: North Dakota, Washington, and Wyoming
Referenced Standards: NCCI experience rating convention, BWC State Fund Manual, interviews with BWC staff, and process documentation

Out-of-State Employer Experience Rating

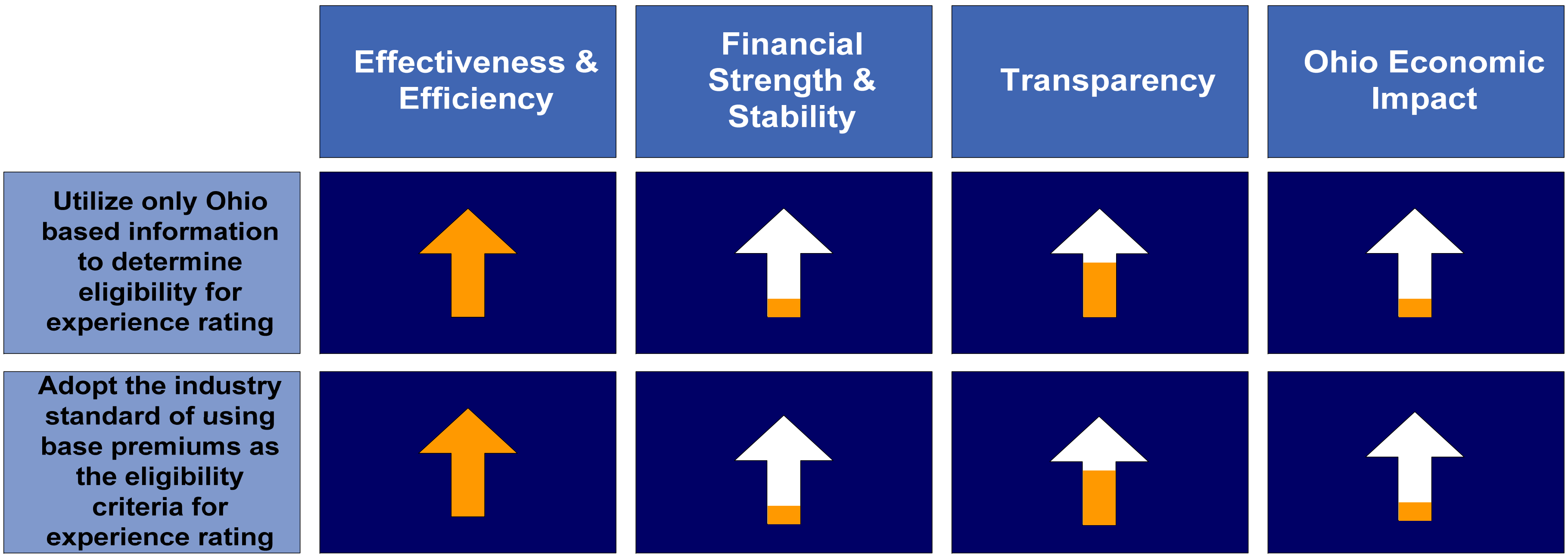
Deloitte Conclusions:

Deloitte recommends:

- Utilizing only the Ohio based information for experience rating in Ohio (including whether the Ohio exposure alone qualifies an employer for experience rating). Discontinue using out-of-state experience rating factors.
- Adopting the industry standard of using base premium level instead of expected losses as the eligibility criteria for experience rating and retaining the time frame requirement. Document the State Fund Manual with the specific amount of base premium required to qualify.

Out-of-State Employer Experience Rating

Recommendation Impact



Vocational Rehabilitation Program

The Situation:

- BWC offers vocational rehabilitation (“voc rehab”) to workers in order to accelerate the return-to-work process and reduce lost time claim costs.
- Injured workers who have stabilized are referred to a field case manager.
- The case manager is overseen by two parties: a disability management coordinator (“DMC”) from BWC, and an MCO.
- The DMC and MCO have the ability to authorize rehabilitation services.
- The role of the DMC is to oversee both the field case manager and the MCO.

Vocational Rehabilitation Program

Review & Analysis:

- As discussed in BWC's October, 2007 Internal Audit report, the structure of the voc rehab program potentially creates a conflict of interest for MCOs, due to the fact that there is no restriction against MCOs referring cases to affiliated companies.
- This is categorized as a material weakness in the Internal Audit report.

Vocational Rehabilitation Program

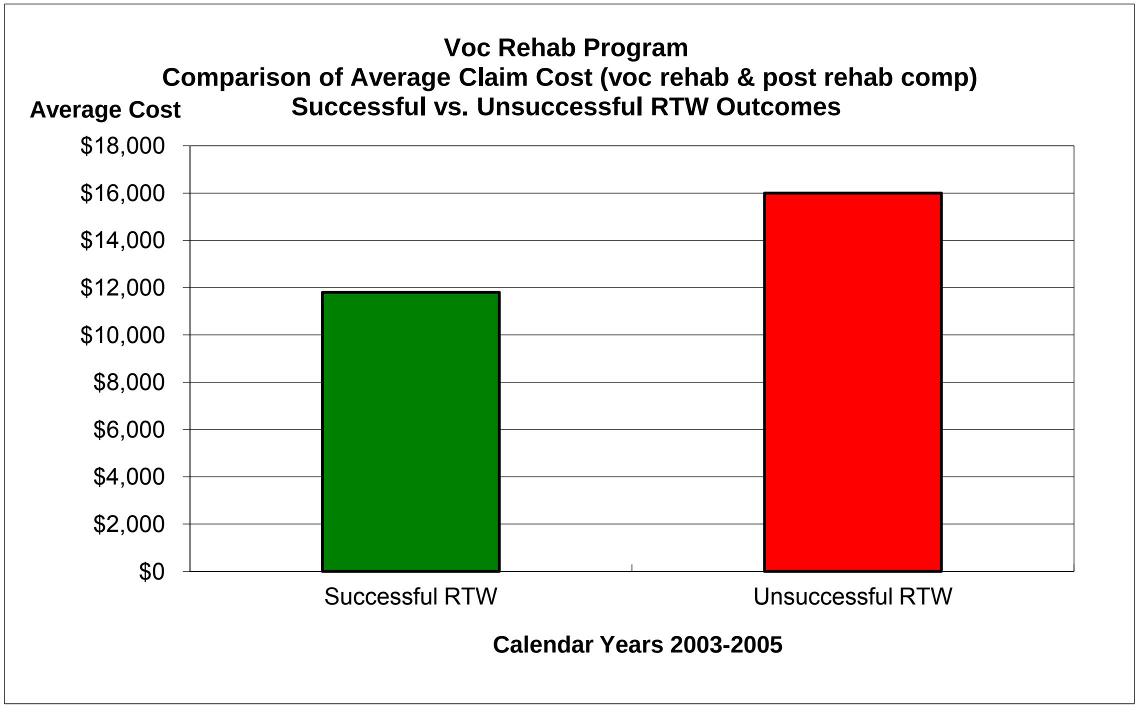
Review & Analysis (continued):

- Living Maintenance (LM) represents payments made to an injured worker in a voc rehab program.
- LM payments are generally equivalent to the temporary total indemnity that the worker would receive.
- To provide an incentive to use the voc rehab program, experience rating reflects reduced or excluded reserves.

Vocational Rehabilitation Program

Review & Analysis (continued):

- BWC conducted a study in 2007 to gauge the effectiveness of the voc rehab program. One of the key results is shown below:



- These results suggest that the voc rehab program has the intended effect of reducing future lost time claim costs when an employee successfully returns to work after participating in the program.

Vocational Rehabilitation Program

Performance Assessment

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Vocational Rehabilitation Program	◑	◑	◑	◑

Peers and Industry Standards Considered

Peers: State Comparisons - All for MCO participation, choice of physician, & Voc Rehab provisions; CA, HI, KS, MO, ND, TN, TX for use of ODG

Referenced Standards: State Laws, URAC, US Dept. of Labor, NAIC

Vocational Rehabilitation Program

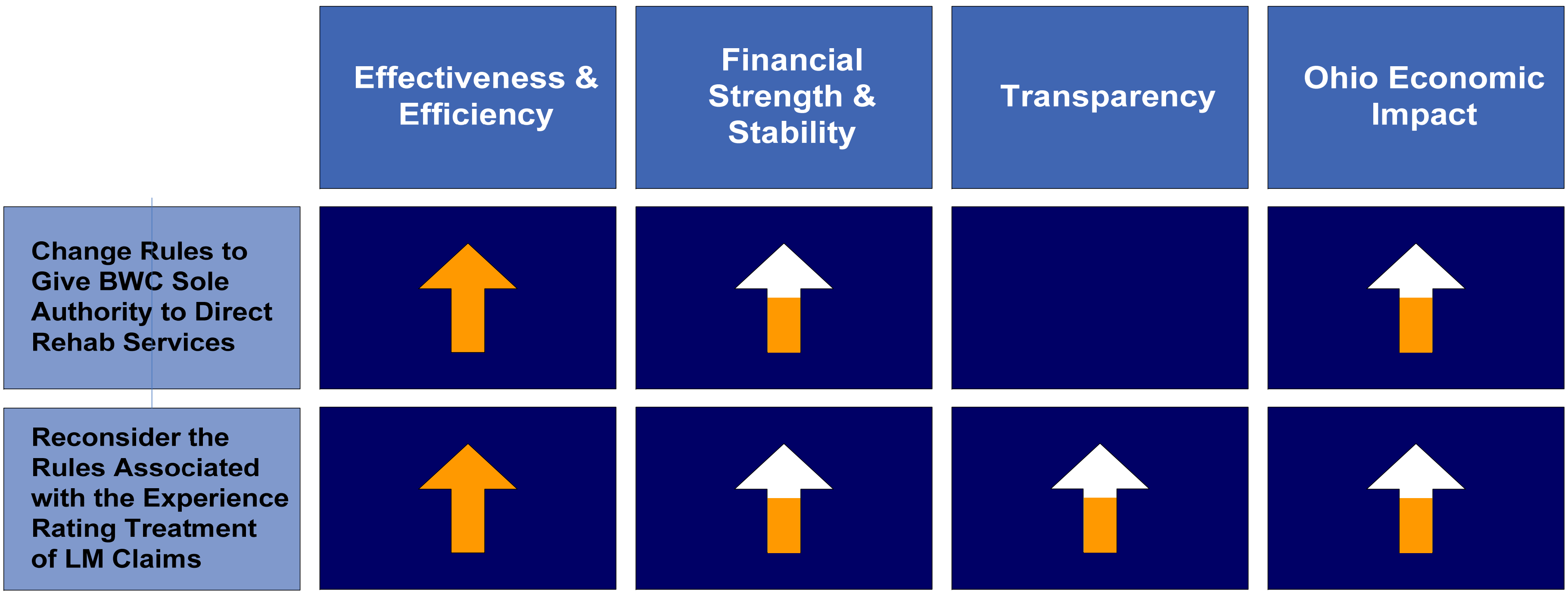
Deloitte Conclusions:

Deloitte recommends:

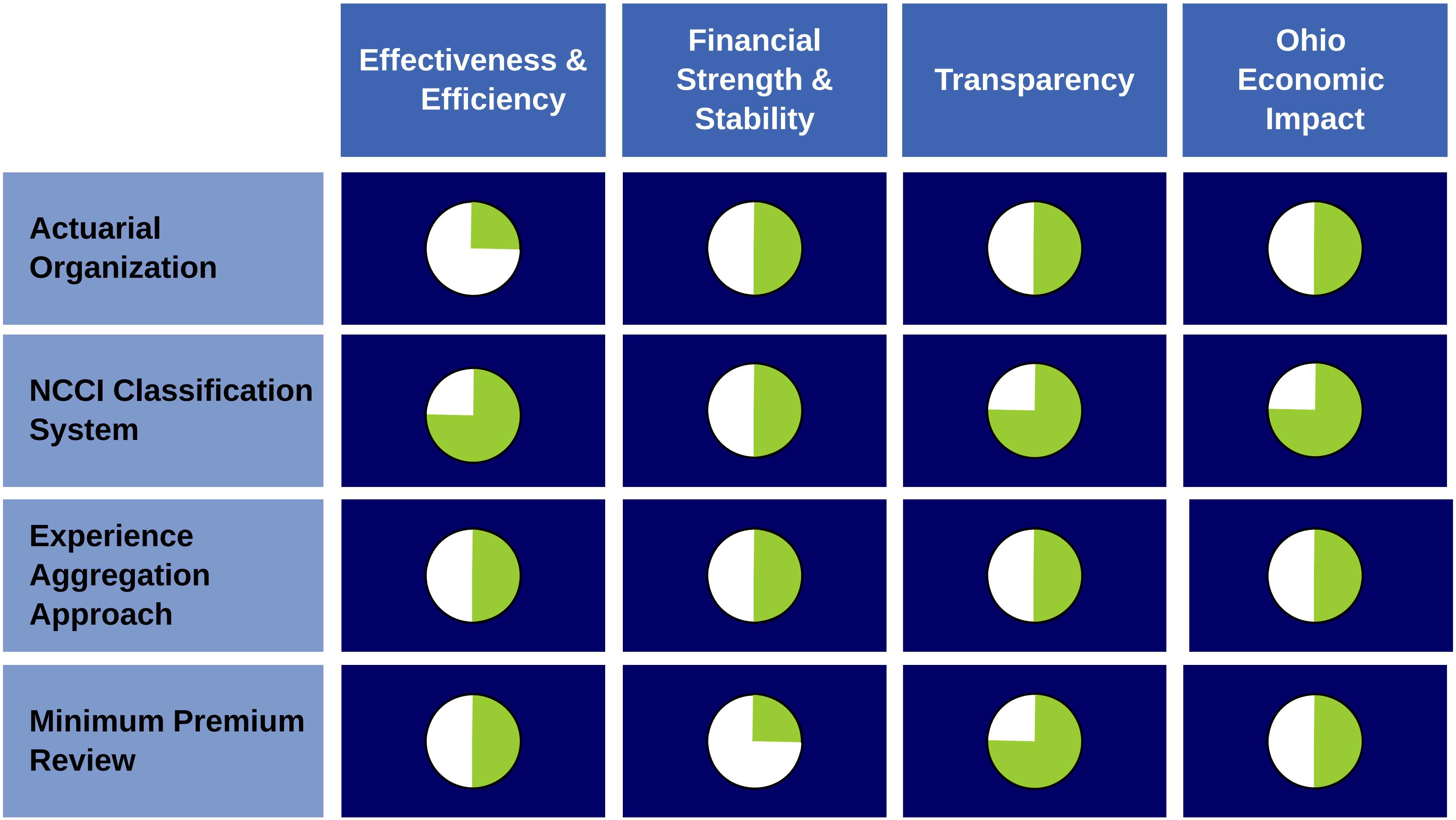
- Changing the rules to give BWC sole authority for recommending rehabilitation services.
- Reconsidering the rules associated with the experience rating treatment of LM claims.

Vocational Rehabilitation Program

Recommendation Impact



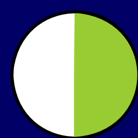
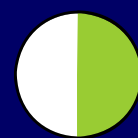
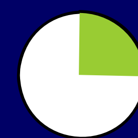
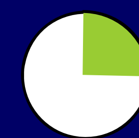
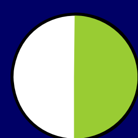
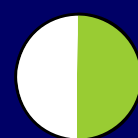
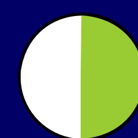
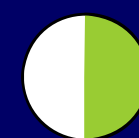
Performance Assessment Summary



Performance Assessment Summary

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Ancillary Funds (DWRF)	◔	○	◔	◔
Ancillary Funds (MIF)	◑	◑	◑	◑
Ancillary Funds (CWPF)	◑	●	◑	◑
Change of Employer Experience Rates	◔	◑	◔	◔

Performance Assessment Summary

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Out-of-State Employer Experience Rating				
Vocational Rehabilitation Program				

Performance Assessment Summary

Overarching Themes

Effectiveness & Efficiency	How well does the Ohio workers' compensation system utilize its resources and administer benefits?
Financial Strength & Stability	Is the Ohio workers' compensation system fiscally sound? Does the system promote pricing stability?
Transparency	Can the public understand the workings of the Ohio workers' compensation system?
Ohio Economic Impact	Does the workers' compensation environment encourage business growth and development in Ohio?

Scoring Method

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

Next Steps

Next Steps

- Finalize documentation of the findings.
- Develop summary of findings from all tasks.
- Provide suggested prioritization of recommendations.

Appendix

Group 4 Study Elements

Actuarial Department Functions & Resources

1) Actuarial Department Organization

Pricing Process

Individual Rate Calculation

1) Private Employer
2) Rating Rules and Laws
   a. Administrative Appeals
   b. Out-of-State Coming in

Minimum Administrative Premium

Alternative Pricing Methods (Including NCCI Classes)

Ancillary Funds

1) Coal Workers Pneumoconiosis
2) Marine Industry
3) Disabled Workers Relief

Cost Controls

1) Rehabilitation Program

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Actuarial Department Area

Actuarial Department Functions & Resources	Tasks Involved
1) Actuarial Department Organization	36. Compare and analyze the organization and the structure of the BWC's actuarial department to industry standards. This analysis should compare the BWC's actuarial department organization, structure, and staffing levels to industry standards, other state insurance funds and monopolistic state insurance funds.

Pricing Process Areas

Individual Rate Calculation	Tasks Involved
1) Private Employer	32. Evaluate and assess the experience aggregation approach used by the BWC compared to industry standards. The BWC currently tracks entities at the tax identification level versus a common or majority ownership of the company. This evaluation would identify industry standards in tracking employer ownership.
2) Rating Rules and laws	14. Evaluate the changing of individual employer rates due to administrative appeals or clerical errors by the BWC. This evaluation would include a review of the rating rules and appeals process for employers. This analysis should include information on industry standards and process. 16. Evaluate the BWC rules, laws, policies and procedures for rating and employer who is operating in another state and requests to be rated in Ohio. This evaluation would include the experience modifier selected, the use of other states experience, and the future liability for Ohio.

Pricing Process Areas - continued

Minimum Administrative Premium	Tasks Involved
1) Minimum Administrative Premium	5. Conduct an evaluation of the minimum administrative premium charged to employers operating in Ohio for worker's compensation coverage. This evaluation should determine the minimum acceptable amount of premium that should be charged to employers in Ohio to bind coverage and to cover expected losses.

Pricing Process Areas - continued

Alternative Pricing Methods	Tasks Involved
1) Alternative Pricing Methods (including NCCI classes)	3. Review and make written recommendation of the BWC's use of the National Council on Compensation Insurance (NCCI) manual classification system for rating classifications. This review would include but not be limited to analysis of the assignment of classifications to employers, the process of employer's reporting payroll, the premium auditing process and the procedures for non-reporting of payroll.

Pricing Process Areas - continued

Alternative Pricing Methods	Tasks Involved
1. Alternative Pricing Methods (Including NCCI classification)	3. Review and make written recommendation of the BWC's use of the National Council on Compensation Insurance (NCCI) manual classification system for rating classifications. This review would include but not be limited to analysis of the assignment of classifications to employers, the process of employer's reporting payroll, the premium auditing process and the procedures for non-reporting of payroll.

Pricing Process Areas - continued

Ancillary Funds	Tasks Involved
1) Coal Workers Pneumoconiosis	7. Review and make written recommendations with regard to the Coal-Workers Pneumoconiosis Fund. This review would include a complete analysis of the rating program. This analysis should compare the methodology used in BWC's rating calculation to industry standards the actuarial standards of practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries.
2) Marine Industry Fund	10. Review and make written recommendations with regard to the Marine Industry Fund. This analysis should compare the methodology used in BWC's rating calculation to industry standards and the Actuarial Standards of Practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries.
3) Disabled Workers Relief	13. Review and make written recommendations with regard to the Disabled Workers' Relief Marine Industry Funds. This analysis would include a complete analysis of the funds including but not limited to the loss information, payroll information, and other rating calculations. This analysis should compare the methodology used in BWC's rating calculation to industry standards and the Actuarial Standards of Practice promulgated by the Actuarial Standards Board of the American Academy of Actuaries.

Cost Control Areas

Cost Controls	Tasks Involved
1) Rehabilitation Program	28. Conduct a study on the effectiveness of the use of the rehabilitation program by the BWC. This study should evaluate the return to work initiatives, the payment of living maintenance and the application of living maintenance payments in the reserving and rates structure.

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