

BWC Board of Directors
Audit Committee
Annual Disaster Recovery/Business Continuity Plan
Tom Croyle, Chief Information Officer
January 21, 2010

Annual Disaster Recovery/Business Continuity Plan

Presentation Objectives

- DRP Planning is Prudent
- DRP Readiness Costs Time and Money
- BWC is Prepared
- Recovery Incidents since Last Report

BWC's Systems are Covered

- The Local IT Asset
- Day-to-Day Recovery Preparations

BWC's Planning is in Line with the Industry

- Capital Costs
- People Costs
- Strategy
- The Risks are Real

BWC's DRP logistics

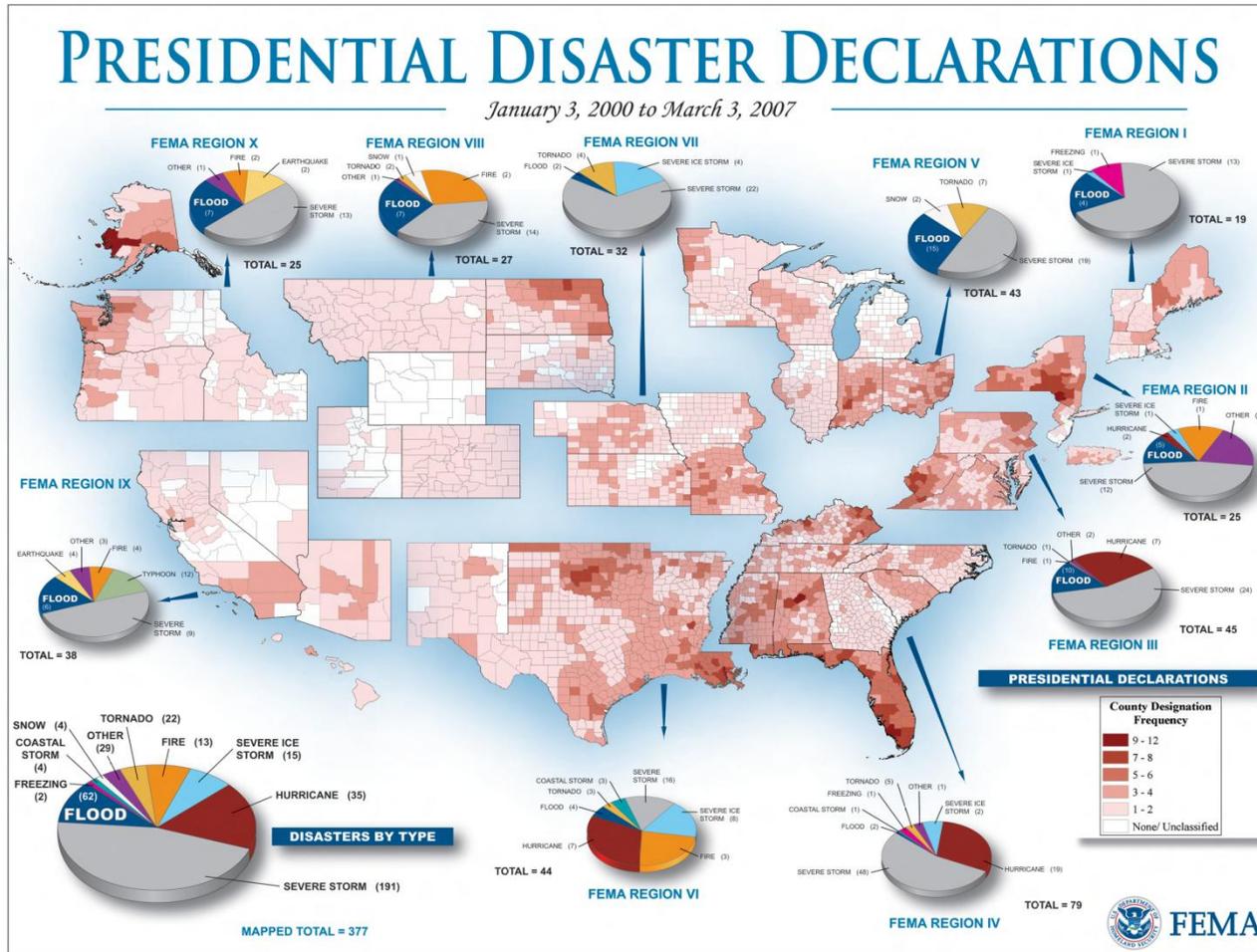
- Remote Sites Available to BWC
- Remote Recovery Testing
- Cost Details 2008/2009 comparison
- Results of 2009 Remote Testing

2009 System Availability Incidents

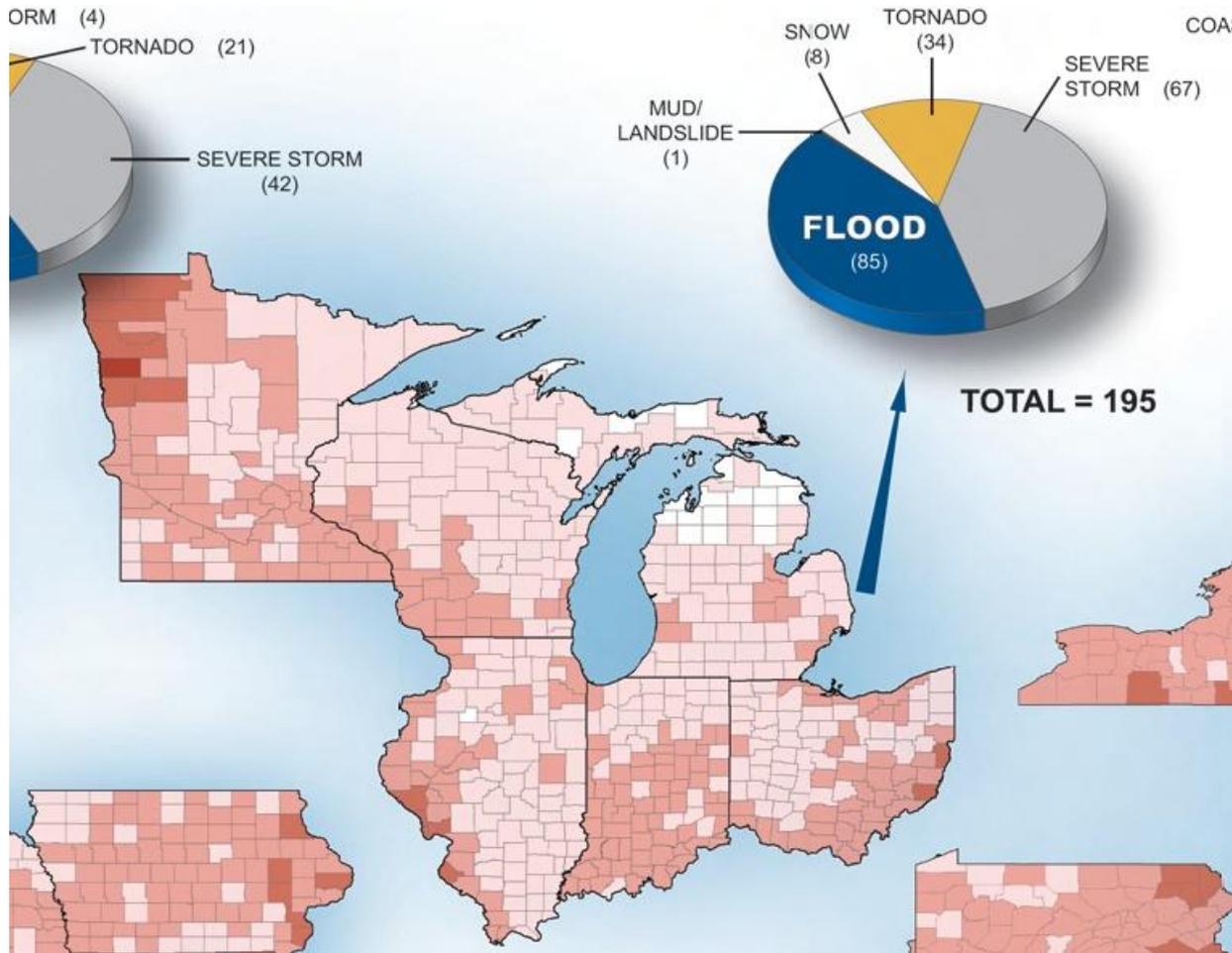
- Peak Payroll
- Thanksgiving Eve Outage

BWC's Disaster Recovery Plan (DRP)

BWC's Disaster Recovery Plan (DRP)



BWC's Disaster Recovery Plan (DRP)



BWC's Disaster Recovery Plan (DRP)

BWC's Systems are Covered

- Extent of Local IT Asset
 - Mission Critical Systems
 - Ancillary Systems
- Day-to-Day Recovery Preparations
 - Redundancy
 - Backups
 - Local
 - Offsite

BWC's Disaster Recovery Plan (DRP)

Systems are covered

IBM Contract for remote recovery site

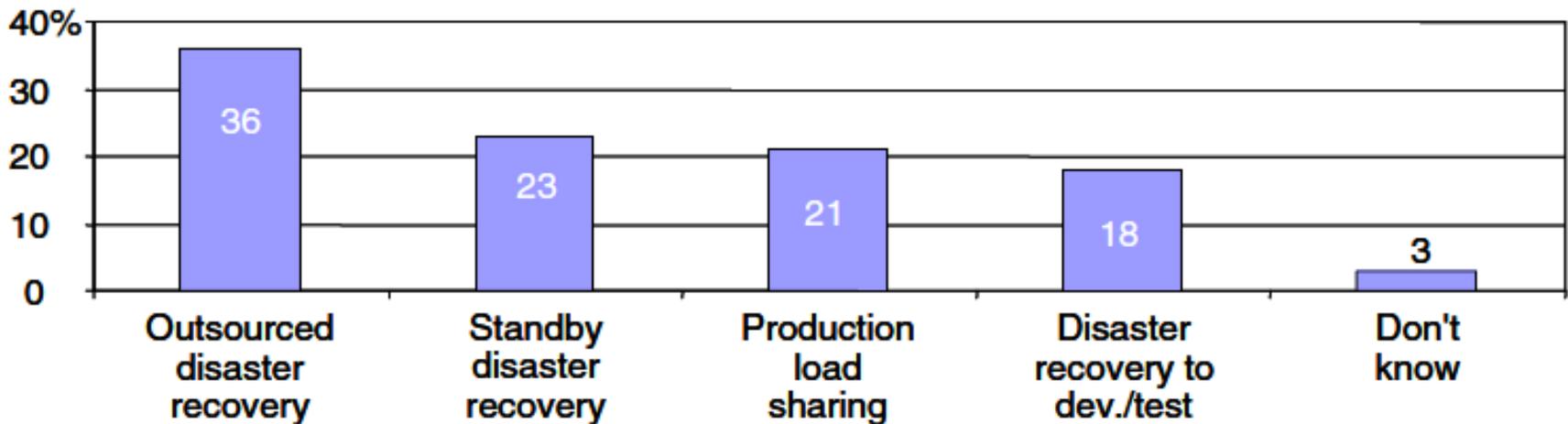
- New York State Data Center
- Plain City Command Center

OIT agreement for server-based recovery

Expected recovery for mission-critical systems
within 48 hours

BWC's Disaster Recovery Plan (DRP)

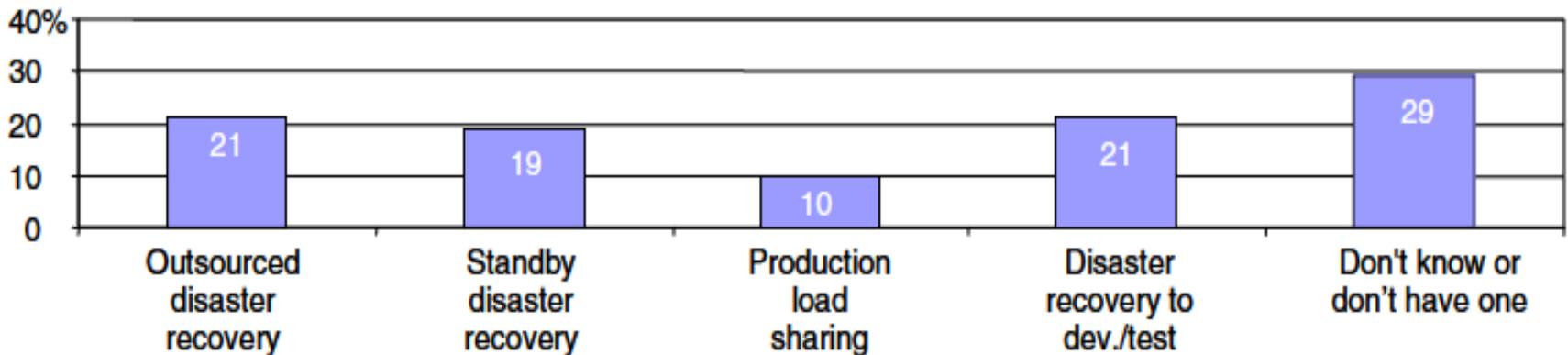
Figure 2. What is your primary disaster recovery strategy for your most-critical applications?



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BWC's Disaster Recovery Plan (DRP)

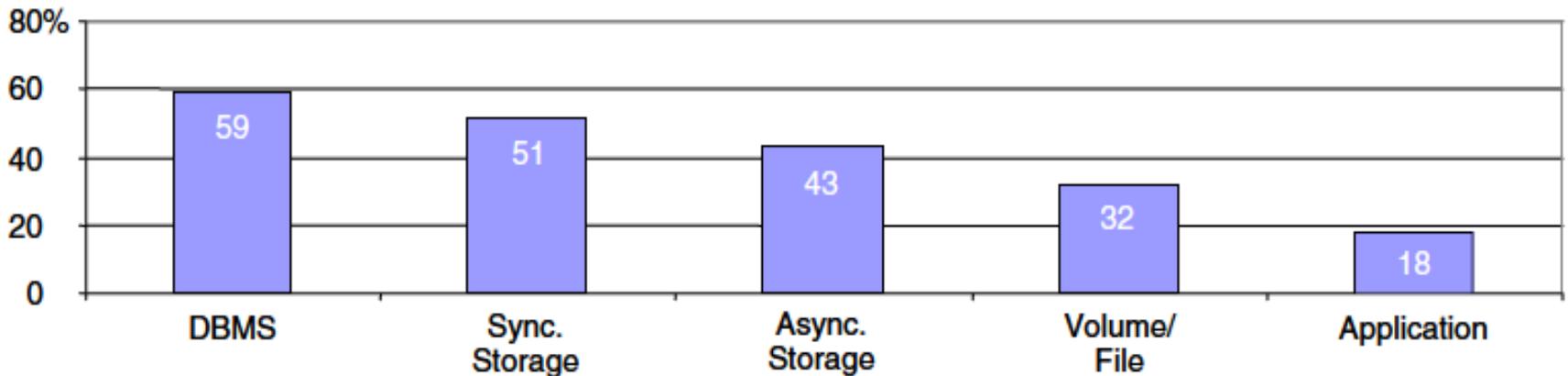
Figure 3. What is your secondary disaster recovery strategy for less-critical applications?



Source: Gartner Research (April 2005)

BWC's Disaster Recovery Plan (DRP)

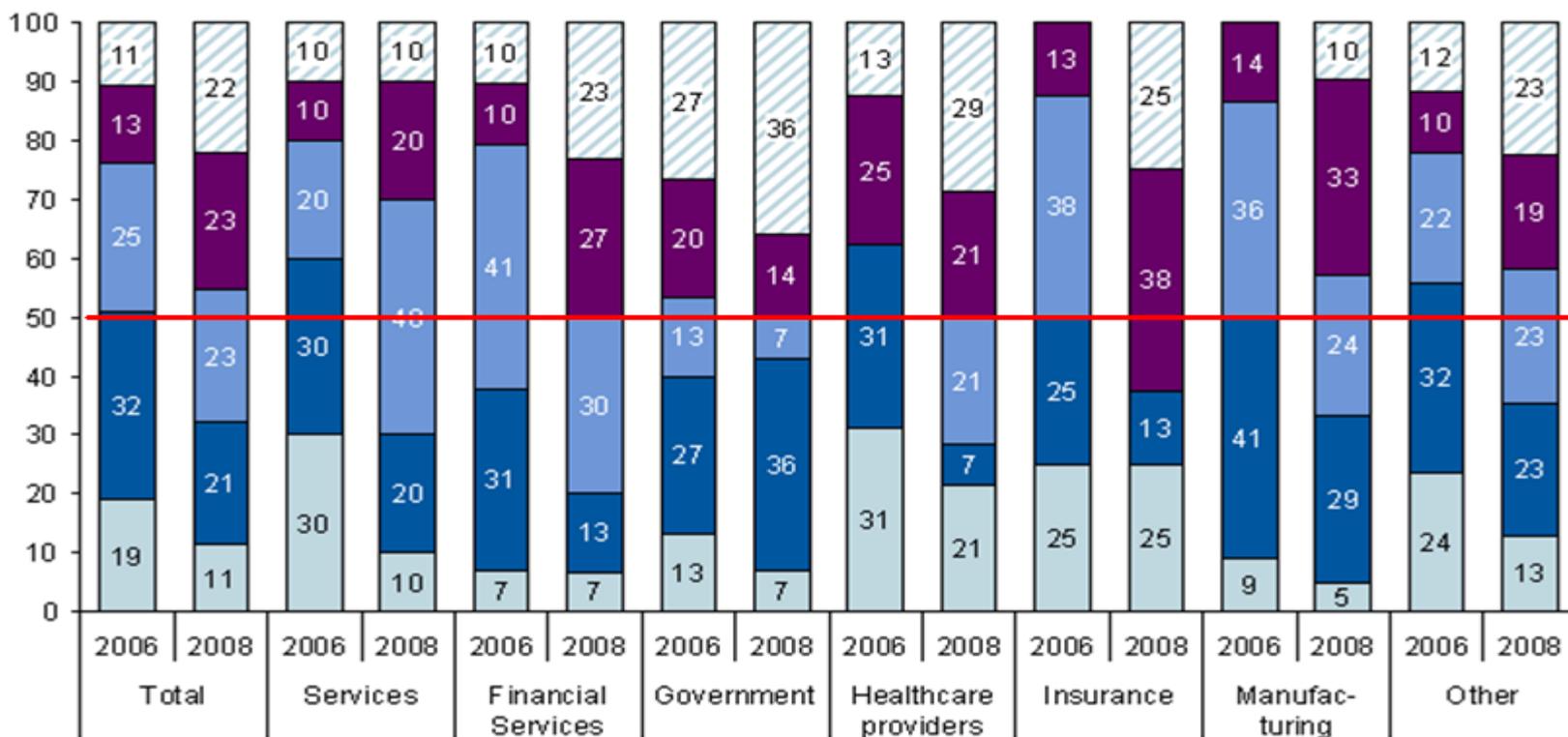
Figure 4. Percent of Respondents Using Various Data Replication Architectures



Source: Gartner Research (April 2005)

BWC's Disaster Recovery Plan (DRP)

Figure 1. Planned DR Spending as a Percentage of Data Center Budget — 2006 vs. 2008
Percentage of Respondents



2006: N = 168
2008: N = 159

Legend: ■ Less than 1% ■ 1%-3% ■ 4%-7% ■ 8%-10% ■ More than 10%

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BWC's Disaster Recovery Plan (DRP)

Systems are covered

- Offsite mission critical recovery testing 2/year
- Command center in Plain City vs. Wm. Green
 - Avoid disrupting Wm. Green activities
 - Realistic test
- Network staff travel to remote site (NY)

BWC's Disaster Recovery Plan (DRP)

Readiness Costs:

	<u>2008</u>	<u>2009</u>
Remote Data Center	\$25,000	\$29,152
Remote Check Printing	\$10,000	\$0
Travel/Lodging	\$38,900	\$22,000
Total Cost to Declare	\$73,900	\$51,152

BWC's Disaster Recovery Plan (DRP)

Readiness Costs:

	<u>2008</u>	<u>2009</u>
IBM Remote Site	\$353,700	\$353,700
Mailgard/State Printing	\$65,862	\$32,557
Total Annual Contracts	\$419,562	\$386,257

BWC's Disaster Recovery Plan (DRP)

DRP Readiness Planning

- Most recent test - weekend of Oct 10/12
- Network up between NY and Ohio
- All mission critical systems restored
- Finance and HR systems restored
- Imaging, email, shared network drives restored
- 21 Issues in process of resolution

BWC's Disaster Recovery Plan (DRP)

Recovery Incidents (past 12 months)

- Scheduled Power Shutdown Project
 - Just this past weekend
 - All went smoothly (no fuse to show today)
- Several Local Outages
 - Peak Payroll Period Outages
 - Thanksgiving Eve

BWC's Disaster Recovery Plan (DRP)

Q&A

**Board of Directors
Ohio Bureau of Workers' Compensation
Audit Committee
January 21, 2010
External Audit Management Letter Comments – Status Update**

Breakdown of Comments Received:

- **Significant Deficiency (1)**
 - Managed Care Organization (MCO) SAS 70 Reviews
- **Material Weakness**
 - None
- **Other Matters for Consideration (8)**
 - Claim Payments (3)
 - Issue, Maintain, and Service Policies (1)
 - Financial Reporting Department (1)
 - ORC Compliance (3)

Comment Status

- **Significant Deficiency**
 - Managed Care Organization (MCO) SAS 70 Reviews - In Progress
- **Other Matters for Consideration**
 - Claim Payments - Resolved
 - Issue, Maintain, and Service Policies - Resolved
 - Financial Reporting Department – Resolved
 - ORC Compliance -
 - Pending – 1 (Resolution dependent on IT and Business Staff availability)
 - Resolved - 2

**Board of Directors
Ohio Bureau of Workers' Compensation
Audit Committee
January 21, 2010
External Audit Management Letter Comments – Status Update**

**Monitoring of Managed Care Organizations – SAS70 Reporting
Significant Deficiency No. 09-1
Responsible Executive – Chief Fiscal & Planning Officer**

Condition

During review of the SAS 70 Type II reports received by management, it appears to indicate that several MCOs have not yet designed and/or implemented internal control systems that meet the standards established by BWC. Specifically, it was noted that three of the 19 MCOs received a qualified opinion from their independent auditors. In addition, management's review of the SAS 70 reports indicates that procedures performed by several of the independent auditors were inadequate, and thus unable to satisfy the overall objectives established by BWC with respect to testing the operating effectiveness of the control environment.

Management Response

Management agrees that the control environments in place at the MCOs have a significant impact to BWC's overall control environment. Steps taken to address this issue are as follows:

- Discussions with the MCO Business Council were held in November 2008;
- Letters were sent to MCOs after the 2008 review to notify them of issues identified in our reviews and impact in 2009 if problems continue;
- Revised control objectives communicated to all MCOs in January 2009;
- SAS 70 training for the MCOs was completed in February 2009;
- The 2009-2010 MCO contract included language that in 2010 allows BWC to initiate penalties for a SAS 70 report in which 10% or more of the control objectives were not tested to the satisfaction of BWC;
- Review of 2009 reports resulted in notification to all MCOs who failed to properly test objectives and/or resolve deficiencies with a 60-day notice to correct or be subject to financial penalties; and
- Responses received from all MCOs have satisfactorily resolved all noted issues.

MEMORANDUM

TO: BWC Board of Directors

FROM: Raymond Mazzotta, Chief Operating Officer
Tracy L. Valentino, Chief Fiscal & Planning Officer

SUBJECT: State Insurance Fund - Reinsurance

DATE: December 21, 2009

As discussed at previous Board meetings, through the competitive bidding process BWC management secured the assistance of Towers Perrin, reinsurance broker, to assist BWC in determining if reinsurance could play a role in protecting our balance sheet from the impact of a catastrophic event.

Towers Perrin provided an analysis that concluded reinsurance is a viable risk management strategy for us to consider and, at BWC management's request issued a request for quotes from reinsurance providers. Considering the magnitude of the decision and your request for more information, we have advised the broker that there is still strong interest in pursuing a program but an effective date of April 1st is more realistic. Below is a synopsis of what was shared with the Audit Committee at the meeting on December 16, 2009:

- The underwriting submission was sent to over 20 reinsurers. There was a large response (the majority provided a quote); however, there were some reinsurers who elected to await on BWC's offer to purchase at a specific price before making a decision to support the program. Quotes were received from companies rated A- and above by A.M. Best, including several London Syndicates.
- The pricing of the Natural Perils layer (Section A) was fairly consistent. This layer reflects retention of the first \$250 million with coverage up to an additional \$250 million. This would essentially limit BWC's exposure on a \$500 million loss to \$250 million in the event of a natural disaster, industrial accident and terrorism (excluding nuclear, biological, chemical or radiological (NBCR)). The authorizations are significant, suggesting there is a significant appetite for this particular layer. This layer of coverage will cost approximately \$4.9 million. This price includes the ability to exercise 1 reinstatement at 100% of premium. The broker has suggested a rate to us below the median of the quotes provided. Once we indicate our desire to move forward, he will work with the lead reinsurers to secure that pricing.

- The pricing of the NBCR Terrorism layers (Sections B and C) was very different and showed the market's caution with respect to this coverage. These two layers also reflect retention of the first \$250 million. The second layer (Section B) provides reinsurance up to the estimated amount of loss prior to TRIA (Federal Terrorism) coverage. That estimate is \$460 million. As such, this layer is coverage of \$210 million. The third layer (Section C) is reinsurance for the 15% required "co-pay" retention associated with TRIA. This layer is capped at \$100 million. This would essentially limit BWC's exposure on a \$1.127 billion loss to \$350 million in the event of a terrorist act in Ohio.
- The variance in the pricing of the Terrorism layers is an indication that there is a high degree of uncertainty in the markets for pricing that exposure. Expected premiums are approximately \$4.7 million (Section B) and \$1.4 million (Section C). These include no option for reinstatement during the coverage period. We will have limited ability to move the rates in this area.
- Total anticipated cost for all three layers is approximately \$11 million. This represents less than one-tenth of one percent of BWC's total premium and approximately .003 percent of net assets in the State Insurance Fund.
- The broker's fee is 10% but is capped at \$500,000 per terms of their response to the RFP.

Several questions were raised by the Directors during the December meeting. Follow up was conducted with Towers Perrin. A summary of those discussions follows.

State Fund Utilization of Reinsurance

Attached is a report from Towers Perrin that provides information regarding other "state fund" carriers, including basic information about their reinsurance programs. It is important to understand that each of these carriers is unique, presenting different risk parameters, different risk appetites, and different levels of financial strength.

Self-Insuring Employers' Guaranty Fund (SIEGF)

The question was posed as to whether or not, the potential liability assumed by BWC as a result of defaulting self-insured employers could be covered under the proposed program. It would not be covered based on the following information.

An employer in Ohio has the privilege, upon meeting certain financial and operational criteria, to be qualified by BWC as an approved self-insured employer. At that point, all of the financial obligations under the Ohio Workers Compensation Law are the sole responsibility of the self-insured employer. The BWC has no insurable interest in that employer's liability under the Act.

Those liabilities can however be protected through the requirement of excess and aggregate insurance, required by BWC, and secured by the self-insured employer. The aggregate liabilities of the self-insured employer can be further secured through the use of performance bonds, protecting against the failure of the self-insured employer to meet its obligations under the Act. A further “backstop” is in fact the SIEGF. BWC’s risk exists in the failure of any or all of the above levels of protection to the extent that they exist and are insufficient to cover liabilities that exist today.

The reinsurers who have committed to this program are underwriting the insurance risk presented to BWC as a result of a catastrophic event. They are not properly positioned to assess and reinsure the financial condition of all of the over 1150 self-insured employers in Ohio. Coverage of that nature would be more in line with financial guarantees and as such, would be beyond the scope and capabilities of this program.

Reducing Reinsurer Risk through a “Double Trigger” Approach

The question was posed as to whether or not the cost of the proposed program could be mitigated through the use of a “double trigger”, through which the reinsurers obligations would be secured if A) there was a recoverable catastrophic event and B) the investment portfolio of BWC was reduced by “X” amount or percent. Again, the answer is it could not be based on the following information.

So called “Double Triggers” while not commonly utilized, are in fact valuable tools in providing reinsurance protection, but only when absolutely required by the ceding company. One example would be an insurer would purchase \$50MM of catastrophe protection above a set retention, but would only recover from such loss if the insurer’s accident year combined ratio exceeded a pre-determined level. In this case, the risk that is being mitigated is the potential of having the annual insurance result (combined ratio) be higher than plan. Another example would be the purchase of a property catastrophe program limit that would only be payable if the entire “industry loss” exceeded a certain level.

In both these cases, the elements of the “double trigger” relate to “insurance risk” which could be measured, priced, and to some extent modeled based on historical data, something that the reinsurance community is well positioned to do. They are not however in a position to reinsure the investment risk of a company. The variables are too broad with potential results brought about by factors that are neither measurable nor controllable. Effective durations of loss are equally uncertain.

Impact of a change in Program Effective Date

The question was posed as to what impact if any, a change in the currently positioned program effective date of January 1, 2010 would have.

The quotations that have been secured are all date sensitive, meaning they all have termination dates that absent agreed upon extensions, are set to expire on or about December 28. This is

primarily due to the fact that many of the reinsurers have already authorized substantial amounts of capital to this program, and if such capital is not to be utilized, they will seek to utilize it elsewhere.

There is no guarantee that the rates secured thus far will be available at a later date. There is no doubt that in the unfortunate event of a substantial worldwide loss in the interim the same rates and capital would not be available. That said, absent such an event, and absent any material change in the balance sheets of the worldwide reinsurers that have been approached, capital commitments may be available at the same levels originally provided. The most common reinsurance contract effective date is January 1. After that date, we get a true sense of the aggregate movement of the market. There are many companies that have their reinsurance contracts effective in April or July to avoid the calendar year end “crunch” due to their business cycle and the reinsurance buying cycle.

Pricing and Next Steps

With respect to pricing this product, Towers Perrin requested quotes from numerous reinsurers to gauge interest and price. After evaluating these quotes, Towers Perrin provided BWC with a recommendation for pricing. In all three instances (Sections A, B, and C), the recommendation made by Towers Perrin was below the median of the quotes received. It is our intention to discuss with Towers Perrin additional pricing alternatives and the potential market response to those options.

Based on all the information received from Towers Perrin and discussed with the Audit Committee, a major natural catastrophe or terrorist event could have an impact on BWC’s financial resources beyond the insurance risk assumed—meaning a concurrent impact on the investment portfolio. In the best interests of stable rates and continued benefit obligations we recommend purchasing Section “A” and Section “C” or at a minimum Section “A”. BWC will evaluate all available program options in order to ensure the best possible coverage and price is obtained. BWC management will provide the Board with firm pricing information prior to entering into any reinsurance contracts.

We look forward to discussing this recommendation with you at the next Audit Committee meeting scheduled for January 21, 2010.

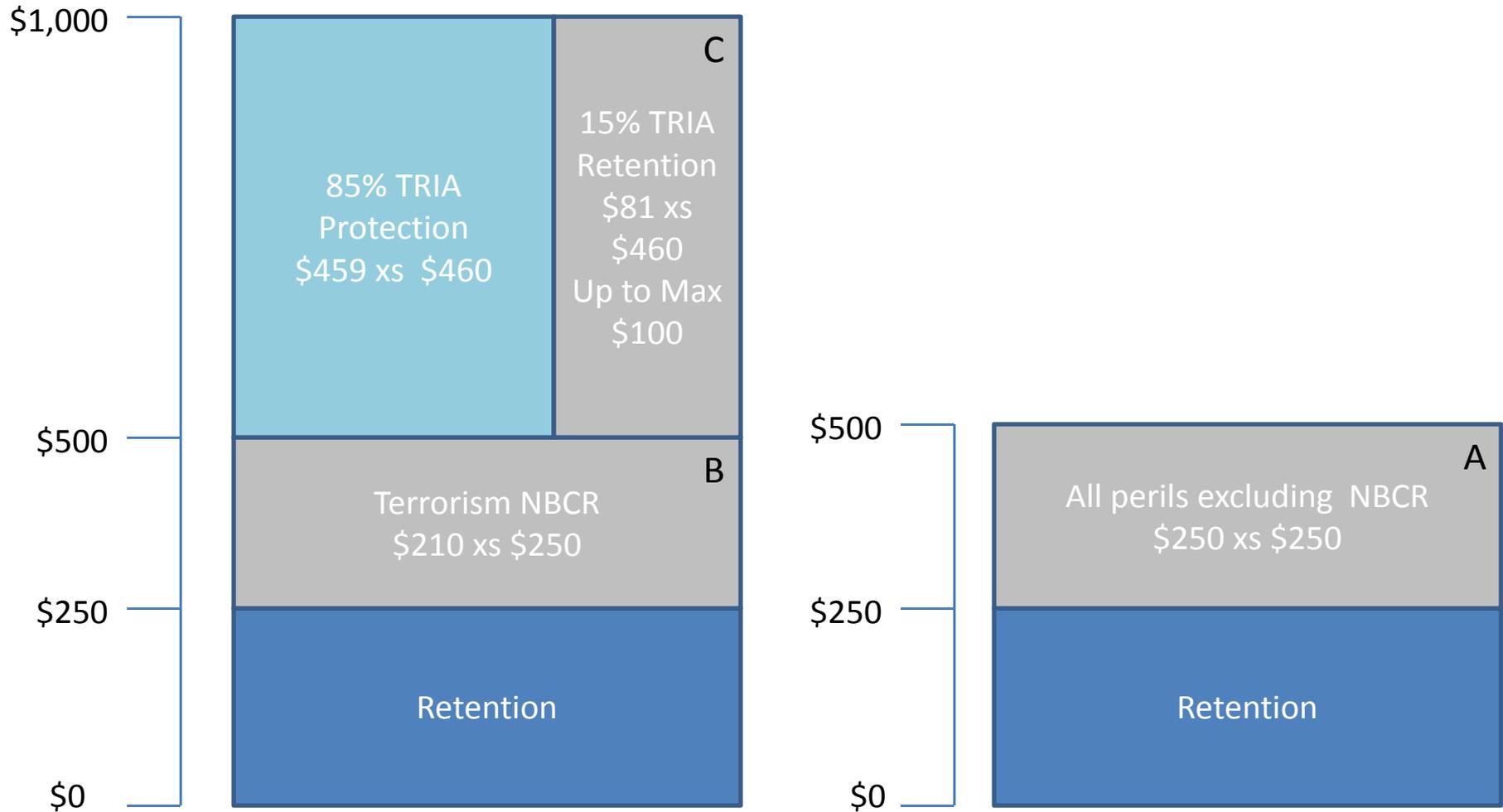
Ohio Bureau of Workers Compensation

Peer Company Exhibit

Data Year: 2008

Company Name	FSC	AM Best Rating	BCAR	Policyholders' Surplus (\$000)	DWP - Workers' Comp (\$000)	Total Liabilities (\$000)	NWP / PHS	Total Liab / PHS	Net Leverage	5 yr. Combined Ratio	Limit (000's)	Retention (000's)
Beacon Mutual Group	...	NR-5	...	141,899	111,837	301,980	0.7	2.1	2.9	109.6	40,000	2,000
BrickStreet Insurance	...	NR-5	...	484,986	462,944	1,029,880	1.0	2.1	3.1	n/a	50,000	5,000
CompSource Oklahoma	...	NR-5	...	183,697	263,390	977,610	1.4	5.3	6.8	111.6	75,000	25,000
Hawaii Employers' Mutual Ins Co	VIII	A	531.3	136,039	53,125	121,348	0.3	0.9	1.2	71.0	60,000	1,500
Idaho State Insurance Fund	...	NR-5	...	190,895	186,687	421,282	1.0	2.2	3.2	96.0	not available	
Injured Workers Insurance Fund	...	NR-5	...	269,531	216,459	1,410,327	0.8	5.2	6.1	112.3	75,000	2,000
Kentucky Employers' Mutual Insurance	VIII	A-	192.3	131,738	144,393	479,493	0.8	3.6	4.5	96.6	75,000	1,500
Louisiana Workers' Compensation Corp	X	A	464.7	536,942	226,534	713,968	0.4	1.3	1.7	91.7	100,000	500
MEMIC Group	VIII	A	228.2	222,876	181,742	516,115	0.8	2.3	3.1	97.7	75,000	5,000
Missouri Employers Mutual Insurance Co	VIII	A-	204.4	134,723	129,017	205,060	0.9	1.5	2.5	95.7	100,000	1,500
Montana State Fund	...	NR-5	...	216,564	243,665	980,052	1.1	4.5	5.6	108.4	100,000	5,000
New Mexico Mutual Group	VII	A-	206.0	72,737	82,369	192,304	1.0	2.6	3.7	102.8	75,000	1,250
New York State Insurance Fund	...	NR-5	...	2,267,113	1,355,121	11,853,439	0.6	5.2	5.8	118.3	currently evaluating	
Pinnacle Assurance Company	...	NR-5	...	698,001	484,459	1,392,100	0.7	2.0	2.7	102.1	75,000	5,000
SAIF Corporation	...	NR-5	...	679,215	403,123	3,229,268	0.6	4.8	5.4	120.7	100,000	40,000
SCF Arizona	...	NR-5	...	477,662	352,582	3,123,338	0.8	6.5	7.3	138.0	100,000	30,000
SFM Mutual Insurance Company	...	NR-5	...	71,589	90,407	280,249	1.4	3.9	5.3	98.6	not available	
State Compensation Ins Fund of CA	...	NR-5	...	5,088,921	1,725,240	16,015,920	0.3	3.1	3.5	105.0	1,500,000	250,000
Texas Mutual Insurance Company	...	NR-5	...	924,889	756,894	2,478,668	0.8	2.7	3.5	109.3	150,000	5,000
Workers Compensation Fund	IX	A	327.4	460,507	231,185	918,575	0.5	2.0	2.5	104.2	100,000	20,000
Ohio BWC	...	NR-5	...	2,515,342	2,378,127	19,905,007	0.9	7.9	8.2		500,000	250,000

Reinsurance Structure – “Natural” Perils & NBCR Terrorism Perils Separate



Ohio Bureau of Workers Compensation

Peer Company Exhibit

Data Year: 2008

Company Name	FSC	AM Best Rating	BCAR	Policyholders' Surplus (\$000)	DWP - Workers' Comp (\$000)	Total Liabilities (\$000)	NWP / PHS	Total Liab / PHS	Net Leverage	5 yr. Combined Ratio	Limit (000's)	Retention (000's)
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12-Month Audit Committee Calendar

Date	January 2010	Notes
1/21/2010	1. Annual Disaster Recovery/Business Continuity Plan	
	2. External Audit Comments - Update	
	3. Quarterly Litigation Update	
Date	February 2010	
2/25/2010	1. Survivorship Rule 4123-17-02 (1 st Reading)	
	2. Office of Budget and Management Audit Update	
Date	March 2010	
3/25/2010	1. Inspector General Annual Report	
	2. Internal Audit QES Review	
Date	April 2010	
4/29/2010	1. Discussion of External Audit	
	2. FY 2011 Administrative Budget (1 st Reading)	
	3. Quarterly Litigation Update	
	4. External Audit Comments - Update	
	May 2010	
5/27/2010	1. FY 2011 Administrative Budget (2 nd Reading)	
	June 2010	
6/17/2010	1. FY 2011 Financial Projections (1 st Reading)	
	2. FY 2011 Audit Plan	
	3. Internal Audit QES Review	
	4. External Audit Update	
	July 2010	
7/29/2010	1. FY 2011 Financial Projections (2 nd Reading)	
	2. External Audit Update	
	3. Quarterly Litigation Update	
	August 2010	
8/26/2010	1. BWC Code of Ethics Review	
	September 2010	
9/23/2010	1. Internal Audit QES Review	
	2. Inspector General Semi-Annual Report	

12-Month Audit Committee Calendar

Date	October 2010	
10/21/2010	1. Audit Committee Charter Review (1 st Reading)	
	2. Quarterly Litigation Update	
Date	November 2010	
11/18/2010	1. External Audit Update	
Date	December 2010	
12/15/2010	1. Internal Audit QES Review	
	2. Office of Budget and Management Update – BWC Staff Transfer	