State of Montana

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ANALYSIS OF WORKERS COMPENSATION FUNDING ALTERNATIVES

This report presents the results of our analysis of alternatives the State of Montana can use to fund its workers compensation losses.

During the course of the project, we:

1. Conducted telephone interviews with you and a representative of the Montana State Fund (State Fund).

2. Conducted an actuarial analysis of the States workers compensation losses.

3. Estimated the costs of a self-insurance program.

4. Contacted commercial insurers to determine the premium they would charge for various types of insured plans.

We appreciate the opportunity to complete this study for the State of Montana. We would be pleased to answer any questions.

Respectfully submitted

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A. ACTUARIAL STUDY

I. EXECUTIVE SUMMARY

This report presents our analysis of alternatives the State can use to fund its workers compensation losses. For the purposes of this analysis we compared costs for the July 1, 2009/10 fiscal year (FY10). Key findings are presented in this Executive Summary. The details of the analysis are in the body of the report.

Current Program

The State now buys workers compensation insurance from the Montana State Fund (State Fund). Key steps the State Fund takes to determine the States costs are:

1. A premium is paid during the year. This premium is based on the State Fund's rates, State payrolls and an experience modification factor (basically a credit or debit for better or worse than average loss experience).

2. A separate policy is issued to each of 37 State agencies. This means the computation in one above is completed for each of these agencies.

3. Following the end of the policy year, the State is eligible to receive a return of premium. There are two separate calculations:

    a. Retrospective premium calculation. There is a retrospective rating formula that applies to the State which the State Fund has provided.

    b. Dividend plan. The State may receive a dividend. This is payable at the discretion of the State Fund's Board of Directors.

For FY10, the State will pay a premium of $17,623,917 during the policy year. Based on our loss projection, we do not believe the State will receive a retrospective rating return. We do not know if the State will receive a dividend but doubt one will be paid.

Self-Insurance

We estimate costs in a self-insurance program as shown in Table I-1.

Table I-1
Workers Compensation Self-insurance Program Costs
July 1, 2009/10

Program Element	Nominal Value	Present Value
Retained losses	$19,047,000	$16,082,000
Claims administration costs	394,881	391,287
Loss control costs	240,000	237,816
Self-insurer fees	299,871	297,142
Total	$19,981,751	$17,008,244

POST CLAIM AUDIT TOTAL = 19.4 m 16.5m

Commercial Insurance

We did not find an insurer that indicated a willingness to quote a first-dollar insurance program. We did obtain cost estimates for a high deductible program. These costs are in Table I-2.

Table I-2
High Deductible Program
Cost Estimate

Program Element	$500,000 Deductible	$1,000,000 Deductible
1. Insurer fixed costs	$ 4,500,000	$3,000,000
2. Estimated losses		
a. Nominal value	17,315,000	18,354,000
b. Present value	14,620,000	15,497,000
3. Loss conversion factor	1.08	1.08
4. Converted losses		
a. Nominal value [(2a)x(3)]	18,700,200	19,822,320
b. Present value [(2b)x(3)]	15,789,600	16736760
5. Estimated taxes, assessments & terrorism premium	150,000	150,000
6. Estimate total cost		
a. Nominal value [(1)+(4a)+(5)]	23,250,200	22,972,320
b. Present value [(1)+(4b)+(5)]	20,439,600	19,8863,760

Cost Comparison

We estimate the cost of the programs compared in this report as shown in Table I-1

Table I-1
Comparison of Program Costs

Program	Nominal Value	Present Value	NV	PV
Insurance with State Fund	$17,623,917	$17,434,469	—	—
Self-insurance program	19,981,751	17,008,244	19.4m	16.5m
$500,000 deductible program	23,250,200	20,439,600	—	—
$1,000,000 deductible program	22,972,320	19,8861,760	—	—

We conclude the current program with the State Fund is likely to provide the best combination of cost stability and overall cost.

FY10 savings to self-insure ~$900,000

The details of our analysis are in the body of the report.

II. INSURANCE WITH STATE FUND

The State pays an annual premium to the State Fund. A separate policy is issued to each of 37 State agencies. A separate premium is calculated for each of these agencies. The State Fund advises the FY10 premium for all State agencies is estimated at $17,623,917.

The premium for each agency is determined as follows:

1. Each agency provides its payroll by rating code. Fourteen rating codes apply for FY10, each with a different rate. The more hazardous the occupation, the higher the rate.

2. An experience modification factor (xmod) is calculated for each agency. The xmod is a credit or debit, depending on the loss history of the agency.

3. The State is subject to a retrospective rating plan. The retrospective premium is based on losses valued 30 months from the beginning of the policy year. The State is charged:

   a. A basic premium. This is 26.6% of the annual premium. It is designed to cover the State Funds operating costs (other than costs associate with claims management) and generate a profit.

   b. A loss conversion factor. This is 14.5 % of losses. This is designed to cover the State Funds cost to manage claims and the legal costs to defend litigated claims.

   c. A loss development factor. This is designed to account for the fact that, as of 30 months from policy inception, not all facts about a claim are known and some claims will cost more than estimated at that point. The loss development factor is 16.3%.

4. The State may also receive a dividend. This is subject to the State Fund's Board declaring a dividend. We do not know the formula for dividend calculations.

Our estimate of the retrospective premium is shown in Table II-1.

Table II-1
Retrospective Premium Calculation

Program Element	Estimated Cost
1. Premium paid	$17,623,917
2. Basic premium factor	.286

Program Element	Estimated Cost
3. Basic premium charge [(1)x(2)]	5,040,440
4. Reported losses at 30 months	13,060,000
5. Loss conversion factor	1.145
6. Loss development factor	1.163
7. Converted & developed losses [(4)x(5)x(6)]	17,391,153
8. Indicated retrospective premium [(3)+(7)]	22,431,593
9. Indicate return premium [(1)-(8) but not less than $0]	0

We do not believe the State will receive a dividend for FY10.

A history of retrospective premium returns and dividends paid to the State is in Table II-2.

Table II-2
Historical Retrospective Rating Returns and Dividend Payments

Policy year	Final Premium	Retrospective Premium Return	Dividend Paid
2010	$ 17,771,881	n.a.	n.a.
2009	18,792,209	n.a.	n.a.
2008	18,293,341	-974,704	0
2007	17,913,054	-64,537	89,237
2006	15,165,327	-1,643,973	0
2005	12,461,090	-879,650	168,908
2004	10,777,786	0	110,083
2003	8,216,735	0	138,905
2002	6,596,739	0	28,750
2001	6,232,521	0	11,822
2000	5,771,237	0	211,333
1999	6,318,779	0	435,580
1998	6,393,850	0	761,495
1997	7,572,528	0	1,088,006
1996	8,284,837	0	0
1995	10,049,131	0	0

2009 and 2010 show n.a. because dividend and retrospective rating calculations have not yet been made for these two years.

III. SELF-INSURANCE PROGRAM

This section of the report provides our estimate of each of the costs of a self-insurance program.

A. PROJECTED LOSSES

We have projected ultimate losses for FY10 at retentions of $500,000, $750,000, $1 million and unlimited.

The projected ultimate losses are the accrual value of losses with accident dates in FY10, regardless of report or payment date.

We project ultimate losses for FY1010 to be as shown in Table III-1.

Table III-1
Projected Ultimate Limited Losses
2009/10

Retention Level (1)	Full Value (2)	Present Value (3)
(A) $500,000	$17,315,000	$14,620,000
(B) 750,000	18,094,000	15,278,000
(C) 1,000,000	18,354,000	15,497,000
(D) Unlimited	19,047,000	16,082,000

Post claim audit, each number has decreased about $500,000.00

Note: (2) and (3) are from Exhibit WC-10 of the actuarial study.

The present value of the projected ultimate limited losses is the amount of money, discounted for anticipated investment income, required to pay claims. It is calculated based on a 3.5% yield on investments over the period during which FY10 claims will be paid (many years).

All costs other than claims are additional.

The full actuarial study is in Appendix A.

B. CLAIMS ADMINISTRATION

In a self-insurance program, the State would be responsible for administering its own claims. This can be accomplished by hiring staff or by contracting for service. In-house administration would require hiring staff and purchasing a claims administration system.

We based this analysis on contracting for service. This avoids the difficulties some governmental entities have with hiring personnel and making capital expenditures on system software. It also provides more flexibility on when to start service and to increase staff levels as claim volume increases.

We estimate the State will incur about 196 lost time claims and about 785 medical only claims, 981 total, in FY10. Each year the State also receives numerous claims that are closed with no payment. Most of these claims require little effort but should be recorded in the claims data base to track causes of loss.

We estimate the cost to handle to conclusion claims occurring in FY10 as shown in Tables III-2 and II-3.

Table III-2
Claims Administration Fee per Claim

Type of Claim	No. of Claims	Low Estimate	Mid-Range Estimate	High Estimate
Medical only	739	$125	$140	$160
Lost time	246	975	1,010	1,295
Closed no payment	859	40	50	75

Table III-3
Claims Administration Costs

Type of Claim	No. of Claims	Low Estimate	Mid-Range Estimate	High Estimate
Medical only	739	$92,375	$103,469	$118,240
Lost time	246	239,850	248,460	318,570
Closed no payment	859	34,361	42,952	64,427
Total	981	$366,586	$394,881	$501,237

Table III-3 shows the cost to handle to conclusion claims that occur during the program year.

Once a self-insurance program is established, moving service in house should be further evaluated.

C. RISK CONTROL

We understand up to four State Fund employees spend part of their time providing loss control service to the State. We also understand the current effort amounts to about two full-time equivalent employees.

We obtained information on salaries for loss control personnel. While there is a range based on location and specific duties, we estimate a salary of about $60,000 would be required to hire a well qualified person in Montana.

In addition to salaries, the State would incur transportation, office and employment related expenses. We estimate these additional costs would equal base salaries. Thus, the estimated cost of two risk control personnel is $240,000.

D. EXCESS INSURANCE

Most states that self-insure workers compensation claims do not purchase excess insurance. They retain the full cost of each claim.

In the course of this project, we approached several insurers that sell excess workers compensation insurance. We provided payroll and claims history information. We were unable to obtain premium indications for excess insurance.

This is discussed in more detail in the next section of this report.

E. SELF-INSURER ASSESSMENTS

We understand the State would be subject to two assessments:

1. A workers compensation regulatory assessment, which funds the Department of Labors regulatory function. This is 1.5281% of the premium that would be paid if the State were fully insured.

2. A subsequent injury fund assessment. This is .1734% of the premium that would be paid if the State were fully insured.

The assessments combined are 1.7015% of premium. Based on a premium of $17,623,916.51 the assessment amount is $299,871.

F. TOTAL SELF-INSURANCE PROGRAM COST

We estimate the total cost of a self-insurance program for the State for the July 1, 2009/10 year as shown in Table III-4.

Table III-4
Estimated Self-Insurance Program Costs

Program Element	Nominal Value	Present Value
Retained losses	$19,047,000	$16,082,000
Claims administration costs	394,881	391,287
Loss control costs	240,000	237,816
Self-insurer fees	299,871	297,142
Total	$19,981,751	$17,008,244

NV	PV
18.5m	15.6m
–	–
–	–
–	–
19.4m	16.5m

The present value of expenses other than losses is based on equal payments over the program year and a 2% interest rate. The costs in Table III-4 are based on not purchasing excess insurance.

IV. COMMERCIAL INSURANCE

We approached several potential insurers to obtain indications of the cost of various commercial insurance programs. The responses received were:

1. Insurers were not interested in quoting first dollar insurance. One insurer estimated the States manual premium at $26 million.

2. There is some interest in providing excess insurance above a self-insured retention. The minimum self-insured retention could be as high as $5 million per occurrence. However, based on our experience with other states, we believe a lower SIR can be obtained in a more comprehensive marketing process. We also note that most states self-insure their workers compensation losses with no excess coverage.

3. We obtained cost indications for a high deductible program. Cost estimates are in Table IV-1.

Table IV-1
High Deductible Program
Cost Estimate

Program Element	$500,000 Deductible	$1,000,000 Deductible
1. Insurer fixed costs	$ 4,500,000	$3,000,000
2. Estimated losses below deductible		
a. Nominal value	17,315,000	18,354,000
b. Present value	14,620,000	15,497,000
3. Loss conversion factor	1.08	1.08
4. Converted losses		
a. Nominal value [(2a)x(3)]	18,700,200	19,822,320
b. Present value [(2b)x(3)]	15,789,600	16,736,760
5. Estimated taxes, assessments & terrorism premium	150,000	150,000
6. Estimated total cost		
a. Nominal value [(1)+(4a)+(5)]	23,250,200	22,972,320
b. Present value [(1)+(4b)+(5)]	20,439,600	19,886,760

The commercial insurance premiums provided in this report are estimates only. We did not submit the complete application underwriters would require to provide an actual quotation.

We have estimated costs for the period July 1, 2009/10. The first year the State could self-insure is July 1, 2011/12. Commercial insurance pricing could change substantially by then.

The commercial insurers we spoke with understand governmental agency risks and are willing to underwrite them. However, they must buy reinsurance for aviation exposures. Each insurer contacted would need more information about State aviation operations to provide a firm quotation.

V. PROGRAM COMPARISON

We estimate the cost of the programs compared in this report as shown in Table V-1

Table V-1
Comparison of Program Costs

Program	Nominal Value	Present Value
Insurance with State Fund	$17,623,917	$17,434,469
Self-insurance program	19,981,751	17,008,244
$500,000 deductible program	23,250,200	20,439,600
$1,000,000 deductible program	22,972,320	19,886,760

NV PV
19.4m 16.5m

Based on our analysis, we believe:

1. The cost of a self-insurance with no excess insurance would be the least costly alternative but by a slim margin.

2. The current program with the State fund is the most advantageous considering both cost and stability.

We have estimated losses will exceed the State Fund premium. Thus, we believe there is some chance State Fund premiums will increase. We recommend this be closely monitored so the State has time to implement alternatives should this occur.