

**MONTANA STATE FUND - RESERVES, EQUITY,  
SOLVENCY, AND RELATED OVERSIGHT  
(OLD FUND AND NEW FUND)**

A Report Prepared for the  
**Economic Affairs Interim Committee**

By  
Kris Wilkinson, Fiscal Analyst II

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## INTRODUCTION

The Montana State Fund (MSF) provides Montana employers with an option for workers' compensation and occupational disease insurance and guarantees available coverage for all employers in Montana. The management and control of the state fund is vested solely in the Board of Directors (board).

During the 1980s workers' compensation was a function of the Department of Labor and Industry. The program experience significant liabilities, exceeding \$400 million. In order to restructure the fund and develop a plan to reduce the debt, the legislature established the fund as a nonprofit, independent public corporation. During the 1990 Special Legislative Session separate funding and accounts for claims for injuries resulting from accidents occurring before July 1, 1990 (Old Fund) and claims occurring on or after July 1, 1990 (New Fund) were established.

MSF, as a state agency, was exempted from the Legislative Finance Act by the 1993 Legislature. However, statute requires MSF to present its approved budget for review by the Legislative Finance Committee (LFC) no later than October 1. The Legislative Fiscal Division (LFD) provides an analysis of the approved budget each year. While the LFC reviews the budget, it has no authority to require MSF to change its budget without action by the legislature. The only entity charged with overseeing and approving budgets, loss reserves, equity, and ensuring the overall solvency of both the Old Fund and New Fund is the board.

If, in any year the loss reserve funds of either the New Fund or the Old Fund are insufficient to pay the claims for workers, the general fund must pay the remaining claims. Reducing equity through dividend payments reduces the amount of investment income available for offsetting the costs of premiums to all employers, including those not eligible for dividends. This report discusses loss reserves and equity of both the New Fund and the Old Fund and their relationship to solvency as well as oversight of the Montana State Fund as it relates to these subjects.

## RELATIONSHIP BETWEEN CLAIMS, LOSS RESERVES AND EQUITY

When a Montana worker is injured on the job a claim for workers' compensation benefits is filed with the relevant insurer. For almost 76 percent of the policies written for workers' compensation insurance in Montana, this insurer is MSF. MSF estimates what the claim will cost and sets aside a loss reserve for those costs that will be paid in future periods. According to the American Association of Insurance Services article, *Setting Realistic Reserves – Projecting the Company's Future Obligations*, "Claim [loss] reserves are established in two ways:

1. Statistically or actuarially by monitoring past lost experience and projecting future losses;
2. Subjectively by the claim person's judgment."

Loss reserves are recorded on the MSF balance sheet as a liability.

If the estimated costs included in the loss reserves set aside to pay benefits and claims for injuries in a given year are not sufficient, additional support to increase loss reserves is provided from either investment income or equity (surplus). The legislature recognized the importance of equity statutorily requiring a minimum surplus of 25 percent of annual earned premium to secure MSF against risk inherent in or affecting the business of insurance and not accounted for or only partially measured. In other words, to secure MSF from insolvency if the premiums charged and set aside as reserves are not sufficient for claims and benefit payments made in future years. In those years when the need for additional reserves is indicated, equity is reduced and loss reserves are increased. In those years where loss reserves are estimated to be higher than required to pay future benefits, loss reserves are decreased and equity is increased.<sup>1</sup>

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<sup>1</sup> Does not include investment income which could also be used to increase either loss reserves or equity

Figure 1 provides the MSF balance sheet for FY 2009 for the New Fund to show the relationship between loss reserves and equity. The amount total assets exceed total liabilities is considered equity. The loss reserves are included in two categories:

- Current liabilities – Estimated Claims Payable
- Noncurrent liabilities – Estimated Claims Payable

Current assets and investments provide income that is used to offset premium costs for ratepayers. Equity or surplus is available to offset risks such as increases in loss reserves due to changes in estimated indemnity or medical claim costs or increases due to court decisions. Equity can also be used to pay dividends, unbudgeted costs, or mitigate premium increases.

### Adverse Development

When claims are initially reported, loss reserves are established using current information and assumptions. Additionally, MSF establishes reserves for claims/losses that have been incurred but not reported (IBNR). Ideally, loss reserves will be adequate to pay benefits to the injured parties over the length of the claim. In some instances it becomes evident that the loss reserves initially established will not be sufficient to pay the entire claim. When an insurer becomes aware that established loss reserves are inadequate, the loss reserve must be increased. The increase is referred to as adverse loss development. Insurers provide coverage for benefits and claims over time for injuries in a given

ASSETS	
Current Assets	\$277,661,331
Noncurrent Assets	
Investments	993,222,091
Land	1,139,460
Construction Work in Progress	11,790,414
Other Noncurrent Assets	<u>6,959,738</u>
Total Noncurrent Assets	\$1,013,111,703
Total Assets	<u>\$1,290,773,034</u>
LIABILITIES	
Current Liabilities	
Estimated Claims Payable	137,985,395
Other Current Liabilities	<u>256,704,380</u>
Total Current Liabilities	\$394,689,775
Noncurrent Liabilities	
Estimated Claims Payable	675,319,317
Other Noncurrent Liabilities	<u>3,142,212</u>
Total Noncurrent Liabilities	<u>\$678,461,529</u>
Total Liabilities	\$1,073,151,304
Equity	217,621,730
Total Liabilities and Equity	<u>\$1,290,773,034</u>

year. The cost of the workers' compensation insurance premium is set prior to the accident and thus the final cost of providing for the benefits and claims may not be known for years. Because MSF can not go back to businesses to collect additional premium to provide for the additional loss reserve, adverse loss development costs reduce income and affect equity in the years they are recognized.

Year	New Fund	Old Fund
2009	\$30,842,102	\$3,170,707
2008	17,612,233	(212,258)
2007	34,045,667	11,209,186
2006	35,438,825	3,811,030
2005	10,070,475	6,691,189
2004	13,568,639	8,215,581
2003	35,366,198	(1,448,292)
2002	5,361,281	(6,690,182)
2001	(1,667,000)	(5,503,000)
2000	(6,049,000)	(3,728,000)
1999	(15,791,000)	3,686,000
1998	(44,165,000)	3,347,000
1997	(80,752,000)	(26,812,000)
1996	(169,235,000)	(24,688,000)
1995	(63,249,000)	(3,795,000)
1994	(3,952,000)	2,975,000
1993	84,550,531	(41,469,366)
1992	\$120,769,569	(\$26,735,448)

Figure 2 shows changes in the estimates of loss reserves for the New Fund and Old Fund since 1992. As shown, both the New and Old Funds have shown significant changes in the loss reserves over time. Changes include increases or decreases for adverse development, loss adjustment expenses, reserve strengthening, and reinsurance recoverable adjustments which all affect the loss reserves. The changes to the loss reserves noted in the table are mainly determined through an actuarial analysis conducted for MSF.

### Uses of Equity

When loss reserves are decreased, equity may be increased. During the period between 1994 and 2001 when loss reserve estimates for the New Fund were decreased by \$386.86 million, some of the uses of equity were to offset liabilities of the Old Fund and to transfer funding to the general fund.

Transactions from the equity of the New Fund included:

- MSF board declared a dividend to the Old Fund of \$102.3 million in September 2006
- 1997 Legislature transferred a \$63.8 million dividend to the Old Fund

- 1997 Legislature transferred \$10 million in FY 1998 and \$10 million in FY 1999 to the general fund to reimburse the general fund for a transfer made in FY 1989

The board transferred a total of \$14.1 million in equity from the Old Fund to the New Fund between FY 2001 and FY 2002. The legislature transferred a total of \$23.0 million to the general fund from the equity in the Old Fund between FY 2004 and FY 2005.

## CURRENT REVIEW OF LOSS RESERVES

MSF has no qualified actuary on staff.<sup>2</sup> MSF has contracted with the same independent actuarial firm for 20 years to establish recommended loss reserves based on statistical analysis. A separate review of these estimates is, by law, to be conducted by the Legislative Audit Division (LAD). LAD is required to:

- Evaluate the claims reservation process
- Evaluate the amount reserved
- Evaluate the current report of the MSF actuary
- Determine if the rates are excessive, inadequate, or unfairly discriminatory

LAD contracts with an actuary to review these areas. Some of the findings in the 2009 review by the contracted actuary include:

1. The amount of the loss reserves as determined by the MSF actuary are within the low range of the loss reserves calculated by the LAD contracted actuary.
2. There is a significant difference between the claims reserved by claims examiners employed by MSF and the amount statistically determined by MSF actuary that needs to be resolved. The amount of the difference is not discussed.
3. The rates are not considered excessive, inadequate or unfairly discriminatory based on the review of the LAD actuary.

### MSF Actuary Best Estimates Are Below LAD Contracted Actuary's Estimates

In the latest report, the independent actuary contracted by LAD estimated the outstanding required reserves for the MSF as of 6/30/09 using assumptions slightly different from those utilized by the actuary contracted by MSF. Figure 3 shows a comparison between the LAD independent actuary's best estimate and the MSF actuary's best estimate for reserves at 6/30/09.

According to the LAD actuarial report, a comparison of the two reserve estimates shows that a significant difference exists between the two estimates of outstanding loss reserves for the New Fund. In part, these differences are due the customized and adjusted actuarial techniques employed by the MSF actuary. The LAD actuary report goes on to state that based on a review of data, formulas, and methodology employed in the 6/30/09 actuarial report prepared by the MSF contracted actuary, on an undiscounted basis the estimate of \$707.1 million would fall at the lower end of the range of reasonable reserve estimates established by the independent actuary contracted by LAD. The LAD actuarial reports for FY 2007 and FY 2008 report have similar results.

	New Fund	Old Fund
MSF Actuary	\$707,101,978	\$65,277,946
LAD Actuary	<u>\$794,716,311</u>	<u>\$85,654,237</u>
Difference	(\$87,614,333)	(\$20,376,291)

In addition to reviewing the New Fund, the LAD actuary reports on the loss reserve estimates for the Old Fund. Since FY 2004 the Old Fund liabilities for claims and benefits have exceeded the assets available to pay the costs. The resulting unfunded liability will become a cost to the general fund in FY 2011 when the assets are fully depleted. Under current law, MSF is required to discount the Old Fund loss reserves. MSF management

<sup>2</sup>The only state agency with a qualified actuary is the State Auditor's Office. The qualified actuary conducts in depth reviews of loss reserves for property and casualty insurance companies including those insurance companies providing workers' compensation insurance. A qualified actuary is a member in good standing with the American Academy of Actuaries.

selected a 3.5 percent discount for FY 2009. The LAD actuary report also states that since the Old Fund does not currently have assets available to support the discounted reserve, the entire amount of investment income assumed to be earned on the loss reserves [\$12.3 million] is unlikely to be earned. Thus, the current deficit position of the Old Fund is most likely understated if discount loss reserves are booked. In other words, the unfunded liability of \$45.5 million as of June 30, 2009 is most likely \$57.8 million.

### ***Legislative Option***

The legislature may wish to consider eliminating the requirement that MSF discount the loss reserves of the Old Fund to clarify the total cost of the unfunded liability to the general fund. The change would increase the unfunded liability in the Old Fund by approximately \$12.3 million over the period the claims are paid.

### **MSF Adjuster's Case Reserve Estimates Exceed Actuarial Estimates**

The LAD contracted actuary noted that they did not rely on any incurred loss development procedures. Incurred loss development procedures examine the historical patterns of the costs of providing benefits and claims from the accident period forward. The patterns are then used to develop factors to predict the costs of claims and benefits in future years. In order to develop reliable factors, the claims reserving methods used by the insurer must be consistent.

The LAD actuary report goes on to state that the data supports the claims that the incurred loss development patterns may be unreliable in predicting ultimate losses due to changes in reserving practices in the last several years and that it should be noted that the lack of reliable incurred loss reserves significantly impedes the actuarial process. In other words, because MSF changed the method it used to establish its loss reserves, the historical patterns normally used to predict the costs of claims and benefits in future years may be unreliable. This makes it difficult to make actuarial assumptions using incurred loss development procedures.

As part of this same discussion, the LAD actuary noted that the adjuster's case reserve estimates [those established by MSF claims examiners] of these outstanding liabilities significantly exceed the MSF actuarial estimates, especially in the Old Fund. The LAD actuary recommends MSF determine the source of these significant differences and reconcile them.

### **MSF Board Action on Loss Reserves**

As previously noted, the only entity charged with overseeing and approving budgets, loss reserves, equity, and ensuring the overall solvency of both the Old Fund and New Fund is the Board of Directors of MSF (board). During its September 2009 board meeting the board approved loss reserves above those recommended as the "best" estimate by the MSF contracted actuary. The contacted actuary "best" estimate was loss reserves of \$780.6 million including loss adjustment expenses that are not included in the MSF "best" estimate of \$707.1 million discussed above. The board, at the recommendation of MSF management, adopted a loss reserve of \$813.3 million, \$32.7 million above the "best" estimate of its contracted actuary.

As part of the additional funding included in the reserves, the board set aside an additional \$4 million of operational results for "reserve strengthening". This brings the total increase to loss reserves for "reserve strengthening" to \$32 million. If not used for additional loss reserves the funds could have been used to increase equity.

### **EQUITY TARGETS**

As discussed above, equity plays an important role in securing MSF against risk inherent in or affecting the business of insurance and not accounted for or only partially measured. Risks which may not have been accounted for include adverse court rulings and increased costs for indemnity or medical claims. According to MSF's actuary, characteristics of MSF that highlight the importance of equity include:

- Serving as the guaranteed market for workers' compensation insurance
- Long-term liabilities associated with workers' compensation claims that may cause greater volatility

- Writing one line of highly regulated insurance
- Writing business in one state
- No access to capital markets to finance adverse financial results or to finance growth objectives

Based on these items the MSF actuary’s conclusion is that MSF needs stronger than average policyholder equity to address these issues. In addition, the MSF actuary states that based on peer company benchmarks, MSF’s current policyholder equity appears to face greater risks from adverse reserve development than from future business results.

MSF uses actuarial analysis to assist the board in making rate decisions including the amount of equity the board should require to ensure that MSF is financially strong. A strong equity position allows for stable premium rates. MSF’s actuary reviews several methods for a strong equity level including:

- Peer company comparison
  - A- State funds \$225-\$405 million
  - Private carriers (average of median and upper quartile) \$315-645 million
  - Insurance industry (WC dominate) \$275-\$340 million
- Dynamic Financial Analysis model results
  - Reserve-to-equity ratio of 2.0 to 2.5 provides strong ability to withstand hard, adverse market conditions and a financial catastrophe \$325-\$407 million\*

\*Based on MSF’s estimate of June 30, 2009 net loss and loss expense reserves of \$813.3 million

The benchmark measurement for adverse loss reserve development is the reserve to equity ratio. The reserve to equity ratio reflects the multi-year nature of an insurer’s obligations. In other words, the insurers need to pay benefits over a long period of time. Insurers with a large reserve to equity ratio have a greater risk of having equity depleted by relatively small errors in loss reserve estimates that result in adverse development. The lower the reserve to equity ratio, the greater the financial strength of the insurance company.

The MSF actuary recommends and the board target is a reserve to equity ratio of 2.0 to 2.5 to 1.0. This would indicate equity between \$325 million and \$407 million. As shown above, the comparison to A-rated State suggests an equity range for MSF would be between \$227 million and \$407 million. MSF equity measured at June 30, 2009 is \$201 million or \$26 million below the lower end of this range.

Fiscal Year	Loss Reserve to Equity Ratio	Equity*
2002	2.19	\$158,498,995
2003	3.40	121,599,417
2004	3.55	127,492,000
2005	3.45	148,353,871
2006	3.62	163,101,495
2007	3.41	199,168,517
2008	3.47	216,564,182
2009	4.05	\$201,031,900

\* As recorded on the statutory financial statements

Figure 4 shows the loss reserve to equity ratios and related equity since 2002. As can be seen, MSF has been unable to achieve the equity ratios between 2.0 and 2.5 to 1.0 since FY 2002. It wasn’t until FY 2006, 4 years after FY 2003 when significant losses were incurred, that the equity levels reached those in FY 2002.

The Board of Directors includes a 3 year plan on reserve to equity targets as part of the MSF strategic business plan. The long term goal of the board is to achieve the loss reserve to equity targets of between 2.0 and 2.5 to 1.0 as recommended by the MSF actuary. A review of the reserve to equity targets since FY 2003 shows that MSF has not been able to meet the projected targets. Figure 5 shows the projected loss reserves included in the MSF strategic business plan since FY 2003, and the actual reserve to equity ratio achieved.

Figure 5  
Loss Reserve to Equity Target

	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012
FY 2003 Strategic Plan	2.09	2.07	2.05							
Actual	3.40	3.55	3.45							
FY 2004 Strategic Plan		2.64	2.60	2.56						
Actual		3.55	3.45	3.62						
FY 2005 Strategic Plan			3.23	3.70	2.88					
Actual			3.45	3.62	3.41					
FY 2006 Strategic Plan				3.75	3.78	3.75				
Actual				3.62	3.41	3.47				
FY 2007 Strategic Plan					3.42	3.24	3.00			
Actual					3.41	3.47	4.05			
FY 2008 Strategic Plan						3.52	3.20	2.91		
Actual						3.47	4.05			
FY 2009 Strategic Plan							3.17	2.98	2.77	
Actual							4.05			
FY 2010 Strategic Plan								4.24	3.88	3.55

MSF has increased projected loss reserve to equity targets over its planned targets since FY 2003. For example, in FY 2003 MSF projected the FY 2005 loss reserve to equity target would be 2.05, in FY 2004 they increased the projection to 2.60, and in FY 2005 they again increased the projection to 3.23. Figure 5 also shows that MSF actual loss reserve to equity ratios have increased between FY 2003 and FY 2009, from 3.4 to 4.05. Not only is MSF not achieving the recommended equity targets, its performance related to this measurement declined in FY 2009, from 3.47 in FY 2008 to 4.05 in FY 2009. This was in part due to losses on investments.

Due to concerns with MSF difficulty in achieving projected equity targets the Legislative Finance Committee requested a report on the board's plan to achieve the recommended equity targets by FY 2014. In the report MSF states that the financial projections established for the FY 2010 strategic business plan indicates MSF would achieve a loss reserve to policyholder equity ratio of 2.47 to 1 by fiscal year 2016. The LFC will continue to receive reports on MSF progress toward this target as part of the annual budget analysis conducted by the Legislative Fiscal Division.

MSF rates include a component assessed to all policyholders for contribution to equity as part of the loss cost multiplier. For FY 2010 the board approved reducing the contribution to equity percentage from 6.8 percent in FY 2009 to 5.4 percent in FY 2010 or from \$14.0 million to \$10.1 million. This amount would be in addition to the interest earned from investments. If MSF is able to maintain or reduce budgeted costs, does not have significant adverse loss development, and does not have significant unbudgeted costs such as dividends and performance incentives, approximately \$10.1 million should be available and could be used to move MSF's equity levels closer to the recommended amount.

### Other Factors Influencing Equity

MSF offsets underwriting losses and pays dividends<sup>3</sup> using either contributions to equity assessed all ratepayers through the loss cost multiplier or investment income generated from loss reserves and equity. If the investment

<sup>3</sup> While excess assets are returned to policyholders as dividends, dividends are not returned to all employers, nor are dividends paid in the same percentages as premiums are paid. Dividends are paid based on the business's loss ratios for the year following payment of premium and on the premium size. For example, in FY 2004 the state of Montana paid \$10,777,669 in premiums (12.93 percent of net earned premiums) and received \$110,083 in dividends, or about 2 percent of the dividend paid. The small amount of the dividend resulted from the individual state agencies' loss ratios. Reducing equity through dividend payments reduces the amount of investment income available for offsetting the costs of premiums to all employers, including those not eligible for dividends.

income is not sufficient to cover operating losses and dividends, MSF reduces equity to pay for the costs. Statute allows MSF to pay dividends if there is an excess of assets over liabilities, including necessary reserves and an appropriate surplus as determined by the board. The only statutory requirement related to appropriate surplus requires the board to set aside 25 percent of annual earned premium as surplus.

Figure 6 shows the net operating income/loss and dividend payments for the last 10 years. As shown MSF has paid dividends for the last 10 years, including those years in which it suffered a net operating loss. The board policy is to declare dividends to policyholders 2 years after the policy year ends so that policyholder injury losses for the dividend year can be more accurately determined. Therefore, the \$5 million dividend for FY 2004 was approved by the board in March 2006. The board approved \$5 million in dividends to policyholders for both FY 2003 and FY 2004, even though net operating losses in those years were \$37.5 million and \$8.3 million, respectively. MSF equity covered both the net operating losses and the \$10 million in dividends by reducing equity. By approving dividends in years MSF suffered net operating losses, the board has extended the time it will take MSF to achieve a strong equity position.

***Legislative Option***

Due to the significance of the need for equity and the inclusion of the contribution to equity component included in the premium rates as part of the loss cost multiplier, the legislature may wish to further clarify under what conditions dividends can be declared.

1998	\$42.65	\$7.00
1999	24.50	6.95
2000	5.30	4.99
2001	6.50	2.80
2002	7.80	1.90
2003	(37.50)	5.00
2004	(8.30)	5.00
2005	18.78	7.00
2006	10.12	3.99
2007	18.90	2.00
2008	32.09	N/A
2009	\$8.63	N/A

N/A dividend decisions for these years will be made in FY 2010 and FY 2011