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MEMORANDUM

DATE: October 23, 2009

TO: Legislative Finance Committee

FROM: Mark Barry, Vice President of Corporate Support

SUBJECT: **Target Policy Holder Equity**

Montana State Fund (MSF) has been requested to provide the Legislative Finance Committee (LFC) with MSF's plan to achieve policy holder equity targets and the time frame in which this will be achieved. This is our report of the plan to ensure MSF is managing a financially safe and sound workers compensation insurance operation while continuing to address and take steps to build equity to achieve appropriate financial strength. Ultimately, MSF balances the goal of ensuring financially sound operations with the goal of providing a stable worker's compensation insurance market for Montana businesses.

During presentations made to members of the LFC in the fall of 2008, MSF's President and CEO agreed to a request made by Senator Erickson to provide the plan to achieve the loss reserve to policy holder equity targets by 2014. President Hubbard was referring to the MSF financial modeling capability which is the basis for establishing pro-forma financial projections included in the MSF Strategic Business Plan approved by the Board of Directors. The following is an explanation of the target equity measure and the MSF modeling plan that is used to guide MSF decisions to achieve this measure.

Background

The first item of importance is the role of MSF. Section 39-71-2313, MCA identifies the purpose of MSF as "... a nonprofit, independent public corporation established for the purpose of allowing an option for employers to insure their liability for workers' compensation and occupational disease coverage ..." In addition to providing for an option for employers to insure with MSF, MSF is also obligated under the same statute as being "required to insure any employer in this state who requests coverage, and it may not refuse to provide coverage ..." Serving as the "guaranteed market" is one of several characteristics of MSF that highlight the importance of maintaining an adequate level of policyholder equity. Other characteristics include,

- Long-term liabilities associated with workers' compensation claims which may cause greater volatility.
- MSF writes one line of highly regulated insurance
- MSF writes in one state
- Unlike a stock company or other privately formed company, MSF cannot access capital markets to finance adverse financial results or to finance growth objectives.

Policyholder equity serves a key role in the proper management of a workers' compensation insurance company and applies to MSF as well. Ultimately, equity will provide the assurance the insurer will be able to fulfill its obligations to the policyholder and the injured employee. In the case of workers' compensation, the insurer must pay the full cost of an injured employee's claim for wage loss and for medical even if these costs exceed the premium and investment income received for the year the injury occurred. The insurer, including MSF must manage the risks inherent in underwriting accounts and in the MSF investment portfolios. These risks include,

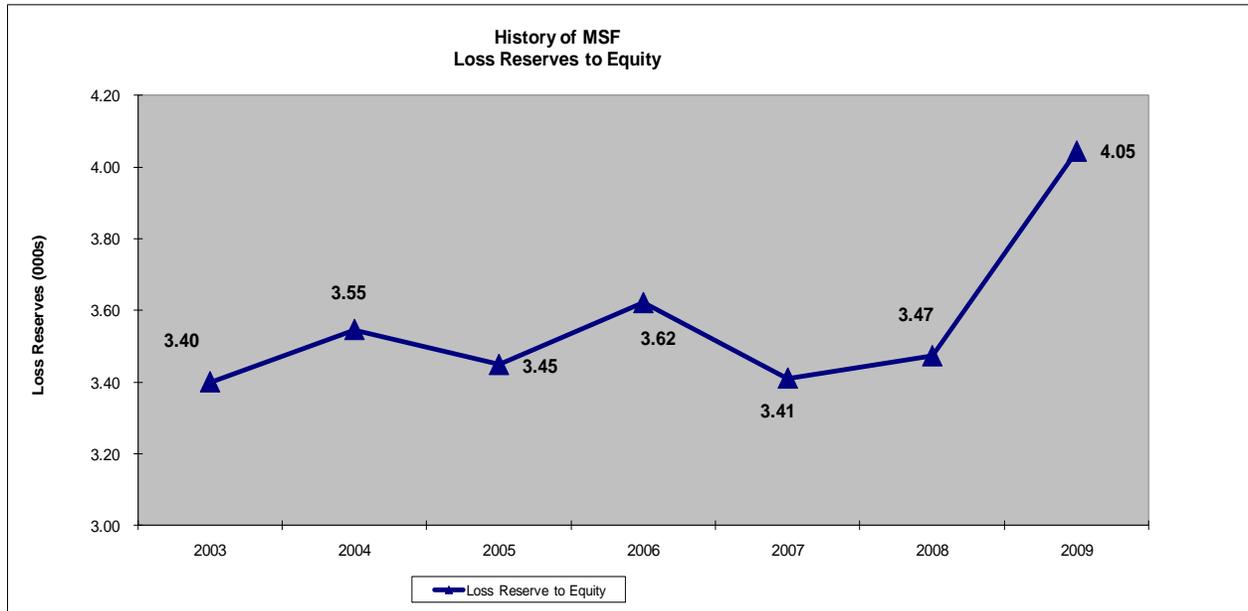
- Premium levels are established before the number of claims, severity and duration of injuries and the ultimate costs are known.
- Case reserves and actuarial reserve estimates are established as claims occur but the ultimate cost may not be known for years.
- Investment of assets held to support obligations will vary in value and rate of return over time.

The next consideration relative to the level of policyholder equity is Section 39-71-2330 (2) MCA, which states "... the board shall annually determine the level of surplus that must be maintained by the state fund pursuant to this section, but shall maintain a minimum surplus of 25% of annual earned premium. The state fund shall use the amount of the surplus above the risk-based capital requirements to secure the state fund against various risks inherent in or affecting the business of insurance and not accounted for or only partially measured by the risk-based capital requirements." This section of law sets the minimum requirement at 25% of premium. The MSF Board of Directors is responsible for determining the appropriate level of policyholder equity above the 25% of annual earned premium minimum set in law.

Overview

The target loss reserve to equity ratio MSF has established as a reasonable long term goal has been between 2.5 and 2 to 1. In other words for every \$2.50 of loss reserves, MSF is targeting \$1 of policyholder equity. At the end of fiscal year 2009, this measure is 4.05 to 1 as compared to 3.47 to 1 in fiscal year 2008. This change is driven by the turmoil in the financial markets and investments where MSF experienced a loss on equity investments of \$23 million and realized losses on bond security investments from losses on sale or bond write downs of another \$13.6 million. Including the loss on equity investments in FY 2008 of \$13 million, MSF total losses on MSF investments the past two fiscal years is \$49.6 million which reduced the level of policyholder equity. Without this degree of loss on MSF investments, the loss reserve to equity

level would be 3.25 to 1. Highlighting the volatility of the investment markets, as of the end of the first quarter of FY 2010, the value of the investment in equities has improved 13% as investment markets have improved resulting in close to \$11 million of gain. The following table provides a history of the loss reserve to equity since FY 2003.



The target ratio for policy holder equity is a recommendation by MSF management based on professional judgment and analysis based on the potential and uncertainty of events that can stress the results of the organization. The target recommended by management is not an immediate goal but is established as a long term goal so management is able to take the incremental steps necessary toward achieving this goal without major disruptions to Montana business. A more critical consideration is that MSF has been able to absorb the volatility of investment markets and adverse development in losses from prior accident years while providing a stable rate environment and specifically since FY 2005. The following table provides a recent history of rate level changes.

Montana State Fund Rate Level Changes	
Effective Date	Manual Rate Change
7/1/2003	11.6%
7/1/2004	9.5%
7/1/2005	3.0%
7/1/2006	2.4%
7/1/2007	-1.0%
7/1/2008	-3.0%
7/1/2009	0.0%

In addition to the annual rate planning process for the rate level approved by the Board of Directors, MSF uses a financial model to project results of operations for future years that allows MSF to test various assumptions and scenarios to establish plans to achieve MSF financial goals.

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As indicated in the published Strategic Business Plan of MSF for FY 2010, MSF is projecting the loss reserve to equity of 3.55 to 1 to be reached by fiscal year 2012. MSF publishes three years of projections in the MSF business plan as beyond that period the estimates become highly uncertain. However, the financial model allows MSF to project out ten years and allows MSF to model options to test the general trajectory of MSF operations to achieve the loss reserve to equity target. 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 or seven years from the end of fiscal year 2009. These projections are based on estimates and are subject to considerable variability over the years, but the important point is that given the predominant forces at work, the indicated direction is improving the ratio toward the target established by the Board.

Explanation of Financial Modeling Used in Planning

Any financial model requires the use and application of assumptions. The assumptions MSF used in building the most current projections for the FY 2010 business plan are presented in the following tables involving payroll and premium changes, losses and investments. The starting point for the model is the current fiscal year projections. In this case the starting point is fiscal year 2009. The projection for FY 2009 is based on the third quarter ending March 31, 2009. The actual results for FY 2009 differ from the projections used in MSF model. This is because we publish the business plan with financial projections before the start of the fiscal year and before we know final results of the previous fiscal year.

The following table provides the assumptions used in estimating premium revenue. The assumptions are for wage trends, change in business volume or the expected net difference between the amount business MSF would anticipate to lose offset by the amount of new business MSF expects to write in the period and finally, the expected rate change. As you will note, MSF estimates wage growth to trend flat for FY 2010 and increasing in FY 2011 to 2% growth and reaching 3% by FY 2013. MSF is also projecting that to keep pace with inflation in benefit costs, an annual 2% rate change will be required. The assumptions used include a net loss of business of (7.8%) in FY 2010 with no change in business volume in future years.

Earned Premium Revenue	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Percent Annual Payroll Trend	na	na	0.00%	2.00%	2.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Percent Net Business Volume Change	na	na	-7.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Percent Manual Rate Change	na	-3.00%	0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%

The next table provides the input assumptions for losses and loss adjustment expenses. This includes assumptions on trends on medical costs and indemnity costs. These inputs provide assumptions for the expected loss ratio for the accident year but also impact assumptions for additional development on prior year's claims to be paid in the future.

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Incurring Loss & LAE	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Medical Severity Trend	na	6.00%	6.09%	6.15%	6.20%	6.25%	6.30%	6.34%	6.39%	6.43%	6.47%
Indemnity Severity Trend	na	2.00%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%
AY Expected Loss Ratio (@ManPrem)	na	0.716	0.700	0.708	0.710	0.708	0.708	0.707	0.707	0.708	0.709
AY ALAE Factor (% Loss)	3.30%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
AY ULAE Factor (% Loss)	10.00%	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%	11.00%

These factors result in the incurred losses for the current accident year and estimates of additional development on prior years as follows.

Incurring Loss	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
AY Loss Incurred	\$165,320	\$165,000	\$147,776	\$154,764	\$162,188	\$170,082	\$178,476	\$187,404	\$196,907	\$207,028	\$217,812
Prior AY Losses Incurred	\$33,873	\$13,005	\$8,039	\$5,111	\$4,354	\$4,632	\$4,626	\$4,601	\$4,898	\$5,218	\$5,564

The next table shows the assumptions used to allocate investments by asset class. MSF invested assets are allocated between bonds, stocks and cash and short term investments. In addition, we also provide an estimate of return on those investments. The remaining portion of the table shows assumptions for the other categories for assets and liabilities, including assets for equipment, real estate and building as well as for accounts payable.

	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Bonds	88.6%	89.2%	90.0%	90.1%	89.2%	88.2%	88.2%	88.2%	88.2%	88.2%	88.2%
Equity Securities	8.9%	8.8%	8.0%	8.0%	9.0%	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Short-Term Investments	1.8%	1.7%	1.5%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%	1.4%
Cash	0.7%	0.3%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%	0.5%
Distribution by Class (excl securities on loan)	100.0%										
Average Return on Bonds	na	3.55%	5.10%	5.19%	5.28%	5.37%	5.46%	5.59%	5.61%	5.63%	5.66%
Return on Equities	na	-21.22%	0.50%	0.50%	1.00%	1.50%	2.00%	2.50%	3.00%	3.00%	3.00%
Short-Term Investment Pool Yield	na	1.03%	1.18%	1.36%	1.70%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Weighted Average Total Return	na	1.33%	4.65%	4.73%	4.82%	4.92%	5.05%	5.22%	5.29%	5.30%	5.32%
Wtd Avg Investment Income Return	na	3.49%	5.01%	5.10%	5.20%	5.30%	5.39%	5.52%	5.54%	5.56%	5.58%
Premium Receivable	\$22,738	\$8,789	\$8,027	\$8,296	\$8,669	\$9,102	\$9,556	\$10,033	\$10,528	\$11,048	\$11,595
Real Estate	\$1,139	\$1,139	\$1,139	\$1,139	\$1,139	\$1,139	\$1,139	\$1,139	\$1,139	\$1,139	\$1,139
Building	\$1,251	\$9,149	\$27,008	\$26,092	\$25,176	\$24,261	\$23,345	\$22,429	\$21,513	\$20,598	\$19,682
Equipment	\$1,107	\$709	\$4,674	\$3,786	\$3,786	\$3,786	\$3,786	\$3,786	\$4,721	\$4,721	\$4,721
Interest Receivable	\$11,414	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Miscellaneous Assets	\$32,316	\$35,828	\$33,028	\$34,184	\$34,184	\$34,184	\$34,184	\$34,184	\$34,184	\$34,184	\$34,184
Noninvested Assets	\$69,965	\$55,614	\$73,875	\$73,497	\$72,954	\$72,471	\$72,010	\$71,571	\$72,085	\$71,690	\$71,320
Unearned Premium	\$9,842	\$8,765	\$7,999	\$8,265	\$8,642	\$9,079	\$9,538	\$10,021	\$10,528	\$11,061	\$11,620
Accounts Payable & Due To Other Agencies	\$27,858	\$22,620	\$20,838	\$21,558	\$22,555	\$23,710	\$24,923	\$26,196	\$27,516	\$28,903	\$30,360
Policyholder Funds Held in Trust	\$4,332	\$3,858	\$3,521	\$3,638	\$3,804	\$3,996	\$4,198	\$4,411	\$4,634	\$4,868	\$5,115
Aggregate Stop Loss Funds Withheld	\$40,556	\$40,556	\$40,556	\$40,556	\$40,556	\$40,556	\$40,556	\$40,556	\$40,556	\$40,556	\$40,556
Compensated Absences	\$1,499	\$1,799	\$1,678	\$1,797	\$1,832	\$1,903	\$1,976	\$2,053	\$2,141	\$2,235	\$2,333
Other Liabilities	\$74,246	\$68,833	\$66,593	\$67,550	\$68,747	\$70,165	\$71,653	\$73,216	\$74,848	\$76,563	\$78,364

There are additional assumptions included in the model such as expected pay patterns for losses incurred as well as other expenses but the above sections are the most significant considerations for the model. All of the inputs and assumptions drive a series of calculations to derive the projected financial results. Financial models cannot capture all possible future dynamics including potential management, marketplace or regulatory actions. The assumptions included in the MSF projections will in all likelihood differ from actual outcomes. MSF researches potential assumptions to determine their reasonableness. For example, the wage trend assumed in the model is derived from quarterly weekly wage data published by the Montana Department of Labor and Industry. MSF also establishes projections assuming manageable rate level adjustments with the goal of providing a stable workers' compensation market for Montana's employers.

As a comparison, if all other assumptions remain the same, it would take a rate increase of 13% effective July 1, 2010 (FY 2011) to achieve a loss reserve to equity of 2.5 to 1 by FY 2014 or as another option, rate increases of 5.5% in each year for FYs 2011 – 2014 to achieve the same loss reserve to equity target ratio. Neither of these actions provides for a stable environment for employers in Montana and is not required for MSF to continue to operate with safe and sound operations. MSF policyholder equity has done its job in recent years to provide stability including,

- Ability to absorb additional development on prior loss years
- Ability to absorb unprofitable years in fiscal years 2003 and 2004
- Ability to absorb a volatile investment climate and investment market downturns.

Discussion of Loss Reserves

MSF proactively manages the risk of variability of loss reserves by recording loss reserves on an undiscounted basis. The affect of this is approximately \$45 million at a 4% discount on indemnity loss reserves. MSF also records an additional \$32 million above the consulting actuary best estimate of unpaid losses for the potential of additional adverse development or the potential cost of adverse court decisions. The fact that MSF records loss reserves on an undiscounted basis and above the consulting actuary's best estimate state's MSF's financial position on a relatively conservative basis. The amounts set aside by MSF mitigate the impact of significant variability from planned outcomes and allow MSF to take incremental steps to adjust plans to absorb this variability while maintaining a stable market. The following table illustrates the adjusted loss reserve to policy holder equity measure if these conservative steps were removed and indicates MSF would be near the target equity level.

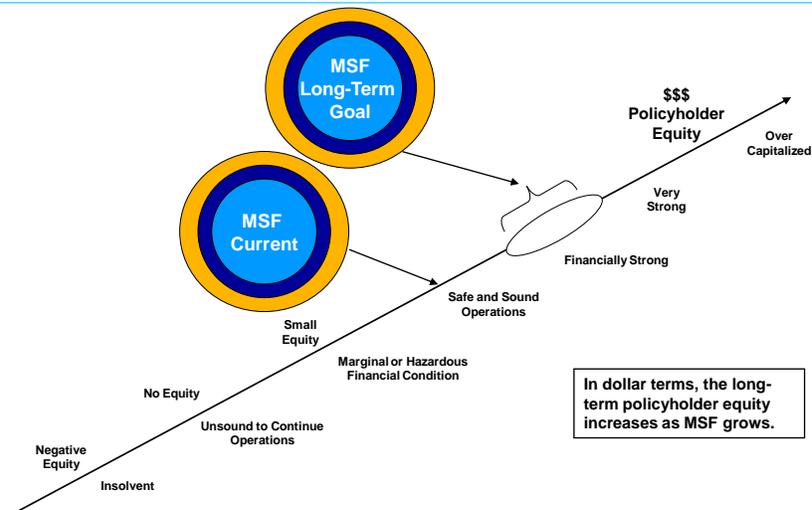
MSF Adjusted Loss and LAE Reserves to Equity	
<i>(in 000s)</i>	
Stated Loss & LAE Reserves	\$ 813,304
Reserve Strengthening	32,000
Discount Impact on Indemnity Reserves	44,758
Adjusted Loss Reserves	\$ 736,546
Adjusted Policy Holder Equity	\$ 277,790
Adjusted Reserve to Equity	2.65

Summary

MSF current financial position continues to provide for safe and sound business operations while allowing MSF to establish the steps to achieve MSF target equity level while also maintaining a stable insurance market for MSF policy holders. The following graphic as provided by the independent consulting actuary, Towers Perrin depicts MSF's current position as well as MSF target for growth. An important point to make about the target loss reserve to equity level of 2.5 to 1 is that this goal is not an indication of minimum level of equity but is rather an indication of a goal for MSF to have an appropriate level of financial strength. There is not a specific requirement to reach this level within a certain timeframe but MSF should provide for the initiatives and actions to take the steps toward the target level.

POLICYHOLDER EQUITY AND DIVIDEND CONSIDERATIONS

We concur with management that MSF needs to continue growing policyholder equity



Source: Towers Perrin

In summary, MSF currently has the financial capacity for safe and sound operations and the MSF financial projections indicate MSF will achieve the loss reserve to policyholder equity target range by fiscal year 2016 with minimal disruption to employers. Actual performance toward achieving this target is subject to variability from year to year, but the long term goal of MSF is to grow equity to position MSF to be financially strong.