



# MONTANA LEGISLATIVE BRANCH

## Legislative Fiscal Division

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Legislative Fiscal Analyst  
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DATE: October 7, 2008

TO: Legislative Finance Committee

FROM: Jon Moe, Fiscal Specialist

RE: 2008 Actuarial Valuations of the Retirement Plans

The respective retirement systems have just recently received their actuarial valuation for the year ending 6/30/2008. In the attached spreadsheet, I have attempted to summarize some key data that might interest the committee, plus provide a comparison to the previous two valuations (2006 and 2007). The four plans that are highlighted are those pension plans that were the focus of attention over the past few sessions as they were considered "actuarially unsound" as defined in the Constitution and state statute. Actions of the legislatures in 2005 and 2007 and especially fine investment returns in FY 2006 resulted in significant improvement that can be seen in the 2007 data.

The key item to focus on in the FY 2008 data is the "Years to Amortize Unfunded Liability" which is also highlighted. This is an important indicator because the definition of "actuarial soundness" is tied to the pension plan ability to pay down its unfunded liability within a 30 year period. As you can see, the Teachers' Retirement System is the only plan that exceeds the 30 year amortization, albeit not by a great deal.

There are two points that need to be mentioned. First is that although this data does not look as bad as one might expect given the recent economic events, the valuation process applies a technique called "smoothing" that spreads gains and losses out over a period of time. Therefore, losses that occurred in FY 2008 are not totally realized in this current valuation, but rather will be spread out over a four year period. Second, the current valuation does not take into account the impact of economic events since June 30, 2008. As you all know, the past three months have seen some extraordinary volatility.

I hope this information can give you some sense of the condition of the various retirement plans. If you have questions, feel free to contact me [jonmoe@mt.gov](mailto:jonmoe@mt.gov) or (406) 444-4581. In addition, Carroll South of the Board of Investments will provide a brief report on the pension fund performance and the market in general at the October 10 Legislative Finance Committee meeting.

ATTACHMENT

**Pension Plan Unfunded Liability**  
**2008 Actuarial Valuation versus 2006 & 2007 Actuarial Valuations**

(Dollars in Millions)

	TRS	PERS-DB	SRS	GWPORS	HPORS	MPORS	FURS	JRS	VFCA
<b>2006 Valuation (as of 6/30/2006)</b>									
Actuarial Liability	\$3,608.9	\$3,919.3	\$171.8	\$64.2	\$112.0	\$291.1	\$255.5	\$37.2	\$31.9
Assets	<u>2,745.8</u>	<u>3,459.1</u>	<u>163.0</u>	<u>58.8</u>	<u>87.2</u>	<u>175.9</u>	<u>167.3</u>	<u>51.8</u>	<u>23.2</u>
Unfunded Liability (Surplus)	\$863.1	\$460.2	\$8.8	\$5.4	\$24.8	\$115.2	\$88.2	(\$14.6)	\$8.7
Funded Ratio	76.1%	88.3%	94.9%	91.6%	77.9%	60.4%	65.5%	139.2%	72.7%
<b>Years to Amortize Unfunded Liability</b>	<b>Does not amortize</b>	<b>Does not amortize</b>	<b>Does not amortize</b>	<b>32.4 yrs</b>	<b>18 yrs</b>	<b>21.4 yrs</b>	<b>15.5 yrs</b>	<b>n/a</b>	<b>9.6 yrs</b>
<b>2007 Valuation (as of 6/30/2007)</b>									
Actuarial Liability	\$3,775.1	\$4,201.2	\$189.0	\$73.0	\$128.3	\$310.4	\$269.4	\$36.9	\$31.6
Assets	<u>3,006.2</u>	<u>3,825.2</u>	<u>183.9</u>	<u>68.8</u>	<u>95.8</u>	<u>198.3</u>	<u>188.5</u>	<u>57.8</u>	<u>25.9</u>
Unfunded Liability (Surplus)	\$768.9	\$376.0	\$5.1	\$4.2	\$32.5	\$112.1	\$80.9	(\$20.9)	\$5.7
Funded Ratio	79.6%	91.1%	97.3%	94.2%	74.7%	63.9%	70.0%	156.6%	82.0%
<b>Years to Amortize Unfunded Liability<sup>(b)</sup></b>	<b>28.6 yrs</b>	<b>21.9 yrs</b>	<b>19.6 yrs</b>	<b>11.3 yrs</b>	<b>19.1 yrs</b>	<b>20.5 yrs</b>	<b>12.9 yrs</b>	<b>n/a</b>	<b>5.1 yrs</b>
Total Contribution Rate	16.730%	13.895%	19.070%	19.560%	45.380%	52.780%	57.660%	32.810%	(a)
Normal Cost Rate	<u>10.400%</u>	<u>12.220%</u>	<u>19.460%</u>	<u>18.670%</u>	<u>22.310%</u>	<u>26.450%</u>	<u>26.050%</u>	<u>25.190%</u>	
Available for Amortization	6.330%	1.675%	-0.390%	0.890%	23.070%	26.330%	31.610%	7.620%	
Avail. For Amort. FY 2010 <sup>(b)</sup>	6.710%	1.810%	-0.100%						
<b>2008 Valuation (as of 6/30/2008)</b>									
Actuarial Liability	\$3,953.7	\$4,504.7	\$204.5	\$83.4	\$134.7	\$327.5	\$287.2	\$39.4	\$32.7
Assets	<u>3,159.1</u>	<u>4,065.3</u>	<u>199.4</u>	<u>77.5</u>	<u>101.5</u>	<u>212.3</u>	<u>206.1</u>	<u>62.0</u>	<u>27.5</u>
Unfunded Liability (Surplus)	\$794.6	\$439.4	\$5.1	\$5.9	\$33.2	\$115.2	\$81.1	(\$22.6)	\$5.2
Funded Ratio	79.9%	90.2%	97.5%	92.9%	75.4%	64.8%	71.8%	157.4%	84.1%
<b>Years to Amortize Unfunded Liability<sup>(b)</sup></b>	<b>31.3 yrs</b>	<b>24.8 yrs</b>	<b>16.3 yrs</b>	<b>13.0 yrs</b>	<b>17.4 yrs</b>	<b>18.6 yrs</b>	<b>11.3 yrs</b>	<b>n/a</b>	<b>5.0 yrs</b>
Net Statutory Funding Rate	16.730%	13.895%	19.070%	19.560%	45.380%	52.780%	57.660%	32.810%	(a)
Normal Cost Rate	<u>10.870%</u>	<u>12.130%</u>	<u>19.240%</u>	<u>18.540%</u>	<u>22.250%</u>	<u>26.650%</u>	<u>26.150%</u>	<u>25.120%</u>	
Available for Amortization	5.860%	1.765%	-0.170%	1.020%	23.130%	26.130%	31.510%	7.690%	
Avail. For Amort. FY 2010 <sup>(b)</sup>	6.240%	1.900%	0.120%						

**Notes** (a) Contributions are not expressed as a percent of wages but rather are a portion of the fire insurance premiums collected by the state.

(b) Contributions by employer increase 0.38% for TRS, 0.135% for PERS and 0.29% for SRS on July 1, 2009, resulting in an increased amount available for amortization. The number of years shown to amortize the unfunded liability takes these increases in em

<b>Key</b>	<b>TRS</b> - Teachers' Retirement System	<b>MPORS</b> - Municipal Police Officers' Retirement System
	<b>PERS</b> - Public Employees' Retirement System	<b>FURS</b> - Firefighters' Unified Retirement System
	<b>SRS</b> - Sheriffs' Retirement System	<b>JRS</b> - Judges' Retirement System
	<b>GWPORS</b> - Game Wardens and Peace Officers' Retirement System	<b>VFCA</b> - Volunteer Firefighters' Compensation Act
	<b>HPORS</b> - Highway Patrol Officers' Retirement System	