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## Maine State Retirement and The Unfunded Liability: A History of Legislative Changes and Financial Trends 1991 – 2013

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**Maine State Retirement and The Unfunded Liability:  
A History of Legislative Changes and Financial Trends  
1991 – 2013**

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February 2014

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## Introduction

In an article published in the Portland Press Herald on July 24, 2010 titled *Maine's Unfunded Pension Liability Looms as Election Issue*, the unfunded liability is reported as having increased from \$3.1 billion to \$4.4 billion through the recent financial crisis beginning in 2008. It is also stated that by 2028, the year that the State is constitutionally obligated to repay the liability, the State will need to pay \$8.9 billion (The Associated Press). It is important here to note that the unfunded liability referred to is from the state and teacher retirement pension. The actuarial unfunded liability is the shortfall found when calculating future assets of the pension and comparing them to future retirement payments. The unfunded liability exists because of insufficient historical general funding and increases in retirement benefits without increases in funding numerous times. The State of Maine is constitutionally obligated to retire the unfunded portion of the pension by 2028 due to a constitutional amendment enacted in 1995 mandating the unfunded liability be paid off by July 1, 2028. Since that amendment there have been many other changes enacted to help pay down the debt and improve the funding ratio (the percentage of future liabilities covered) of the pension.

## Explanation of Analysis

The following analysis has been completed to trace the historical trends and positions of the unfunded liability and the funding ratio. The analysis will point out which legislative changes appeared to have left the most impact on the actuarial unfunded liability based on the financial data. The analyst will present all legislative changes pertaining to or impacting the Maine State Retirement System with extended reference and analysis given to those changes deemed to be most effective to changes in the unfunded liability. Through a series of tables and graphs the analysis will present financial data from the Maine State Retirement System and the State of Maine. The analysis will cover the time between the years of 1991 through 2013. All financial and legislative information presented is public. All State of Maine General Fund financial information was taken from Comprehensive Annual Financial Reports for the State of Maine dated 2000 – 2013 obtained through <http://www.maine.gov/osc/finanrept/cafr.shtml>. State General Fund information pre-2000 was taken from a report in excel provided by Heidi MacDonald CPA, Manager, Financial Reporting and Analysis for the Office of the State Controller. All MainePERS financial information was taken from Comprehensive Annual Financial Reports dated 1991 – 2013 obtained through the Maine Public Employees Retirement System.

# Overview of State Financial History:

*General Fund Budgetary Revenues and Expenditures*

# Maine State General Fund Overview

## Budgetary Basis

Table 1

State of Maine General Fund (budgetary basis)					
FY		Other Financing		Other Financing	Excess Revenue over
6/30/XXXX	Revenue	Sources	Expenditures	Uses	(under) Expenditures
1991	1,424,084,700	19,889,664	1,550,964,764		(106,990,400)
1992	1,512,463,098	30,424,588	1,533,844,301		9,043,385
1993	1,561,402,638	40,532,268	1,606,620,230	-	(4,685,324)
1994	1,623,888,486		1,592,804,301	5,191,887	25,892,298
1995	1,671,736,430	6,857,711	1,686,997,644	-	(8,403,503)
1996	1,749,709,326	11,444,832	1,685,207,128	-	75,947,030
1997	1,863,086,299	-	1,768,652,535	13,119,827	81,313,937
1998	2,111,860,005	17,206,078	1,898,373,021		230,693,062
1999	2,237,123,270		2,153,508,108	27,212,512	56,402,650
2000	2,395,216,806		2,317,138,580	21,774,000	56,304,226
2001	2,395,079,000		2,692,519,000	40,748,000	(338,188,000)
2002	2,456,518,000		2,655,175,000	3,793,000	(202,450,000)
2003	2,384,516,000		2,613,422,000	8,133,000	(237,039,000)
2004	2,631,976,000		2,683,073,000	11,815,000	(62,912,000)
2005	2,803,441,000		2,842,558,000	49,458,000	(88,575,000)
2006	2,919,128,000		2,941,571,000	61,858,000	(84,301,000)
2007	3,080,894,000		3,107,330,000	73,724,000	(100,160,000)
2008	3,116,270,000		3,178,137,000	75,529,000	(137,396,000)
2009	2,908,101,000		3,109,932,000	53,338,000	(255,169,000)
2010	2,779,248,000		2,941,228,000	86,243,000	(248,223,000)
2011	2,981,548,000		2,925,917,000	84,713,000	(29,082,000)
2012	3,069,427,000		3,172,066,000	79,407,000	(182,046,000)
2013	3,094,448,000		3,144,915,000	59,516,000	(109,983,000)

Data from 1991-2000 provided by State of Maine financial office (name). Data from 2001-2013 taken from CAFRS

Table 1 presents revenues and expenditures on a budgetary basis for the State of Maine general fund from 1991 through 2013. The analysis uses budgetary figures due to the financial information collected from the State of Maine (financial office), which was budgetary financial data only. General fund information is important in helping to show the State's overall financial health. A healthy general fund potentially means extra funding to pay down the unfunded liability. Initial glances at Table 1 point to the excess revenues (under) expenditures since 2001. Prior to 2001 and beginning at 1991 the State budgeted

excess revenues over expenditures 7 out of the 10 years. The State budgeted its largest excess in revenues in 1998. It is not entirely surprising that the State has not budgeted for excess revenues over expenditures since 2001. Since 2001 the United States has seen 2 recessions, 2 wars, political turmoil, and healthcare overhaul. Between 2001 and 2003 the State budgeted for revenue shortfalls of over \$200 million in all 3 years. Between 2007 and 2010 the State budgeted an average revenues under expenditures of \$185 million. This is important because the State can utilize any surplus from the general fund to help pay down the unfunded liability; for example in 1999 and 2000 the State contributed \$20 and \$4 million of surplus respectively to the unfunded liability (CAFR 1999, 2000). As the Maine economy improves the State has begun budgeting for increased revenues. Budgetary revenues increased from 2010 to 2011 by 7.28%; from 2011 to 2012 by 2.95%; and from 2012 to 2013 by .82%. Although the increases may appear to be insignificant, the 3-year trend of increases follows 2 years of decreases. From 2008 to 2009 the State budgeted for 6.68% less revenues and from 2009 to 2010 4.43% less. During this time the State also budgeted for reduced expenditures: from 2008 to 2009 the State reduced expenditures by 2.15%; from 2009 to 2010 by 5.42%; and from 2010 to 2011 by .52% before budgeting for a sharp increase of 8.41% in 2012. As the State continues paying down the unfunded liability it can be argued that more help from the general fund will be necessary especially if the contribution levels into the Maine State Retirement System of both employees and employers remain stagnant or decrease.



# Maine State Retirement System:

## *Financial Overview*

## Membership

Maine has seen membership in the Maine Retirement System fluctuate from 1991 to 2013 while members receiving benefits has increased year over year. Figure 1 shows the trend of increasing members receiving benefits while the number of total members has fluctuated. By the year 2013 there is only a 13,029 difference in total members and retirement recipients. The largest spread came in the year 2001, which showed 29,445 more members than retirement recipients. 2001 also appears to be more of an outlier, considering that for all other years from 1991 to 2013 the number of total members was between 47,000 and 53,200.

Figure 1

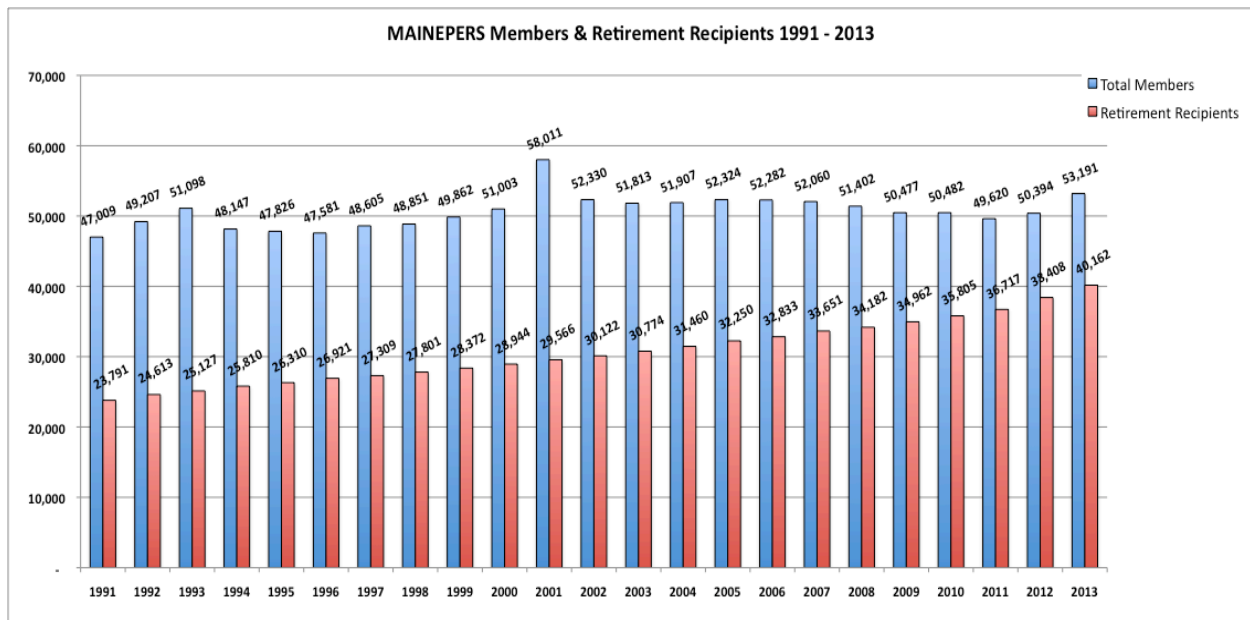


Table 2 below shows the percent changes from year to year for both retirement recipients and total members. From 2011 to 2012 and 2012 to 2013 the system saw its greatest increases in retirement recipients since 1991. Retirement recipients increased 4.61% to 2012 and 4.57% to 2013. Total members also saw a substantial increases from 2012 to

2013; gaining 5.55%. The column to the far right of Table 2 labeled *Ratio* shows the retirement recipients as a percentage of total members.

Table 2

<b>Members &amp; Retirees</b>					
<b>YEAR</b>	<b>Members non-terminated</b>	<b>% Change</b>	<b>Retirement Recipients</b>	<b>% Change</b>	<b>Ratio</b>
1991	47,009		23,791		51%
1992	49,207	4.68%	24,613	3.46%	50%
1993	51,098	3.84%	25,127	2.09%	49%
1994	48,147	-5.78%	25,810	2.72%	54%
1995	47,826	-0.67%	26,310	1.94%	55%
1996	47,581	-0.51%	26,921	2.32%	57%
1997	48,605	2.15%	27,309	1.44%	56%
1998	48,851	0.51%	27,801	1.80%	57%
1999	49,862	2.07%	28,372	2.05%	57%
2000	51,003	2.29%	28,944	2.02%	57%
2001	58,011	13.74%	29,566	2.15%	51%
2002	52,330	-9.79%	30,122	1.88%	58%
2003	51,813	-0.99%	30,774	2.16%	59%
2004	51,907	0.18%	31,460	2.23%	61%
2005	52,324	0.80%	32,250	2.51%	62%
2006	52,282	-0.08%	32,833	1.81%	63%
2007	52,060	-0.42%	33,651	2.49%	65%
2008	51,402	-1.26%	34,182	1.58%	66%
2009	50,477	-1.80%	34,962	2.28%	69%
2010	50,482	0.01%	35,805	2.41%	71%
2011	49,620	-1.71%	36,717	2.55%	74%
2012	50,394	1.56%	38,408	4.61%	76%
2013	53,191	5.55%	40,162	4.57%	76%

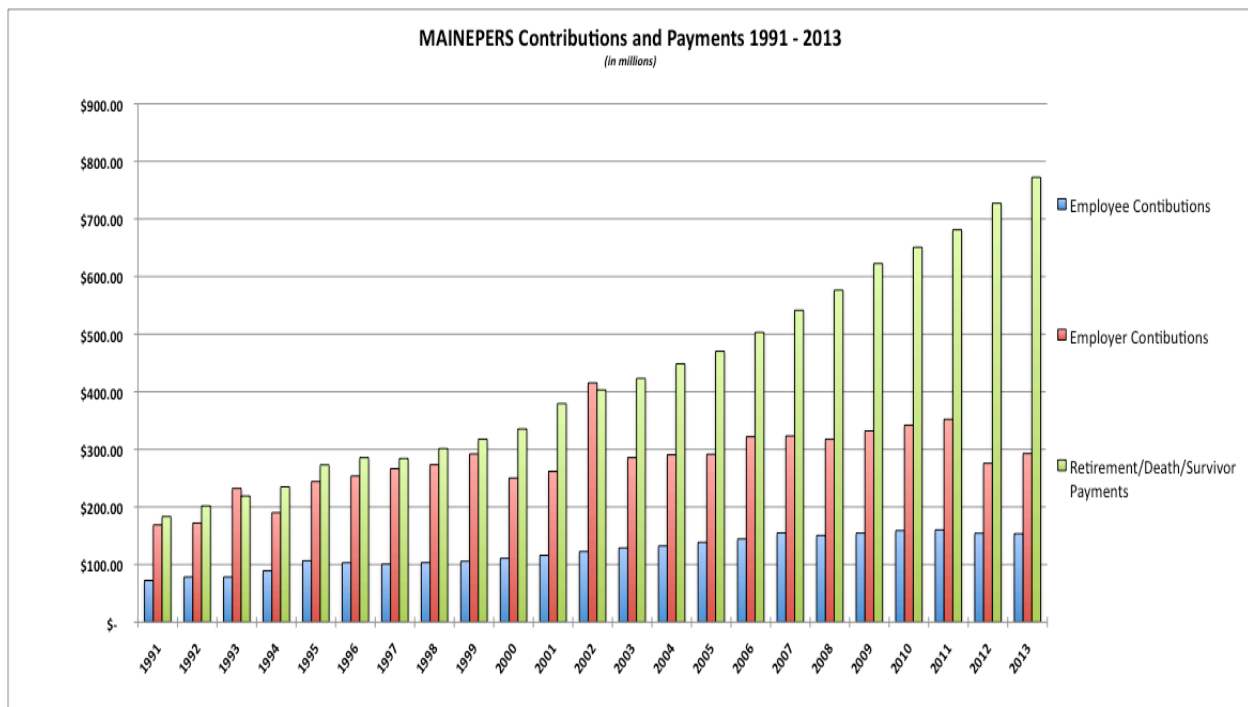
The membership graph and table show us that as retirement recipients are increasing at a fairly steady pace, membership into the retirement pension is remaining relatively stagnant. Total members increased by only 6,000 new members from 1991 to 2013 while retirement recipients increased by 16,000 over the same period. Table 3 below shows the amount of contributions to the plan by both employees and employers from 1991 to 2013; it also includes retirement, death, and survivor payments for each year. Before 2003 the amount of benefits paid was covered by the total amount of contributions by the employees and employers each year. This is seen in the column to the far right, labeled *Ratio*. The

column shows the benefit payments as a percentage of the employee and employer contributions for each year. From 2003 on, with the exception of the time from 2005 to 2006, the amount of benefit payments continued to increase compared to the amount of employee and employer contributions. The table shows that both, the employee and employer contributions have increased and decreased since 1991. The most significant changes for employee contributions came in the years 1994 and 1995 with increases from year to year of 13.57% and 19.74% respectively. Employer contributions have seen the most fluctuation with significant changes coming in the years 1993 to 1995, 2000, 2002-2003, 2006, and 2012. What Table 3 and Figure 2 show is that as benefits increased over the years, employer contributions did not.

Table 3

Contributons & Payments							
	Employee Contributions	% Change	Employer Contributions	% Change	Retirement/Death/Survivor Payments	% Change	Ratio
1991	\$ 72,350,546.00		\$ 168,770,434.00		\$ 183,334,750.00		76%
1992	\$ 78,479,531.00	8.47%	\$ 172,090,046.00	1.97%	\$ 201,825,146.00	10.09%	81%
1993	\$ 78,481,972.00	0.00%	\$ 232,135,989.00	34.89%	\$ 219,001,480.00	8.51%	71%
1994	\$ 89,134,364.00	13.57%	\$ 190,180,426.00	-18.07%	\$ 234,911,910.00	7.26%	84%
1995	\$ 106,726,802.00	19.74%	\$ 244,105,817.00	28.35%	\$ 273,021,392.00	16.22%	78%
1996	\$ 103,116,929.00	-3.38%	\$ 253,646,796.00	3.91%	\$ 285,528,562.00	4.58%	80%
1997	\$ 100,683,010.00	-2.36%	\$ 266,453,877.00	5.05%	\$ 284,139,339.00	-0.49%	77%
1998	\$ 103,314,565.00	2.61%	\$ 273,317,235.00	2.58%	\$ 301,341,756.00	6.05%	80%
1999	\$ 105,706,888.00	2.32%	\$ 292,104,205.00	6.87%	\$ 317,749,428.00	5.44%	80%
2000	\$ 110,766,917.00	4.79%	\$ 250,278,123.00	-14.32%	\$ 335,494,029.00	5.58%	93%
2001	\$ 116,032,261.00	4.75%	\$ 261,845,196.00	4.62%	\$ 379,522,223.00	13.12%	100%
2002	\$ 122,613,975.00	5.67%	\$ 415,551,283.00	58.70%	\$ 403,208,003.00	6.24%	75%
2003	\$ 128,911,129.00	5.14%	\$ 285,646,013.00	-31.26%	\$ 423,217,912.00	4.96%	102%
2004	\$ 132,254,631.00	2.59%	\$ 290,572,258.00	1.72%	\$ 448,400,887.00	5.95%	106%
2005	\$ 138,622,166.00	4.81%	\$ 291,615,599.00	0.36%	\$ 470,218,358.00	4.87%	109%
2006	\$ 144,397,946.00	4.17%	\$ 321,901,020.00	10.39%	\$ 503,027,886.00	6.98%	108%
2007	\$ 155,061,294.00	7.38%	\$ 323,376,847.00	0.46%	\$ 541,387,999.00	7.63%	113%
2008	\$ 150,522,802.00	-2.93%	\$ 317,757,236.00	-1.74%	\$ 576,345,663.00	6.46%	123%
2009	\$ 154,546,403.00	2.67%	\$ 332,102,517.00	4.51%	\$ 622,604,996.00	8.03%	128%
2010	\$ 158,962,754.00	2.86%	\$ 341,999,575.00	2.98%	\$ 650,834,368.00	4.53%	130%
2011	\$ 160,205,523.00	0.78%	\$ 352,190,861.00	2.98%	\$ 681,156,473.00	4.66%	133%
2012	\$ 154,299,064.00	-3.69%	\$ 275,748,880.00	-21.70%	\$ 727,214,247.00	6.76%	169%
2013	\$ 153,536,499.00	-0.49%	\$ 292,694,292.00	6.15%	\$ 772,360,000.00	6.21%	173%

Figure 2



As seen clearly in the above Figure 2, benefit payments have far surpassed the combination of employee and employer contributions. Employee contributions were at a 5-year low in 2013 and employer contributions were at the second lowest in the last 8 years in 2013, the lowest being in 2012. With the unfunded liability and increasing benefit payments, it may be assumed that employer and employee contributions would increase; however, according to Figure 2 and Table 3, that is not the case with the pension.

## Balance Sheet

Table 4

<b>Balance Sheet Summary</b>			
	<b>Total Assets</b>	<b>Trust Reserves</b>	<b>Liabilities &amp; Operating Reserves</b>
<b>1991</b>	\$ 1,892,544,569.08	\$ 1,833,973,331.44	\$ 8,571,238.04
<b>1992</b>	\$ 2,064,865,225.22	\$ 2,057,972,825.65	\$ 6,892,399.57
<b>1993</b>	\$ 2,293,792,717.74	\$ 2,279,498,376.48	\$ 14,294,341.26
<b>1994</b>	\$ 2,496,296,189.57	\$ 2,482,359,766.57	\$ 13,936,423.00
<b>1995</b>	\$ 2,792,047,670.00	\$ 2,750,522,177.00	\$ 41,525,493.00
<b>1996</b>	\$ 3,127,905,393.00	\$ 3,092,090,263.00	\$ 35,815,130.00
<b>1997</b>	\$ 5,230,088,073.00	\$ 5,214,196,836.00	\$ 15,891,237.00
<b>1998</b>	\$ 6,241,050,237.00	\$ 6,181,956,263.00	\$ 59,093,974.00
<b>1999</b>	\$ 6,989,620,443.00	\$ 6,933,090,346.00	\$ 56,530,097.00
<b>2000</b>	\$ 7,875,881,503.00	\$ 7,618,480,224.00	\$ 257,401,279.00
<b>2001</b>	\$ 7,533,286,244.00	\$ 7,028,778,723.00	\$ 504,507,521.00
<b>2002</b>	\$ 7,158,248,561.00	\$ 6,632,301,751.00	\$ 525,946,810.00
<b>2003</b>	\$ 7,693,180,348.00	\$ 6,975,244,129.00	\$ 717,936,219.00
<b>2004</b>	\$ 8,355,533,001.00	\$ 8,093,521,560.00	\$ 262,011,441.00
<b>2005</b>	\$11,716,782,268.00	\$ 8,930,532,689.00	\$ 2,786,249,579.00
<b>2006</b>	\$12,242,629,932.00	\$ 9,529,330,019.00	\$ 2,713,299,913.00
<b>2007</b>	\$14,095,564,420.00	\$10,972,415,489.00	\$ 3,123,148,931.00
<b>2008</b>	\$13,505,688,890.00	\$10,489,432,282.00	\$ 3,016,256,608.00
<b>2009</b>	\$ 9,128,878,210.00	\$ 8,309,747,539.00	\$ 819,130,671.00
<b>2010</b>	\$10,084,594,890.00	\$ 9,069,473,464.00	\$ 1,015,121,426.00
<b>2011</b>	\$11,144,085,786.00	\$10,840,669,337.00	\$ 303,416,449.00
<b>2012</b>	\$11,375,085,744.00	\$10,544,061,663.00	\$ 831,024,081.00
<b>2013</b>	\$12,847,066,027.00	\$11,344,222,107.00	\$ 1,502,843,920.00

2009 is the year that deserves a highlight, as it is the year that the balance sheet assets took the largest loss out of the period from 1991 to 2013. A decrease in assets of 32% took assets from \$13.5 billion in 2008 to \$9.1 billion in 2009. The only other decreases came from 2007 to 2008, 2000 to 2001 and from 2001 to 2002, all in times of recessions. Figure 3 below clearly traces the trend of the assets from 1991 to 2013, clearly showing the dips from 2000-2002 and 2007-2009. The fund assets, in 2013, are only \$1.2 billion away from the highest point of \$14.1 billion in 2007. Liabilities have increased since 1991, although as a percentage of assets they have decreased from .45% to .12%. As can be seen in figure 4

and Table 4, liabilities have had one sharp increase in 2005 and remained steady until 2009 when they sharply decreased.

Figure 3

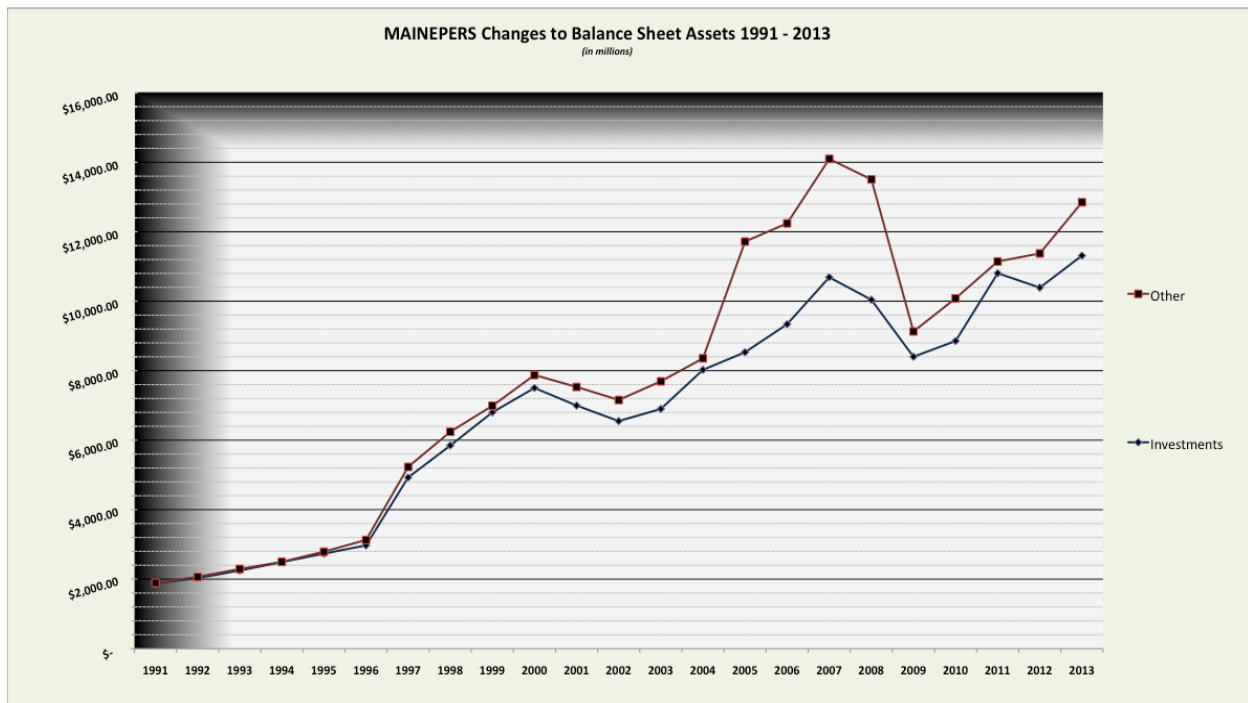


Figure 4

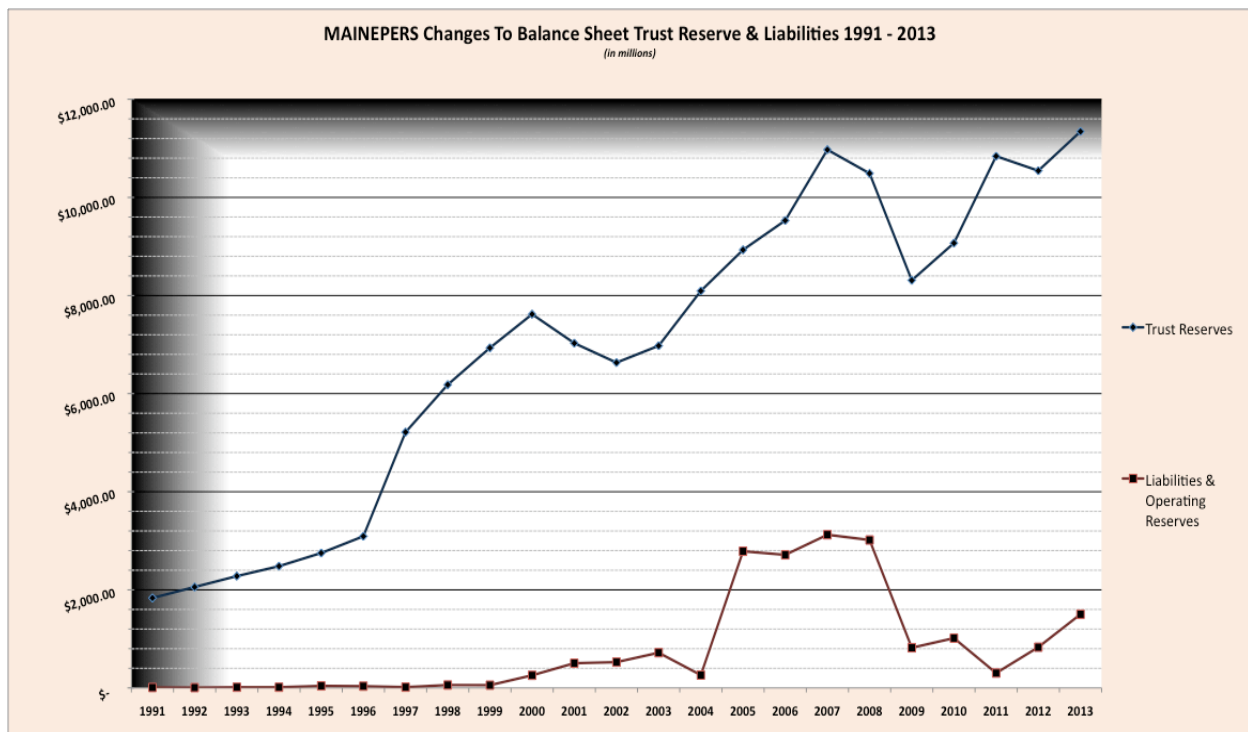
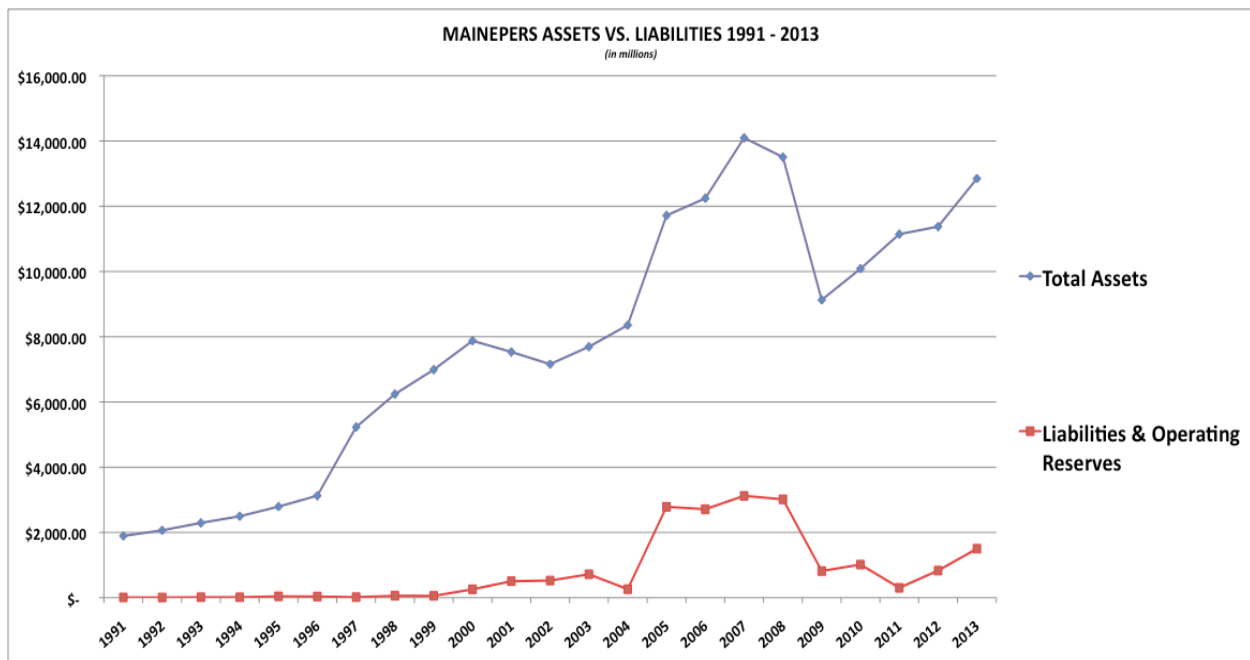


Figure 5

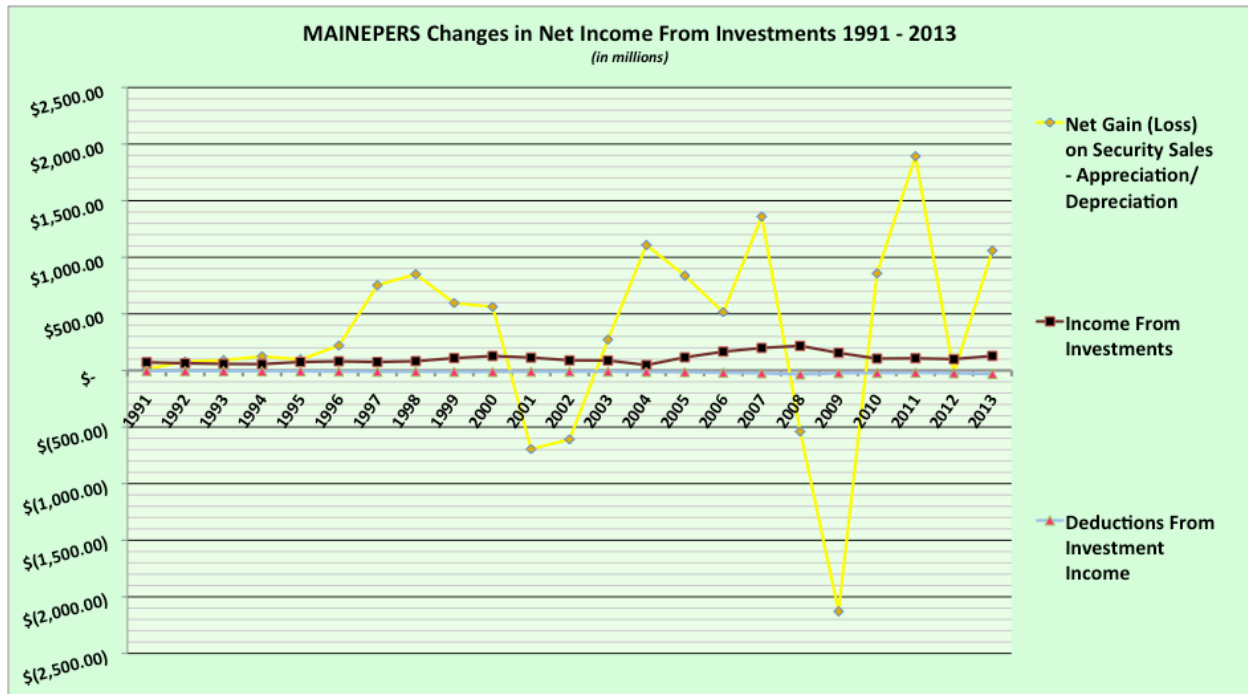


As can be seen in Figure 5 above, liabilities have begun to climb again from 2011 to 2013 as assets continue to climb. It is important to note that the liabilities presented on the balance sheet do not make up the unfunded liability, which will be discussed later in the actuarial valuation section.



## Income Statement

Figure 6



Based on the graph above we can note the two most recent recessions quite easily. The dips in the trend line for net gain (loss) on security sales – appreciation/depreciation matches up with the dips in the values of assets from Figures 3 and 5. This is what we would expect as the decreases in appreciation/depreciation caused by the recessions is what caused the shrinking of assets. An important note here is that it is easy to see the reliance on the market for the state and teacher retirement fund to remain healthy. As with most pensions, when the market was down pensions were shrinking. After a sharp decline in 2012, 2013 appears to mark a promising return to gains for the pension fund. Throughout the period from 1991 to 2013 income has fluctuated as is expected from most investment funds.

## Actuarial Valuation

Figure 7

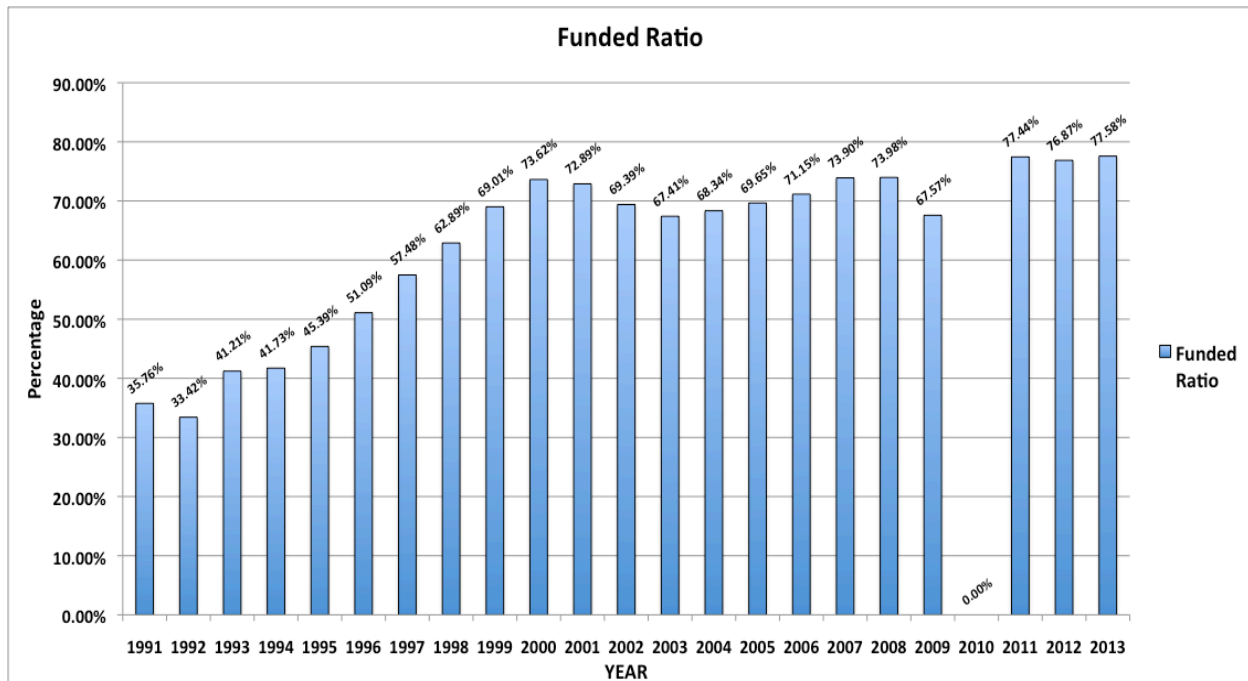


Figure 7 traces the funded ratio from 1991 to 2013 of the State and Teacher portion of the Maine State Retirement Fund (with no information available for 2010). The funded ratio is the percentage of future benefits that are covered by current assets and assumptions about contributions and market gains over time. As can be seen in Figure 7 the funded ratio has improved significantly since 1991. The ratio has gone from below 40% to above 75% hitting a high of 77.58% in 2013. It can be seen that the funding ratio did dip slightly during times of recession and economic downturn; 2001-2003 and 2009. Figure 7 also points out that there was a steady improvement to the funding ratio from 1994 to 2000. After 2000 the ratio has fluctuated ranging from 67.41% to 77.58%.

Table 5

Actuarial Assets & Liabilities						
	Actuarial Value	% Increase	Unfunded Actuarial Liability	% Increase	Market Value	Unfunded Accrued Liability
1991	\$1,442,408,751.00		\$ 2,590,848,538.00		\$1,428,708,354.00	\$ 1,393,541,823.00
1992	\$1,594,383,373.00	11%	\$ 3,177,024,392.00	23%	\$1,634,257,822.00	\$ 1,487,610,939.00
1993	\$1,852,948,650.00	16%	\$ 2,643,416,082.00	-17%	\$1,966,911,644.00	\$ 1,246,275,890.00
1994	\$2,025,193,386.00	9%	\$ 2,828,457,537.00	7%	\$2,039,381,434.00	\$ 1,535,237,852.00
1995	\$2,320,244,566.00	15%	\$ 2,791,740,760.00	-1%	\$2,463,229,285.00	\$ 1,338,704,745.00
1996	\$3,018,115,219.00	30%	\$ 2,888,985,772.00	3%	\$3,294,019,681.00	\$ 1,342,843,480.00
1997	\$3,530,721,113.00	17%	\$ 2,612,058,351.00	-10%	\$3,964,028,611.00	\$ 833,709,046.00
1998	\$4,158,926,645.00	18%	\$ 2,454,021,636.00	-6%	\$4,732,073,875.00	\$ 457,916,121.00
1999	\$4,844,937,706.00	16%	\$ 2,175,409,960.00	-11%	\$5,362,496,450.00	\$ 161,374,694.00
2000	\$5,487,720,169.00	13%	\$ 1,966,194,367.00	-10%	\$5,926,693,594.00	\$ (13,519,269.00)
2001	\$5,801,422,994.00	6%	\$ 2,157,386,869.00	10%	\$5,490,520,609.00	\$ 902,972,963.00
2002	\$5,877,158,371.00	1%	\$ 2,592,677,039.00	20%	\$5,092,119,785.00	\$ 1,899,537,632.00
2003	\$6,041,952,157.00	3%	\$ 2,921,320,341.00	13%	\$5,381,673,439.00	\$ 1,910,839,229.00
2004	\$6,452,570,244.00	7%	\$ 2,989,819,155.00	2%	\$6,280,951,942.00	\$ 1,482,835,537.00
2005	\$6,964,597,457.00	8%	\$ 3,034,652,581.00	1%	\$6,997,802,832.00	\$ 1,117,577,826.00
2006	\$7,504,219,546.00	8%	\$ 3,043,079,648.00	0%	\$7,503,201,781.00	\$ 1,082,373,383.00
2007	\$8,245,520,019.00	10%	\$ 2,912,250,119.00	-4%	\$8,668,381,195.00	\$ 1,010,914,693.00
2008	\$8,631,557,629.00	5%	\$ 3,036,474,882.00	4%	\$8,311,970,624.00	\$ 1,854,531,420.00
2009	\$8,325,951,236.00	-4%	\$ 3,995,268,096.00	32%	\$6,620,849,642.00	\$ 4,155,722,074.00
2010	N/A		N/A		N/A	N/A
2011	\$8,736,885,121.00	5%	\$ 2,544,780,065.00	-36%	\$8,677,947,874.00	\$ 1,656,150,220.00
2012	\$8,880,730,120.00	2%	\$ 2,672,576,161.00	5%	\$8,453,862,754.00	\$ 2,085,162,521.00
2013	\$9,177,749,622.00	3%	\$ 2,652,900,255.00	-1%	\$9,091,347,964.00	\$ 1,858,055,293.00

The actuarial value has trended consistently up due to the smoothing of asset gains.

Smoothing is simply spreading out gains and losses over a set period of time so that there are no sharp gains or losses. During the recessions the losses do not appear as dramatic due to the smoothing. The unfunded actuarial liability has fluctuated from 1991 to 2013, with a high being in 2009 and a low being in 2000. Since its high in 2009 the UAL decreased substantially to 2011, however it jumped back up in 2012 before slightly decreasing in 2013. In contrast to Figure 7, Table 5 reports a still large unfunded liability. The funding ratio may be improving and almost at 80%; however, the unfunded liability

balance remains at \$2.65 billion. It can also be helpful to look at the columns labeled “unfunded accrued liability” and “market value.” Market value can show us the more dramatic picture of the decrease in value from 2008 to 2009, dropping from \$8.3 billion to \$6.6 billion respectively. The unfunded accrued liability section provides what the liability is in terms of today’s costs rather than future costs. Below are tables showing values for the three funds not discussed in detail; Legislative, Judicial, and Participating Local Districts. The actuarial section focuses on the State and Teacher retirement because that is where the large unfunded liability lies.

#### Legislative

Table 6

<b>Actuarial Assets &amp; Liabilities</b>				
	<b>Actuarial Value</b>	<b>Unfunded Actuarial Liability</b>	<b>Market Value</b>	<b>Unfunded Accrued Liability</b>
<b>1991</b>	\$ 1,080,721.00	\$ -	\$ 1,071,818.00	\$ -
<b>1992</b>	\$ 1,290,146.00	\$ -	\$ 1,318,556.00	\$ -
<b>1993</b>	\$ 1,738,154.00	\$ -	\$ 1,834,276.00	\$ -
<b>1994</b>	\$ 2,084,111.00	\$ -	\$ 2,098,712.00	\$ -
<b>1995</b>	\$ 2,467,535.00	\$ -	\$ 2,619,597.00	\$ -
<b>1996</b>	\$ 3,234,312.00	\$ -	\$ 3,529,980.00	\$ -
<b>1997</b>	\$ 3,812,004.00	\$ -	\$ 4,279,832.00	\$ -
<b>1998</b>	\$ 4,466,018.00	\$ -	\$ 5,081,486.00	\$ -
<b>1999</b>	\$ 5,167,207.00	\$ -	\$ 5,719,192.00	\$ -
<b>2000</b>	\$ 5,822,440.00	\$ -	\$ 6,288,189.00	\$ -
<b>2001</b>	\$ 6,175,884.00	\$ -	\$ 5,844,914.00	\$ -
<b>2002</b>	\$ 6,246,247.00	\$ -	\$ 5,411,908.00	\$ -
<b>2003</b>	\$ 6,418,843.00	\$ -	\$ 5,717,377.00	\$ -
<b>2004</b>	\$ 6,827,478.00	\$ -	\$ 6,645,888.00	\$ -
<b>2005</b>	\$ 7,406,475.00	\$ -	\$ 7,441,788.00	\$ -
<b>2006</b>	\$ 7,944,468.00	\$ -	\$ 7,943,390.00	\$ -
<b>2007</b>	\$ 8,721,571.00	\$ (3,625,933.00)	\$ 9,168,846.00	\$ -
<b>2008</b>	\$ 9,099,133.00	\$ (3,494,128.00)	\$ 8,762,234.00	\$ -
<b>2009</b>	\$ 8,717,885.00	\$ (3,218,076.00)	\$ 6,932,518.00	\$ -
<b>2010</b>	N/A	N/A	N/A	N/A
<b>2011</b>	\$ 9,040,180.00	\$ (3,314,987.00)	\$ 8,979,197.00	\$ -
<b>2012</b>	\$ 9,322,419.00	\$ (3,078,780.00)	\$ 8,874,321.00	\$ -
<b>2013</b>	\$ 9,771,955.00	\$ (2,899,341.00)	\$ 9,679,959.00	\$ -

The legislative fund is currently more than 100% funded showing a negative unfunded actuarial liability.

## Judicial

Table 7

<b>Actuarial Assets &amp; Liabilities</b>				
	<b>Actuarial Value</b>	<b>Unfunded Actuarial Liability</b>	<b>Market Value</b>	<b>Unfunded Accrued Liability</b>
<b>1991</b>	\$12,250,132.00	\$ 8,606,991.00	\$12,149,210.00	\$ 5,951,750.00
<b>1992</b>	\$13,223,826.00	\$ 9,506,060.00	\$13,515,024.00	\$ 6,353,924.00
<b>1993</b>	\$14,326,711.00	\$ 9,605,907.00	\$15,118,993.00	\$ 5,632,707.00
<b>1994</b>	\$16,389,088.00	\$ 9,138,878.00	\$16,503,906.00	\$ 5,964,412.00
<b>1995</b>	\$18,291,640.00	\$ 8,054,168.00	\$19,418,860.00	\$ 3,622,014.00
<b>1996</b>	\$21,204,460.00	\$ 6,880,893.00	\$23,142,890.00	\$ 1,937,142.00
<b>1997</b>	\$23,199,772.00	\$ 5,696,697.00	\$26,046,962.00	\$ -
<b>1998</b>	\$26,980,527.00	\$ 2,181,586.00	\$30,698,749.00	\$ -
<b>1999</b>	\$31,284,179.00	\$ (2,689,308.00)	\$34,626,100.00	\$ -
<b>2000</b>	\$35,253,102.00	\$ (3,914,533.00)	\$38,073,066.00	\$ -
<b>2001</b>	\$35,253,102.00	\$ (3,684,023.00)	\$35,243,801.00	\$ -
<b>2002</b>	\$37,071,019.00	\$ (1,318,049.00)	\$32,119,276.00	\$ -
<b>2003</b>	\$37,261,834.00	\$ 898,247.00	\$33,189,773.00	\$ 697,081.00
<b>2004</b>	\$39,210,995.00	\$ (2,822,264.00)	\$38,168,105.00	\$ -
<b>2005</b>	\$41,842,216.00	\$ 88,914.00	\$42,041,709.00	\$ -
<b>2006</b>	\$44,350,649.00	\$ (1,248,240.00)	\$44,344,633.00	\$ -
<b>2007</b>	\$48,225,053.00	\$ (1,382,702.00)	\$50,698,214.00	\$ -
<b>2008</b>	\$50,418,942.00	\$ (2,784,490.00)	\$48,552,160.00	\$ -
<b>2009</b>	\$48,478,344.00	\$ 2,064,976.00	\$38,550,289.00	\$ 10,181,758.00
<b>2010</b>	N/A	N/A	N/A	N/A
<b>2011</b>	\$49,324,784.00	\$ (1,456,487.00)	\$48,992,049.00	\$ -
<b>2012</b>	\$49,735,004.00	\$ (3,394,326.00)	\$47,344,407.00	\$ -
<b>2013</b>	\$51,055,251.00	\$ 1,319,534.00	\$50,574,604.00	\$ -

The Judicial plan has fluctuated since 1991 showing an unfunded actuarial liability of as great as \$9.6 million or as little as (\$3.6 million).

## Consolidated Participating Local Districts

Table 8

<b>Actuarial Assets &amp; Liabilities</b>				
	<b>Actuarial Value</b>	<b>Unfunded Actuarial Liability</b>	<b>Market Value</b>	<b>Unfunded Accrued Liability</b>
<b>1991</b>	N/A	N/A	N/A	N/A
<b>1992</b>	N/A	N/A	N/A	N/A
<b>1993</b>	N/A	N/A	N/A	N/A
<b>1994</b>	N/A	N/A	N/A	N/A
<b>1995</b>	\$ 394,664,766.00	\$ 135,293,189.00	\$ 184,337,950.00	\$ -
<b>1996</b>	\$ 806,819,972.00	\$ 199,777,193.00	\$ 522,524,066.00	\$ -
<b>1997</b>	\$ 924,525,993.00	\$ 144,004,460.00	\$ 1,037,988,379.00	\$ -
<b>1998</b>	\$ 1,066,810,947.00	\$ 80,841,983.00	\$ 1,213,829,587.00	\$ -
<b>1999</b>	\$ 1,205,489,778.00	\$ 12,572,365.00	\$ 1,334,265,793.00	\$ -
<b>2000</b>	\$ 1,336,237,898.00	\$ 45,692,543.00	\$ 1,441,126,169.00	\$ -
<b>2001</b>	\$ 1,381,355,851.00	\$ 14,870,585.00	\$ 1,307,328,009.00	\$ -
<b>2002</b>	\$ 1,537,234,672.00	\$ (224,151,449.00)	\$ 1,331,899,294.00	\$ -
<b>2003</b>	\$ 1,551,942,311.00	\$ (144,213,510.00)	\$ 1,382,342,410.00	\$ -
<b>2004</b>				
<b>2005</b>	\$ 1,726,776,134.00	\$ (145,578,017.00)	\$ 1,735,008,951.00	\$ -
<b>2006</b>	\$ 1,846,304,483.00	\$ (126,174,743.00)	\$ 1,846,054,077.00	\$ -
<b>2007</b>	\$ 2,001,713,785.00	\$ (162,738,863.00)	\$ 2,104,369,171.00	\$ -
<b>2008</b>	\$ 2,201,652,592.00	\$ (248,023,571.00)	\$ 2,120,135,491.00	\$ -
<b>2009</b>	\$ 2,083,711,056.00	\$ (50,973,648.00)	\$ 1,656,980,351.00	\$ -
<b>2010</b>	N/A	N/A	N/A	N/A
<b>2011</b>	\$ 2,119,465,931.00	\$ 148,108,591.00	\$ 2,105,168,446.00	\$ -
<b>2012</b>	\$ 2,136,653,342.00	\$ 269,054,893.00	\$ 2,033,951,477.00	\$ -
<b>2013</b>	\$ 2,213,416,717.00	\$ 291,002,918.00	\$ 2,192,579,050.00	\$ 43,975,692.00

The PLD plan has fluctuated from being more than 100% funded to having an unfunded actuarial liability of \$291 million.

It is important to note that the State and Teacher plan carries the largest unfunded actuarial liability currently at \$2.65 billion compared to other plans at (\$2.9 million), \$1.3 million, and \$291 million. It is also important to note that the State and Teacher plan is the only plan that has not been 100% funded at some point from 1991 to 2013.

# Legislative Changes

*Analyst Selected From 1991 - 2013*

## Disclosure Statement

The legislative changes section of this analysis presents in two ways. First presentation is a bulleted list of legislative changes from 1991 to 2013, chosen by the analyst as seemingly most effective to paying down the unfunded liability, including a synopsis of benefits as of 1991 for the state employee and teacher retirement plan. The bulleted list provides minimal details of the actual legislative bill. Second is a discussion of impacts on the unfunded liability potentially from legislative changes. This discussion will include looking at data trends after the legislation was enacted.



Bulleted List of Changes: *selected by analyst*

**1991: Benefit and Plan Determinations Before Changes:**

Contributions at 6.5% except for:

- State police, inland fisheries and wildlife officers, and marine resource officers employed before 9/1/84 contribute 7.5% of earnable compensation for 20 years and 6.5% after 20 years
- State police and prison employees employed after 8/31/84 contribute 7.5% of earnable compensation for 25 years and 6.5% after 25 years
- Forest rangers and state prison employees employed before 9/1/84 contribute 7.5% of earnable compensation until eligible for retirement and 6.5% after

Eligibility:

- If currently in service retirement after 25 years or age 60 with either 10 years of service or 1 year immediately before retirement
- If not currently in service retirement is after 25 years or at age 60 with 10 years of service.
- 1/50 of average final compensation of membership years up to 25
- Entering the plan after 12/1/84 retirement age moves to 62 and early benefits reduced 6% each year before 62
- Special Plans:
  - State police, inland fisheries and wildlife officers, and marine resource officers employed before 9/1/84 1992:
    - Eligibility after 20 years of service in named position

- Benefit is half of average final compensation plus 2% each year of service past 20 years of service
- State police employed after 8/31/84:
  - Eligibility after 25 years as state police officer
  - Benefit is the same as general employees, but reduced for payment before age 55 rather than age 60
- Forest Rangers employed before 9/1/84:
  - Eligibility at age 50 with 25 years of creditable service
  - Benefit is half of average final compensation plus 2% each year past qualification of retirement
- Airplane Pilot employed before 9/1/84:
  - Eligibility at age 55 and with 25 years service
  - Benefit –is the greater of:
    - Half of average final compensation plus 2% per year after qualification
    - After age 60 use the general formula
- Liquor Inspectors employed before 9/1/84:
  - Eligibility is at age 55 and 25 years of service
  - Benefit is half of average final compensation plus 2% each year past qualification of retirement
- State Prison Employee employed before 9/1/84:
  - Eligibility is at age 50 and 20 years of service

- Benefit is half average final compensation plus 2% per year after qualification
- State Prison Employee employed after 8/31/84:
  - Eligibility is 25 years of service
  - Benefit is the same as general employees, reduced for retirement age 55 rather than 60

### **Legislative Changes:**

#### Contribution Rate Changes

- 1992: 1% increase in employee contribution rate for State and teacher members hired after July 1, 1992
- 1993: Employee contribution rates increased 1.15%
- 2002: Establish a minimum level of employer contributions to State employee/teacher retirement plan

#### Special Retirement Plans

- 1994: Members who became State police officers after August 31, 1984 and complete 25 years of credible service can retire before 55 with no benefit reduction
- 1997: State fire marshals, State fire marshal inspectors, State fire marshal investigators, and motor vehicle inspectors have option of qualifying for service retirement benefit after reaching age 55 with 25 years of service
- 1998: Police service retirement start date changed from September 1, 1984 to September 16, 1984 for qualification to special retirement after 20 years of service (bill also includes how to fund new cost)

- 1998: 1998 special plan – retirement age of 55 for certain employees hired on or after September 1, 1984 or July 1, 1998. Member with 10 years of service under this plan can retire at age 55 with no penalty for years of service in special plan – other service subject to penalty
- 1999: Included more employees to 1998 special retirement plan
- 2000: Remove police officers hired after September 15, 1984 from 1998 special plan and place them in a new special plan for retirement after 25 years regardless of age – refunds any additional contributions made
- 2000: Bangor Pre-release center employees covered by 20-year retirement plan to stay in plan upon closing of center
- 2001: Another extension of 1998 special plan
- 2001: Remove groups from 1998 special plan and place in special retirement plan for retirement after 25 years regardless of age
- 2002: Amend changes to special plan coverage for Inland Fisheries and Wildlife Officers and Marine Resource Officers – makes inclusion of service earned on and after September 1, 2002 contingent upon additional funding of new plan
- 2002: Extend 1998 special plan to more and sets employee contribution rate at 8.65% for that group

#### Amortization of Unfunded Liability

- 1993: Amortization schedule for payment of unfunded liability extended from 25 years to 35 years
- 1995: Unfunded liability be paid off by July 1, 2028 and no new liabilities created
- 1998: Unfunded liability be paid off in no more than 25 years from June 30, 1998

- 2003: Extended amortization period for the unfunded liability
- 2005: Change to amortization period of unfunded actuarial liability associated with retirement plan that covers state employees and teachers from 15 years from June 30, 2005, to 23 years from June 30, 2005

#### Normal Retirement Age and Vested Status

- 1993: Except for special plans, all State, teacher, legislative, and judicial members with less than 10 years of service as of July 1, 1993 had normal retirement age set to 62
- 1993: Benefits reduction for members who retire before reaching normal age changed for members with less than 10 years of service at July 1, 1993 from being based on actuarial tables (2-1/8% per year) to 6% per year
- 1999: Change requirement of service to be vested from 10 years to 5 years
- 2011: Normal retirement age changed from 62 to 65 for new hires and current members with less than 5 years of service on July 1, 2011

#### Cost of Living Adjustments

- 1993: Cost of Living Adjustments were changed from being applied to benefits of retirees receiving retirement benefits for at least 6 months to those who have been receiving a retirement for at least 12 months
- 2001: CPI-U for all cost-of-living adjustments (all urban consumers vs. urban wage earners and clerical workers)
- 2009: COLA changes to address impact of negative consumer price index years (no negative COLA just actuarial adjustment next positive year)
- 2011: 3 year freeze on COLAs

- 2011: COLA capped at CPI-U or 3% - whichever is lower
- 2011: COLA will only apply to first \$20,000 of benefit – this will go up each year based on actual COLAs granted
- 2011: There may be 3 one-time COLAs if sufficient funds exist

#### General Fund Surplus Payments

- 1998: 1<sup>st</sup> transfer to retirement allowance from surplus of general fund must pay remaining actuarial costs or accumulated interest of early retirement incentives made to employees of certain school units
- 2013: Removal of MainePERS from General Fund surplus money

#### Health Benefits

- 1998: Funds to increase State's share of cost of retired educators' health insurance from 25% to 30% effective January 1, 1999
- 2001: Increase state share of health insurance premiums for retired teachers from 30% to 35%
- 2003: Increase health insurance payment for teachers, 35% to 40%
- 2005: Increase portion of retiree health insurance paid by the state for teachers from 40% to 45%

Discussion: *Impacts of Legislative Changes on Unfunded Liability*

Table 9

<b>Year</b>	<b>Unfunded Actuarial Liability</b>	<b>Funded Ratio</b>
<b>1991</b>	\$ 2,590,848,538.00	\$ 0.36
<b>1992</b>	\$ 3,177,024,392.00	\$ 0.33
<b>1993</b>	\$ 2,643,416,082.00	\$ 0.41
<b>1994</b>	\$ 2,828,457,537.00	\$ 0.42
<b>1995</b>	\$ 2,791,740,760.00	\$ 0.45
<b>1996</b>	\$ 2,888,985,772.00	\$ 0.51
<b>1997</b>	\$ 2,612,058,351.00	\$ 0.57
<b>1998</b>	\$ 2,454,021,636.00	\$ 0.63
<b>1999</b>	\$ 2,175,409,960.00	\$ 0.69
<b>2000</b>	\$ 1,966,194,367.00	\$ 0.74
<b>2001</b>	\$ 2,157,386,869.00	\$ 0.73
<b>2002</b>	\$ 2,592,677,039.00	\$ 0.69
<b>2003</b>	\$ 2,921,320,341.00	\$ 0.67
<b>2004</b>	\$ 2,989,819,155.00	\$ 0.68
<b>2005</b>	\$ 3,034,652,581.00	\$ 0.70
<b>2006</b>	\$ 3,043,079,648.00	\$ 0.71
<b>2007</b>	\$ 2,912,250,119.00	\$ 0.74
<b>2008</b>	\$ 3,036,474,882.00	\$ 0.74
<b>2009</b>	\$ 3,995,268,096.00	\$ 0.68
<b>2010</b>	N/A	#VALUE!
<b>2011</b>	\$ 2,544,780,065.00	\$ 0.77
<b>2012</b>	\$ 2,672,576,161.00	\$ 0.77
<b>2013</b>	\$ 2,652,900,255.00	\$ 0.78

### *Contribution Rates*

Employee and employer contribution rates were increased in both 1992 and 1993, with a minimum rate being established for employers in 2002. After dropping in 1992, the funded ratio improved each year from 1993 to 2000. The actual amount decreased from \$3.18 billion in 1992 to \$1.97 billion in 2000 with one increases in 1994 and 1996. Increasing the contribution rate may have had some influence on this trend. After 2000, Maine saw two recessions and saw the unfunded liability climb back up to a high of \$4 billion in 2009.

### *Special Retirement Plans*

Special retirement plans have fluctuated from 1991 to 2013. The state has added employees to special plans with funding requirements and without funding requirements. Although there are no real correlations between the special plans and the unfunded liability it only takes common sense to understand that a retiree receiving a full pension at the age of 55 does not help reduce the pension liability. There is no evidence in this analysis to show that special plans have hurt progress on the unfunded liability;; however, questions are raised concerning where the liability would be if all retirees needed to reach the age of 62 or 65 to receive full benefits without penalties.

### *Amortization of Unfunded Liability*

The amortization period has been changed several times within the period of 1991 to 2013. The change having the most impact was the constitutional amendment to pay the unfunded liability off by July 1, 2028 and to not be able to create new liabilities. Before the recessions the state appeared to be on track to have the liability paid down early. This would have saved the state money as the unfunded actuarial liability includes interest. The state is now back at the amortization period to July 1, 2028, leaving just 14 years to pay down the debt.



The state paid down the liability from 1992 to 2000 at an average of \$151.3 million per year. At that rate the state would not pay down the unfunded liability as it stands at fiscal year end of 2013.

#### *Normal Retirement Age and Vested Status*

The normal retirement age has been increased two times since 1991. It was bumped to 62 in 1993 and 65 in 2011. As mentioned above the unfunded liability was paid down by \$1.2 billion from 1992 to 2000. After increasing from 2011 to 2012 the liability decreased from 2012 to 2013. The 1993 change to a 6% penalty for early retirement may have helped reduce the liability before the recessions. However; the state changed the vested status to after 5 years of service from 10 years of service in 1999.

#### *Cost of Living Adjustments*

In 1993, along with other legislative action taken to tackle the unfunded liability, cost of living adjustments (COLAS) were changed from being applied to those receiving benefits for 6 months to those receiving benefits for 12 months. This contributed to the decrease in liability from 1993 to 2000. In an attempt to pay down the unfunded liability; post recessions; the legislature placed a freeze on COLAS in 2011. The freeze is in effect for 3 years: 2012, 2013, and 2014. This freeze has helped to control the liability, however an analysis including 2014 is needed to see how the COLA freeze is impacting the unfunded liability.

#### *General Fund Surplus Payments and Health Benefits*

The health benefits were not analyzed, however it was deemed important to note health insurance changes. It will be interesting to see how the 2013 bill to remove MainePERS from general fund surplus money will impact the unfunded liability in years to come.

### Short Post-Analysis Discussion

After analyzing the years 1991 through 2013 it became apparent that the major attempts to impact the unfunded liability came in 1993, 1995, and 2011. The liability was on track to be fully paid before the recession in 2001 and the recession in 2008 hit the economy.

Although progress has been made, there have been some decisions that do not aid in the attempt to be 100% funded. The special plans appear to hurt the system as retirees are drawing early and for longer periods of time. Drastic measures were taken in 1993 to clear up historical mistakes, and it seems as though drastic measures must be taken again to recover from two economic recessions.

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