

Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	FY2018		FY2017		FY2016		FY2015		FY2014		FY2013		FY2012	
<b>Membership</b>														
Active Members		51,223		50,578		49,472		49,037		49,663		49,121		48,207
Service Retirees		34,937		33,563		32,241		30,871		29,225		27,654		26,524
Disabilitants		1,826		1,830		1,843		1,819		1,818		1,802		1,750
Survivors		4,058		3,940		3,868		3,786		3,686		3,830		3,701
Deferred Retirees		17,109		17,006		17,019		16,787		16,472		16,062		15,702
Nonvested Former Members		<u>8,235</u>		<u>9,468</u>		<u>7,571</u>		<u>6,941</u>		<u>5,818</u>		<u>5,574</u>		<u>5,788</u>
Total Membership		117,388		116,385		112,014		109,241		106,682		104,043		101,672
<b>Funded Status</b>														
Accrued Liability		\$14,679,489,000		\$14,509,150,000		\$14,316,886,000		\$13,092,702,000		\$12,445,126,000		\$11,428,641,000		\$11,083,227,000
Current Assets		<u>\$13,035,350,000</u>		<u>\$12,364,957,000</u>		<u>\$11,676,370,000</u>		<u>\$11,223,285,000</u>		<u>\$10,326,272,000</u>		<u>\$9,375,780,000</u>		<u>\$9,162,301,000</u>
Unfunded Accrued Liability		\$1,644,139,000		\$2,144,193,000		\$2,640,516,000		\$1,869,417,000		\$2,118,854,000		\$2,052,861,000		\$1,920,926,000
Funding Ratio	88.80%		85.22%		81.56%		85.72%		82.97%		82.04%		82.67%	
<b>Financing Requirements</b>														
Covered Payroll		\$3,133,366,000		\$3,023,449,000		\$2,889,433,000		\$2,727,560,000		\$2,653,367,000		\$2,553,156,000		\$2,463,700,000
Benefits Payable		\$797,027,000		\$750,526,000		\$707,361,000		\$665,821,000		\$623,942,000		\$586,256,000		\$552,088,000
Normal Cost	8.14%	\$255,056,000	8.19%	\$247,621,000	8.19%	\$236,644,000	7.66%	\$208,931,000	7.37%	\$195,553,000	6.95%	\$177,445,000	7.17%	\$176,648,000
Administrative Expenses	0.32%	\$10,027,000	0.35%	\$10,582,000	0.37%	\$10,691,000	0.33%	\$9,001,000	0.32%	\$8,491,000	0.35%	\$8,936,000	0.26%	\$6,406,000
Amortiz. of Unfunded Liab.^	<u>3.07%</u>	<u>\$96,194,000</u>	<u>4.70%</u>	<u>\$142,102,000</u>	<u>5.93%</u>	<u>\$171,343,000</u>	<u>4.45%</u>	<u>\$121,376,000</u>	<u>5.13%</u>	<u>\$136,118,000</u>	<u>5.15%</u>	<u>\$131,488,000</u>	<u>4.89%</u>	<u>\$120,475,000</u>
Total Requirements	11.53%	\$361,277,000	13.24%	\$400,305,000	14.49%	\$418,678,000	12.44%	\$339,308,000	12.82%	\$340,162,000	12.45%	\$317,869,000	12.32%	\$303,529,000
Employee Contributions	5.75%	\$180,169,000	5.50%	\$166,290,000	5.50%	\$158,919,000	5.50%	\$150,016,000	5.50%	\$145,935,000	5.00%	\$127,658,000	5.00%	\$123,185,000
Employer Contributions	5.88%	\$184,242,000	5.50%	\$166,290,000	5.50%	\$158,919,000	5.50%	\$150,016,000	5.50%	\$145,935,000	5.00%	\$127,658,000	5.00%	\$123,185,000
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Direct State Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Administrative Assessment	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>
Total Contributions	11.63%	\$364,411,000	11.00%	\$332,580,000	11.00%	\$317,838,000	11.00%	\$300,032,000	11.00%	\$291,870,000	10.00%	\$255,316,000	10.00%	\$246,370,000
Total Requirements	11.53%	\$361,277,000	13.24%	\$400,305,000	14.49%	\$418,678,000	12.44%	\$339,308,000	12.82%	\$340,162,000	12.45%	\$317,869,000	12.32%	\$303,529,000
Total Contributions	<u>11.63%</u>	<u>\$364,411,000</u>	<u>11.00%</u>	<u>\$332,580,000</u>	<u>11.00%</u>	<u>\$317,838,000</u>	<u>11.00%</u>	<u>\$300,032,000</u>	<u>11.00%</u>	<u>\$291,870,000</u>	<u>10.00%</u>	<u>\$255,316,000</u>	<u>10.00%</u>	<u>\$246,370,000</u>
Sufficiency/(Deficiency)	0.10%	\$3,134,000	(2.24%)	(\$67,725,000)	(3.49%)	(\$100,840,000)	(1.44%)	(\$39,276,000)	(1.82%)	(\$48,292,000)	(2.45%)	(\$62,553,000)	(2.32%)	(\$57,159,000)
Amortization Target Date	2048		2042		2042		2041		2041		2040		2040	
Actuary	GRS		GRS		GRS		GRS		GRS		GRS		GRS	

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

The information set forth in this report is a compilation of data taken from actuarial valuation reports prepared by each plan's actuary. The LCPR or its staff do not warrant or guarantee its accuracy, reliability or completeness. LCPR staff compiles this information to provide a single source for similar data on the plans, for the sake of convenience and ease of comparison, for use by Minnesota legislators and, secondarily, the public. This information should not be relied on for any "official" purpose. Please refer to the plans' actuarial valuation reports, available on the LCPR website at www.lcpr.leg.mn, for the most accurate, complete and detailed information.

Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	FY2011	FY2010	FY2009	FY2008	FY2007	FY2006	FY2005
<b>Membership</b>							
Active Members	47,955	48,494	48,989	48,823	48,379	48,000	47,125
Service Retirees	24,900	23,337	22,457	21,736	20,880	19,903	19,202
Disabilitants	1,723	1,684	1,656	1,620	1,547	1,508	1,434
Survivors	3,541	3,414	3,230	3,090	2,919	2,793	2,731
Deferred Retirees	15,422	15,388	15,210	14,951	14,751	14,217	13,592
Nonvested Former Members	<u>6,117</u>	<u>6,537</u>	<u>6,912</u>	<u>6,865</u>	<u>7,007</u>	<u>6,828</u>	<u>7,702</u>
Total Membership	99,658	98,854	98,454	97,085	95,483	93,249	91,786
<b>Funded Status</b>							
Accrued Liability	\$10,576,481,000	\$10,264,071,000	\$10,512,760,000	\$9,994,602,000	\$9,627,304,704	\$8,819,160,917	\$8,455,335,998
Current Assets	<u>\$9,130,011,000</u>	<u>\$8,960,391,000</u>	<u>\$9,030,401,000</u>	<u>\$9,013,456,000</u>	* <u>\$8,904,516,772</u>	<u>\$8,486,756,016</u>	<u>\$8,081,736,374</u>
Unfunded Accrued Liability	\$1,446,470,000	\$1,303,680,000	\$1,482,359,000	\$981,146,000	\$722,787,932	\$332,404,901	\$373,599,624
Funding Ratio	86.32%	87.30%	85.90%	90.18%	92.49%	96.23%	95.58%
<b>Financing Requirements</b>							
Covered Payroll	\$2,459,441,000	\$2,483,519,000	\$2,493,948,000	\$2,378,816,000	\$2,241,738,286	\$2,157,579,057	\$2,084,561,802
Benefits Payable	\$505,573,000	\$473,447,000	\$445,792,000	\$418,757,000	\$392,058,387	\$366,797,030	\$347,959,178
Normal Cost	7.14% \$175,488,000	7.77% \$193,027,000	7.86% \$196,091,000	7.78% \$185,140,000	8.40% \$188,716,922	8.52% \$183,605,603	8.79% \$183,131,914
Administrative Expenses	0.19% \$4,673,000	0.23% \$5,712,000	0.22% \$5,419,000	0.23% \$5,471,000	0.23% \$5,155,998	0.21% \$4,530,916	0.21% \$4,377,580
Amortiz. of Unfunded Liab.^	<u>3.70%</u> <u>\$90,999,000</u>	<u>2.99%</u> <u>\$74,200,000</u>	<u>6.77%</u> <u>\$168,840,000</u>	<u>4.38%</u> <u>\$104,192,000</u>	<u>3.13%</u> <u>\$70,166,408</u>	<u>1.38%</u> <u>\$29,774,591</u>	<u>1.55%</u> <u>\$32,310,708</u>
Total Requirements	11.03% \$271,160,000	10.99% \$272,939,000	14.85% \$370,350,000	12.39% \$294,803,000	11.76% \$264,039,328	10.11% \$217,911,110	10.55% \$219,820,202
Employee Contributions	5.00% \$122,972,000	5.00% \$124,176,000	4.75% \$118,462,000	4.50% \$107,047,000	4.25% \$95,273,877	4.00% \$86,303,162	4.00% \$83,382,472
Employer Contributions	5.00% \$122,972,000	5.00% \$124,176,000	4.75% \$118,462,000	4.50% \$107,047,000	4.25% \$95,273,877	4.00% \$86,303,162	4.00% \$83,382,472
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>
Total Contributions	10.00% \$245,944,000	10.00% \$248,352,000	9.50% \$236,924,000	9.00% \$214,094,000	8.50% \$190,547,754	8.00% \$172,606,324	8.00% \$166,764,944
Total Requirements	11.03% \$271,160,000	10.99% \$272,939,000	14.85% \$370,350,000	12.39% \$294,803,000	11.76% \$264,039,328	10.11% \$217,911,110	10.55% \$219,820,202
Total Contributions	<u>10.00%</u> <u>\$245,944,000</u>	<u>10.00%</u> <u>\$248,352,000</u>	<u>9.50%</u> <u>\$236,924,000</u>	<u>9.00%</u> <u>\$214,094,000</u>	<u>8.50%</u> <u>\$190,547,754</u>	<u>8.00%</u> <u>\$172,606,324</u>	<u>8.00%</u> <u>\$166,764,944</u>
Sufficiency/(Deficiency)	(1.03%) (\$25,216,000)	(0.99%) (\$24,587,000)	(5.35%) (\$133,426,000)	(3.39%) (\$80,709,000)	(3.26%) (\$73,491,574)	(2.11%) (\$45,304,786)	(2.55%) (\$53,055,258)
Amortization Target Date	2040	2040	2020	2020	2020	2020	2020
Actuary	Mercer	Mercer	Mercer	Mercer	Segal	Segal	Segal

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

\* Reflects 2007 Asset Valuation Method change

Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	FY2004		FY2003		FY2002		2001		2000		1999		1998	
<b>Membership</b>														
Active Members		46,899		48,136		49,099		49,229		47,920		47,168		46,299
Service Retirees		18,672		17,774		17,279		16,766		16,276		15,670		15,185
Disabilitants		1,397		1,275		1,218		1,127		1,070		1,007		948
Survivors		2,585		2,405		2,308		2,085		1,955		1,811		1,697
Deferred Retirees		13,784		12,679		11,939		11,452		11,125		10,663		9,775
Nonvested Former Members		<u>12,741</u>		<u>8,626</u>		<u>8,224</u>		<u>8,111</u>		<u>7,772</u>		<u>8,220</u>		<u>6,447</u>
Total Membership		96,078		90,895		90,067		88,770		86,118		84,539		80,351
<b>Funded Status</b>														
Accrued Liability		\$7,878,362,792		\$7,830,671,000		\$7,340,397,000		\$6,573,193,000		\$6,105,703,000		\$5,464,207,000		\$5,005,165,000
Current Assets		<u>\$7,884,984,028</u>		<u>\$7,757,292,000</u>		<u>\$7,673,028,000</u>		<u>\$7,366,673,000</u>		<u>\$6,744,165,000</u>		<u>\$5,968,692,000</u>		<u>\$5,390,526,000</u>
Unfunded Accrued Liability		(\$6,621,236)		\$73,379,000		(\$332,631,000)		(\$793,480,000)		(\$638,462,000)		(\$504,485,000)		(\$385,361,000)
Funding Ratio	100.08%		99.06%		104.53%		112.07%		110.46%		109.23%		107.70%	
<b>Financing Requirements</b>														
Covered Payroll		\$2,066,680,651		\$2,138,858,000		\$2,040,390,000		\$1,967,814,000		\$1,900,124,000		\$1,757,716,000		\$1,664,588,000
Benefits Payable		\$328,545,403		\$311,472,000		\$296,687,000		\$270,558,000		\$237,825,000		\$207,962,000		\$182,562,000
Normal Cost	9.13%	\$188,614,832	9.03%	\$193,153,000	9.02%	\$183,888,000	8.76%	\$172,402,000	8.72%	\$165,591,000	7.52%	\$131,986,000	7.58%	\$126,150,000
Administrative Expenses	0.22%	\$4,546,697	0.21%	\$4,492,000	0.20%	\$4,081,000	0.20%	\$3,936,000	0.21%	\$3,990,000	0.15%	\$2,637,000	0.15%	\$2,497,000
Amortiz. of Unfunded Liab.^	<u>(0.02%)</u>	<u>(\$413,336)</u>	<u>0.19%</u>	<u>\$4,064,000</u>	<u>(0.88%)</u>	<u>(\$17,955,000)</u>	<u>(2.17%)</u>	<u>(\$42,702,000)</u>	<u>(1.81%)</u>	<u>(\$34,392,000)</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>
Total Requirements	9.33%	\$192,748,193	9.43%	\$201,709,000	8.34%	\$170,014,000	6.79%	\$133,636,000	7.12%	\$135,189,000	7.67%	\$134,623,000	7.73%	\$128,647,000
Employee Contributions	4.00%	\$82,667,226	4.00%	\$85,554,000	4.00%	\$81,616,000	4.00%	\$78,712,000	4.00%	\$76,005,000	4.00%	\$70,309,000	4.00%	\$66,584,000
Employer Contributions	4.00%	\$82,667,226	4.00%	\$85,554,000	4.00%	\$81,616,000	4.00%	\$78,712,000	4.00%	\$76,005,000	4.00%	\$70,309,000	4.00%	\$66,584,000
Employer Add'l Cont.	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Direct State Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Other Govt. Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Administrative Assessment	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>	<u>0.00%</u>	<u>\$0</u>
Total Contributions	8.00%	\$165,334,452	8.00%	\$171,108,000	8.00%	\$163,232,000	8.00%	\$157,424,000	8.00%	\$152,010,000	8.00%	\$140,618,000	8.00%	\$133,168,000
Total Requirements	9.33%	\$192,748,193	9.43%	\$201,709,000	8.34%	\$170,014,000	6.79%	\$133,636,000	7.12%	\$135,189,000	7.67%	\$134,623,000	7.73%	\$128,647,000
Total Contributions	<u>8.00%</u>	<u>\$165,334,452</u>	<u>8.00%</u>	<u>\$171,108,000</u>	<u>8.00%</u>	<u>\$163,232,000</u>	<u>8.00%</u>	<u>\$157,424,000</u>	<u>8.00%</u>	<u>\$152,010,000</u>	<u>8.00%</u>	<u>\$140,618,000</u>	<u>8.00%</u>	<u>\$133,168,000</u>
Sufficiency/(Deficiency)	(1.33%)	(\$27,413,741)	(1.43%)	(\$30,601,000)	(0.34%)	(\$6,782,000)	1.21%	\$23,788,000	0.88%	\$16,821,000	0.33%	\$5,995,000	0.27%	\$4,521,000
Amortization Target Date	2034		2032		2032		2031		2030		2020		2020	
Actuary	Segal		Milliman		Milliman		Milliman		Milliman & Robertson		Milliman & Robertson		Milliman & Robertson	

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	1997	1996	1995	1994	1993	1992	1991
<b>Membership</b>							
Active Members	46,289	49,914	49,705	49,365	48,830	49,214	49,718
Service Retirees	14,718	14,368	14,004	13,924	13,171	12,835	12,335
Disabilitants	905	857	824	800	779	743	726
Survivors	1,574	1,447	1,313	1,207	1,117	1,023	946
Deferred Retirees	9,775	6,118	5,518	4,818	3,839	2,769	2,216
Nonvested Former Members	<u>6,447</u>	<u>5,744</u>	<u>5,242</u>	<u>4,744</u>	<u>4,492</u>	<u>4,256</u>	<u>4,152</u>
Total Membership	79,708	78,448	76,606	74,858	72,228	70,840	70,093
<b>Funded Status</b>							
Accrued Liability	\$4,519,542,000	\$4,087,273,000	\$3,795,926,000	\$3,876,584,000	\$3,563,492,000	\$3,125,299,000	\$2,883,603,000
Current Assets	<u>\$4,664,519,000</u>	<u>\$3,975,832,000</u>	<u>\$3,462,098,000</u>	<u>\$3,158,068,000</u>	<u>\$2,905,578,000</u>	<u>\$2,613,472,000</u>	<u>\$2,304,312,000</u>
Unfunded Accrued Liability	(\$144,977,000)	\$111,441,000	\$333,828,000	\$718,516,000	\$657,914,000	\$511,827,000	\$579,291,000
Funding Ratio	103.21%	97.27%	91.21%	81.47%	81.54%	83.62%	79.91%
<b>Financing Requirements</b>							
Covered Payroll	\$1,612,662,000	\$1,643,049,000	\$1,611,687,000	\$1,789,033,000	\$1,694,520,000	\$1,658,792,000	\$1,612,238,000
Benefits Payable	\$150,676,000	\$136,522,000	\$126,831,000	\$116,071,000	\$104,362,000	\$95,010,000	\$85,977,000
Normal Cost	7.48% \$120,589,000	6.67% \$109,591,368	6.69% \$107,821,860	6.67% \$119,328,501	6.93% \$117,430,236	6.58% \$109,148,514	5.98% \$96,411,832
Administrative Expenses	0.13% \$2,096,000	0.12% \$1,971,659	0.11% \$1,772,856	0.12% \$2,146,840	0.11% \$1,863,972	0.23% \$3,815,222	0.22% \$3,546,924
Amortiz. of Unfunded Liab.^	<u>0.00%</u> \$0	<u>0.42%</u> \$6,900,806	<u>1.25%</u> \$20,146,088	<u>2.36%</u> \$42,221,179	<u>1.89%</u> \$32,026,428	<u>1.46%</u> \$24,218,363	<u>1.66%</u> \$26,763,151
Total Requirements	7.61% \$122,685,000	7.21% \$118,463,833	8.05% \$129,740,804	9.15% \$163,696,520	8.93% \$151,320,636	8.27% \$137,182,098	7.86% \$126,721,907
Employee Contributions	4.00% \$64,506,000	4.07% \$66,872,094	4.07% \$65,595,661	4.07% \$72,813,643	4.07% \$68,966,964	4.07% \$67,512,834	4.15% \$66,907,877
Employer Contributions	4.00% \$64,506,000	4.20% \$69,008,058	4.20% \$67,690,854	4.20% \$75,139,386	4.20% \$71,169,840	4.20% \$69,669,264	4.29% \$69,165,010
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> \$0	<u>0.00%</u> \$0	<u>0.00%</u> \$0	<u>0.00%</u> \$0	<u>0.00%</u> \$0	<u>0.00%</u> \$0	<u>0.00%</u> \$0
Total Contributions	8.00% \$129,012,000	8.27% \$135,880,152	8.27% \$133,286,515	8.27% \$147,953,029	8.27% \$140,136,804	8.27% \$137,182,098	8.44% \$136,072,887
Total Requirements	7.61% \$122,685,000	7.21% \$118,463,833	8.05% \$129,740,804	9.15% \$163,696,520	8.93% \$151,320,636	8.27% \$137,182,098	7.86% \$126,721,907
Total Contributions	<u>8.00%</u> <u>\$129,012,000</u>	<u>8.27%</u> <u>\$135,880,152</u>	<u>8.27%</u> <u>\$133,286,515</u>	<u>8.27%</u> <u>\$147,953,029</u>	<u>8.27%</u> <u>\$140,136,804</u>	<u>8.27%</u> <u>\$137,182,098</u>	<u>8.44%</u> <u>\$136,072,887</u>
Sufficiency/(Deficiency)	0.39% \$6,327,000	1.06% \$17,416,319	0.22% \$3,545,711	(0.88%) (\$15,743,490)	(0.66%) (\$11,183,832)	0.00% \$0	0.58% \$9,350,980
Amortization Target Date	2020	2020	2020	2020	2020	2020	2020
Actuary	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	1990	1989	1988	1987	1986	1985	1984
<b>Membership</b>							
Active Members	49,576	48,653	47,040	45,707	45,172	44,399	44,158
Service Retirees	11,810	11,564	11,455	10,994	10,601	10,155	10,843
Disabilitants	676	665	669	676	670	683	0
Survivors	899	850	753	671	599	529	0
Deferred Retirees	1,824	1,355	1,162	1,014	957	910	852
Nonvested Former Members	<u>4,638</u>	<u>3,924</u>	<u>4,084</u>	<u>4,496</u>	<u>4,402</u>	<u>4,878</u>	<u>5,495</u>
Total Membership	69,423	67,011	65,163	63,558	62,401	61,554	61,348
<b>Funded Status</b>							
Accrued Liability	\$2,707,968,000	\$2,456,686,000	\$2,115,476,000	\$1,894,142,000	\$1,656,860,000	\$1,489,214,000	\$1,267,662,330
Current Assets	<u>\$2,108,210,000</u>	<u>\$1,871,542,000</u>	<u>\$1,644,145,000</u>	<u>\$1,518,483,000</u>	<u>\$1,313,155,000</u>	<u>\$1,109,815,000</u>	<u>\$955,850,470</u>
Unfunded Accrued Liability	\$599,758,000	\$585,144,000	\$471,331,000	\$375,659,000	\$343,705,000	\$379,399,000	\$311,811,860
Funding Ratio	77.85%	76.18%	77.72%	80.17%	79.26%	74.52%	75.40%
<b>Financing Requirements</b>							
Covered Payroll	\$1,513,522,000	\$1,418,160,000	\$1,316,671,000	\$1,208,043,000	\$1,135,260,000	\$1,047,928,000	\$902,667,264
Benefits Payable	\$76,040,000	\$69,604,000	\$63,698,000	\$57,057,000	\$48,325,000	\$43,144,000	\$35,472,030
Normal Cost	6.10% \$92,324,842	6.10% \$86,507,760	5.47% \$72,021,904	5.45% \$65,838,344	5.15% \$58,465,890	5.12% \$53,653,914	6.13% \$55,333,503
Administrative Expenses	0.29% \$4,389,214	0.23% \$3,261,768	0.26% \$3,423,345	0.27% \$3,261,716	0.27% \$3,065,202	0.28% \$2,934,198	0.18% \$1,624,801
Amortiz. of Unfunded Liab.^	<u>1.78%</u> <u>\$26,940,692</u>	<u>1.81%</u> <u>\$25,668,696</u>	<u>1.88%</u> <u>\$24,753,415</u>	<u>1.58%</u> <u>\$19,087,079</u>	<u>1.54%</u> <u>\$17,483,004</u>	<u>1.78%</u> <u>\$18,653,118</u>	<u>1.64%</u> <u>\$14,803,743</u>
Total Requirements	8.17% \$123,654,747	8.14% \$115,438,224	7.61% \$100,198,663	7.30% \$88,187,139	6.96% \$79,014,096	7.18% \$75,241,230	7.95% \$71,762,047
Employee Contributions	4.15% \$62,811,163	4.34% \$61,548,144	3.73% \$49,111,828	3.73% \$45,060,004	3.73% \$42,345,198	3.73% \$39,087,714	3.73% \$33,669,489
Employer Contributions	4.29% \$64,930,094	4.51% \$63,959,016	3.90% \$51,350,169	3.90% \$47,113,677	3.90% \$44,275,140	3.90% \$40,869,192	3.90% \$35,204,023
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>
Total Contributions	8.44% \$127,741,257	8.85% \$125,507,160	7.63% \$100,461,997	7.63% \$92,173,681	7.63% \$86,620,338	7.63% \$79,956,906	7.63% \$68,873,512
Total Requirements	8.17% \$123,654,747	8.14% \$115,438,224	7.61% \$100,198,663	7.30% \$88,187,139	6.96% \$79,014,096	7.18% \$75,241,230	7.95% \$71,762,047
Total Contributions	<u>8.44%</u> <u>\$127,741,257</u>	<u>8.85%</u> <u>\$125,507,160</u>	<u>7.63%</u> <u>\$100,461,997</u>	<u>7.63%</u> <u>\$92,173,681</u>	<u>7.63%</u> <u>\$86,620,338</u>	<u>7.63%</u> <u>\$79,956,906</u>	<u>7.63%</u> <u>\$68,873,512</u>
Sufficiency/(Deficiency)	0.27% \$4,086,509	0.71% \$10,068,936	0.02% \$263,334	0.33% \$3,986,542	0.67% \$7,606,242	0.45% \$4,715,676	(0.32%) (\$2,888,535)
Amortization Target Date	2020	2020	2011	2011	2010	2010	2010
Actuary	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Touche Ross

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	1983	1982	1981	1980	1979	1978	1977
<b>Membership</b>							
Active Members	43,191	43,627	46,669	46,242	44,602	42,772	40,462
Service Retirees	10,477	9,138	9,642	8,280	8,032	7,198	6,836
Disabilitants	0	681	647	626	608	436	401
Survivors	0	392	371	321	297	289	272
Deferred Retirees	983	880	793	765	699	580	519
Nonvested Former Members	<u>4,881</u>	<u>4,954</u>	<u>4,752</u>	<u>772</u>	<u>706</u>	<u>0</u>	<u>0</u>
Total Membership	59,532	59,672	62,874	57,006	54,944	51,275	48,490
<b>Funded Status</b>							
Accrued Liability	\$1,127,574,029	\$1,004,387,821	\$831,782,260	\$737,987,559	\$641,769,751	\$560,718,470	\$487,086,044
Current Assets	<u>\$866,438,610</u>	<u>\$753,249,422</u>	<u>\$648,942,941</u>	<u>\$546,987,559</u>	<u>\$463,869,751</u>	<u>\$382,200,101</u>	<u>\$331,023,536</u>
Unfunded Accrued Liability	\$261,135,419	\$251,138,399	\$182,839,319	\$191,000,000	\$177,900,000	\$178,518,369	\$156,062,508
Funding Ratio	76.84%	75.00%	78.02%	74.12%	72.28%	68.16%	67.96%
<b>Financing Requirements</b>							
Covered Payroll	\$857,061,120	\$798,795,264	\$778,276,657	\$654,775,846	\$622,392,796	\$554,473,178	\$470,814,459
Benefits Payable	\$31,295,880	\$28,023,857	\$23,449,570	\$21,009,667	\$19,548,782	\$16,332,866	\$14,661,839
Normal Cost	6.96% \$59,651,454	6.84% \$54,637,596	6.73% \$52,378,019	6.82% \$44,655,713	6.53% \$40,642,250	7.06% \$39,145,806	7.09% \$33,380,745
Administrative Expenses	0.18% \$1,542,710	0.18% \$1,437,831	0.18% \$1,400,898	0.18% \$1,178,597	0.14% \$871,350	0.14% \$776,262	0.14% \$659,140
Amortiz. of Unfunded Liab.^	<u>2.03%</u> <u>\$17,398,341</u>	<u>2.07%</u> <u>\$16,535,062</u>	<u>1.58%</u> <u>\$12,296,771</u>	<u>1.84%</u> <u>\$12,047,876</u>	<u>1.86%</u> <u>\$11,576,506</u>	<u>2.62%</u> <u>\$14,527,197</u>	<u>2.53%</u> <u>\$11,911,606</u>
Total Requirements	9.17% \$78,592,505	9.09% \$72,610,489	8.49% \$66,075,688	8.84% \$57,882,185	8.53% \$53,090,105	9.82% \$54,449,266	9.76% \$45,951,491
Employee Contributions	3.73% \$31,968,380	3.46% \$27,638,316	4.00% \$31,131,066	4.00% \$26,191,034	4.00% \$24,895,712	4.00% \$22,178,927	4.00% \$18,832,578
Employer Contributions	3.73% \$31,968,380	3.46% \$27,638,316	4.00% \$31,131,066	4.00% \$26,191,034	4.00% \$24,895,712	4.00% \$22,178,927	4.00% \$18,832,578
Employer Add'l Cont.	1.87% \$16,027,043	1.58% \$12,620,965	2.00% \$15,565,533	2.00% \$13,095,517	2.00% \$12,447,856	2.00% \$11,089,464	2.00% \$9,416,289
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>
Total Contributions	9.33% \$79,963,802	8.50% \$67,897,597	10.00% \$77,827,666	10.00% \$65,477,585	10.00% \$62,239,280	10.00% \$55,447,318	10.00% \$47,081,446
Total Requirements	9.17% \$78,592,505	9.09% \$72,610,489	8.49% \$66,075,688	8.84% \$57,882,185	8.53% \$53,090,105	9.82% \$54,449,266	9.76% \$45,951,491
Total Contributions	<u>9.33%</u> <u>\$79,963,802</u>	<u>8.50%</u> <u>\$67,897,597</u>	<u>10.00%</u> <u>\$77,827,666</u>	<u>10.00%</u> <u>\$65,477,585</u>	<u>10.00%</u> <u>\$62,239,280</u>	<u>10.00%</u> <u>\$55,447,318</u>	<u>10.00%</u> <u>\$47,081,446</u>
Sufficiency/(Deficiency)	0.16% \$1,371,298	(0.59%) (\$4,712,892)	1.51% \$11,751,978	1.16% \$7,595,400	1.47% \$9,149,174	0.18% \$998,052	0.24% \$1,129,955
Amortization Target Date	2010	2010	2009	2009	2009	1997	1997
Actuary	Touche Ross	Touche Ross	Touche Ross	Wyatt	Wyatt	TPF&C	TPF&C

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	1976	1975	1974	1973	1972	1971	1969
<b>Membership</b>							
Active Members	40,186	38,966	37,945	36,792	36,962	37,129	36,406
Service Retirees	6,464	5,109	4,693	4,164	3,993	3,741	3,469
Disabilitants	348	289	273	237	222	198	174
Survivors	250	239	225	202	181	167	159
Deferred Retirees	461	729	715	652	590	565	503
Nonvested Former Members	0	0	0	0	0	0	0
Total Membership	47,709	45,332	43,851	42,047	41,948	41,800	40,711
<b>Funded Status</b>							
Accrued Liability	\$443,695,318	\$420,764,087	\$382,018,823	\$353,134,691	\$198,455,169	\$179,812,104	\$154,685,076
Current Assets	<u>\$274,936,153</u>	<u>\$246,896,093</u>	<u>\$229,812,734</u>	<u>\$201,394,410</u>	<u>\$179,503,926</u>	<u>\$158,713,858</u>	<u>\$132,750,343</u>
Unfunded Accrued Liability	\$168,759,165	\$173,867,994	\$152,206,089	\$151,740,281	\$18,951,243	\$21,098,246	\$21,934,733
Funding Ratio	61.97%	58.68%	60.16%	57.03%	90.45%	88.30%	85.80%
<b>Financing Requirements</b>							
Covered Payroll	\$441,481,073	\$383,302,933	\$336,978,084	\$297,239,366	\$286,119,678	\$258,358,553	\$201,375,595
Benefits Payable	\$12,563,632	\$10,899,407	\$9,377,935	\$5,853,020	\$5,335,860	\$4,779,729	\$4,347,736
Normal Cost	7.30% \$32,228,118	6.91% \$26,486,233	7.00% \$23,588,466	6.85% \$20,360,897	5.77% \$16,509,105	5.77% \$14,907,289	5.59% \$11,256,896
Administrative Expenses	0.14% \$618,074	0.14% \$536,624	0.14% \$471,769	0.19% \$564,755	0.19% \$543,627	0.19% \$490,881	0.19% \$382,614
Amortiz. of Unfunded Liab.^	<u>2.79%</u> <u>\$12,317,322</u>	<u>3.11%</u> <u>\$11,920,721</u>	<u>3.05%</u> <u>\$10,277,832</u>	<u>3.32%</u> <u>\$9,868,347</u>	<u>0.39%</u> <u>\$1,115,867</u>	<u>0.47%</u> <u>\$1,214,285</u>	<u>0.49%</u> <u>\$986,740</u>
Total Requirements	10.23% \$45,163,514	10.16% \$38,943,578	10.19% \$34,338,067	10.36% \$30,793,998	6.35% \$18,168,600	6.43% \$16,612,455	6.27% \$12,626,250
Employee Contributions	4.00% \$17,659,243	4.00% \$15,332,117	4.00% \$13,479,123	4.00% \$11,889,575	3.00% \$8,583,590	3.00% \$7,750,757	3.00% \$6,041,268
Employer Contributions	4.00% \$17,659,243	4.00% \$15,332,117	4.00% \$13,479,123	4.00% \$11,889,575	3.00% \$8,583,590	3.00% \$7,750,757	3.00% \$6,041,268
Employer Add'l Cont.	2.00% \$8,829,621	2.00% \$7,666,059	2.00% \$6,739,562	2.00% \$5,944,787	1.00% \$2,861,197	1.00% \$2,583,586	1.00% \$2,013,756
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>
Total Contributions	10.00% \$44,148,107	10.00% \$38,330,293	10.00% \$33,697,808	10.00% \$29,723,937	7.00% \$20,028,377	7.00% \$18,085,099	7.00% \$14,096,292
Total Requirements	10.23% \$45,163,514	10.16% \$38,943,578	10.19% \$34,338,067	10.36% \$30,793,998	6.35% \$18,168,600	6.43% \$16,612,455	6.27% \$12,626,250
Total Contributions	<u>10.00%</u> <u>\$44,148,107</u>	<u>10.00%</u> <u>\$38,330,293</u>	<u>10.00%</u> <u>\$33,697,808</u>	<u>10.00%</u> <u>\$29,723,937</u>	<u>7.00%</u> <u>\$20,028,377</u>	<u>7.00%</u> <u>\$18,085,099</u>	<u>7.00%</u> <u>\$14,096,292</u>
Sufficiency/(Deficiency)	(0.23%) (\$1,015,406)	(0.16%) (\$613,285)	(0.19%) (\$640,258)	(0.36%) (\$1,070,062)	0.65% \$1,859,778	0.57% \$1,472,644	0.73% \$1,470,042
Amortization Target Date	1997	1997	1997	1997	1997	1997	1997
Actuary	TPF&C	Little Church	Coates & Crawford	Coates & Crawford	Coates & Crawford	Coates, Herfurth & England	Coates, Herfurth & England

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.

Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	1968	1967	1966	1965	1964	1963	1962
<b>Membership</b>							
Active Members	34,591	34,278	33,006	31,396	29,553	28,187	27,363
Service Retirees	3,303	3,029	3,461	3,359	3,130	2,853	2,662
Disabilitants	167	146	130	0	0	79	64
Survivors	154	149	41	0	0	169	43
Deferred Retirees	475	443	0	0	0	9	10
Nonvested Former Members	0	0	0	0	0	0	0
Total Membership	38,690	38,045	36,638	34,755	32,683	31,297	30,142
<b>Funded Status</b>							
Accrued Liability	\$141,584,064	\$134,199,924	\$123,283,950	\$116,543,308	\$98,004,185	\$75,725,186	\$82,526,201
Current Assets	<u>\$119,304,370</u>	<u>\$106,167,069</u>	<u>\$94,514,491</u>	<u>\$85,579,255</u>	<u>\$77,232,036</u>	<u>\$55,019,467</u>	<u>\$64,478,811</u>
Unfunded Accrued Liability	\$22,279,694	\$28,032,855	\$28,769,459	\$30,964,053	\$20,772,149	\$20,705,719	\$18,047,390
Funding Ratio	84.26%	79.11%	76.66%	73.43%	78.80%	72.65%	78.13%
<b>Financing Requirements</b>							
Covered Payroll	\$181,058,514	\$165,053,984	\$137,700,000	\$129,000,000	\$126,132,775	\$118,435,930	\$109,988,801
Benefits Payable	\$3,961,131	\$3,544,562	\$3,700,000	\$3,200,000	\$3,189,340		
Normal Cost	5.44% \$9,849,583	5.44% \$8,978,937	5.11% \$7,036,470	5.11% \$6,591,900	5.12% \$6,457,998	6.58% \$7,793,084	\$0
Administrative Expenses	0.19% \$344,011	0.19% \$313,603	0.19% \$261,630	0.19% \$245,100	0.19% \$239,652	\$0	\$0
Amortiz. of Unfunded Liab.^	<u>0.53%</u> <u>\$959,610</u>	<u>0.67%</u> <u>\$1,105,862</u>	<u>1.00%</u> <u>\$1,377,000</u>	<u>1.16%</u> <u>\$1,496,400</u>	<u>0.90%</u> <u>\$1,135,195</u>	<u>\$0</u>	<u>\$0</u>
Total Requirements	6.16% \$11,153,204	6.30% \$10,398,401	6.30% \$8,675,100	6.46% \$8,333,400	6.21% \$7,832,845	\$7,793,084	\$0
Employee Contributions	3.00% \$5,431,755	3.00% \$4,951,620	3.00% \$4,131,000	3.00% \$3,870,000	3.00% \$3,783,983	\$0	\$0
Employer Contributions	3.00% \$5,431,755	3.00% \$4,951,620	3.00% \$4,131,000	3.00% \$3,870,000	3.00% \$3,783,983	\$0	\$0
Employer Add'l Cont.	2.00% \$3,621,170	2.00% \$3,301,080	2.00% \$2,754,000	2.00% \$2,580,000	2.00% \$2,522,656	\$0	\$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	\$0	\$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	\$0	\$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Contributions	8.00% \$14,484,681	8.00% \$13,204,319	8.00% \$11,016,000	8.00% \$10,320,000	8.00% \$10,090,622	\$0	\$0
Total Requirements	6.16% \$11,153,204	6.30% \$10,398,401	6.30% \$8,675,100	6.46% \$8,333,400	6.21% \$7,832,845	\$7,793,084	\$0
Total Contributions	<u>8.00%</u> <u>\$14,484,681</u>	<u>8.00%</u> <u>\$13,204,319</u>	<u>8.00%</u> <u>\$11,016,000</u>	<u>8.00%</u> <u>\$10,320,000</u>	<u>8.00%</u> <u>\$10,090,622</u>	<u>\$0</u>	<u>\$0</u>
Sufficiency/(Deficiency)	1.84% \$3,331,477	1.70% \$2,805,918	1.70% \$2,340,900	1.54% \$1,986,600	1.79% \$2,257,777	(\$7,793,084)	\$0
Amortization Target Date	1997	1997	1997	1997	1997	1997	1997
Actuary	Coates, Herfurth & England	Coates, Herfurth & England	Coates, Herfurth & England	Coates, Herfurth & England	Coates, Herfurth & England	A.A. Weinberg	A.A. Weinberg

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.



Actuarial Valuation Data by Year

State Employees Retirement Plan

(MSRS-General)

	1959	1958	1957	1954
<u>Membership</u>				
Active Members	27,025	27,069	27,968	26,663
Service Retirees	2,102	1,956	1,984	1,185
Disabilitants	40	36	0	0
Survivors	57	61	0	0
Deferred Retirees	13	17	511	0
Nonvested Former Members	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Membership	29,237	29,139	30,463	27,848
<u>Funded Status</u>				
Accrued Liability	\$72,350,420	\$69,378,239	\$69,000,000	\$56,100,000
Current Assets	<u>\$48,704,693</u>	<u>\$44,250,440</u>	<u>\$42,300,000</u>	<u>\$26,400,000</u>
Unfunded Accrued Liability	\$23,645,727	\$25,127,799	\$26,700,000	\$29,700,000
Funding Ratio	67.32%	63.78%	61.30%	47.06%
<u>Financing Requirements</u>				
Covered Payroll	\$95,643,820	\$88,528,372	\$84,100,000	\$74,700,000
Benefits Payable			\$2,200,000	\$1,200,000
Normal Cost	\$0	\$0	6.29% \$5,289,890	15.26% \$11,399,220
Administrative Expenses	\$0	\$0	0.00% \$0	0.00% \$0
Amortiz. of Unfunded Liab.^	<u>\$0</u>	<u>\$0</u>	<u>1.37%</u> <u>\$1,152,170</u>	<u>1.74%</u> <u>\$1,299,780</u>
Total Requirements	\$0	\$0	7.66% \$6,442,060	17.00% \$12,699,000
Employee Contributions	\$0	\$0	3.00% \$2,523,000	6.00% \$4,482,000
Employer Contributions	\$0	\$0	3.00% \$2,523,000	0.00% \$0
Employer Add'l Cont.	\$0	\$0	2.00% \$1,682,000	0.00% \$0
Direct State Funding	\$0	\$0	0.00% \$0	0.00% \$0
Other Govt. Funding	\$0	\$0	0.00% \$0	0.00% \$0
Administrative Assessment	<u>\$0</u>	<u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>
Total Contributions	\$0	\$0	8.00% \$6,728,000	6.00% \$4,482,000
Total Requirements	\$0	\$0	7.66% \$6,442,060	17.00% \$12,699,000
Total Contributions	<u>\$0</u>	<u>\$0</u>	<u>8.00%</u> <u>\$6,728,000</u>	<u>6.00%</u> <u>\$4,482,000</u>
Sufficiency/(Deficiency)	\$0	\$0	0.34% \$285,940	(11.00%) (\$8,217,000)
Amortization Target Date	1997	1997	1997	1994
Actuary	A.A. Weinberg	A.A. Weinberg	A.A. Weinberg	A.A. Weinberg

^Amortization of the unfunded actuarial accrued liability (UAAL) to the amortization target date.