

Actuarial Valuation Data

Teachers Retirement Association

(TRA)

	2011	2010	2009	2008	2007*	2007**
<b>Membership</b>						
Active Members	76,755	77,356	77,786	76,515	77,694	77,694
Service Retirees	49,079	47,517	46,108	43,041	42,679	42,679
Disabilitants	602	654	624	641	636	636
Survivors	3,856	3,682	3,476	3,299	3,223	3,223
Deferred Retirees	13,237	12,756	12,490	12,168	12,636	12,636
Nonvested Former Members	<u>25,196</u>	<u>23,651</u>	<u>23,073</u>	<u>22,115</u>	<u>22,914</u>	<u>22,914</u>
Total Membership	168,725	165,616	163,557	157,779	159,782	159,782
<b>Funded Status</b>						
Accrued Liability	\$22,171,493,000	\$22,081,634,000	\$23,114,802,000	\$22,230,841,000	\$21,470,314,497	\$21,470,314,497
Current Assets	<u>\$17,132,383,000</u>	<u>\$17,323,146,000</u>	<u>\$17,882,408,000</u>	<u>\$18,226,985,000</u>	<u>\$18,794,389,076</u>	<u>\$20,111,778,892</u>
Unfunded Accrued Liability	\$5,039,110,000	\$4,758,488,000	\$5,232,394,000	\$4,003,856,000	\$2,675,925,421	\$1,358,535,605
Funding Ratio	77.27%	78.45%	77.36%	81.99%	87.54%	93.67%
<b>Financing Requirements</b>						
Covered Payroll	\$4,106,922,000	\$4,047,547,000	\$4,049,217,000	\$3,846,190,000	\$3,814,373,772	\$3,814,373,772
Benefits Payable	\$1,459,550,000	\$1,421,382,000	\$1,381,366,000	\$1,330,837,000	\$1,273,093,384	\$1,273,093,384
Normal Cost	8.17% \$335,649,000	8.36% \$338,474,000	8.88% \$359,579,000	8.77% \$337,281,000	9.37% \$357,343,265	9.37% \$357,343,265
Administrative Expenses	<u>0.24%</u> \$9,857,000	<u>0.24%</u> \$9,714,000	<u>0.28%</u> \$11,338,000	<u>0.27%</u> \$10,385,000	<u>0.29%</u> \$11,061,684	<u>0.29%</u> \$11,061,684
Normal Cost & Expense	8.41% \$345,506,000	8.60% \$348,188,000	9.16% \$370,917,000	9.04% \$347,666,000	9.66% \$368,404,949	9.66% \$368,404,949
Normal Cost & Expense	8.41% \$345,506,000	8.60% \$348,188,000	9.16% \$370,917,000	9.04% \$347,666,000	9.66% \$368,404,949	9.66% \$368,404,949
Amortization	<u>8.16%</u> \$335,125,000	<u>7.11%</u> \$287,781,000	<u>7.66%</u> \$310,170,000	<u>6.04%</u> \$232,310,000	<u>3.78%</u> \$144,183,329	<u>1.92%</u> \$73,235,976
Total Requirements	16.57% \$680,631,000	15.71% \$635,969,000	16.82% \$681,087,000	15.08% \$579,976,000	13.44% \$512,588,278	11.58% \$441,640,925
Employee Contributions	6.00% \$246,490,000	5.50% \$222,737,000	5.50% \$222,860,000	5.50% \$211,704,000	5.51% \$210,143,378	5.51% \$210,143,378
Employer Contributions	6.16% \$252,854,000	5.68% \$229,799,000	5.69% \$230,325,000	5.69% \$218,752,000	5.72% \$218,013,895	5.72% \$218,013,895
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.53% \$21,510,000	0.47% \$19,049,000	0.44% \$17,948,000	0.50% \$19,170,000	0.49% \$18,819,110	0.49% \$18,819,110
Other Govt. Funding	0.00% \$0	0.06% \$2,500,000	0.06% \$2,500,000	0.06% \$2,500,000	0.07% \$2,500,000	0.07% \$2,500,000
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
Total Contributions	12.69% \$520,854,000	11.71% \$474,085,000	11.70% \$473,633,000	11.75% \$452,126,000	11.78% \$449,476,383	11.78% \$449,476,383
Total Requirements	16.57% \$680,631,000	15.71% \$635,969,000	16.82% \$681,087,000	15.08% \$579,976,000	13.44% \$512,588,278	11.58% \$441,640,925
Total Contributions	<u>12.69%</u> \$520,854,000	<u>11.71%</u> \$474,085,000	<u>11.70%</u> \$473,633,000	<u>11.75%</u> \$452,126,000	<u>11.78%</u> \$449,476,383	<u>11.78%</u> \$449,476,383
Deficiency (Surplus)	3.88% \$159,777,000	4.00% \$161,884,000	5.12% \$207,454,000	3.33% \$127,850,000	1.65% \$63,111,895	(0.21%) (\$7,835,458)
Amortization Target Date	2037	2037	2037	2037	2037	2037
Actuary	Mercer	Mercer	Mercer	Mercer	Segal	Segal

\* Reflects 2007 Asset Valuation Method change

\*\* Current Assets and Amortization

Actuarial Valuation Data

Teachers Retirement Association

(TRA)

	2006*	2005	2004	2003	2002	2001
<b>Membership</b>						
Active Members	79,164	74,552	72,008	71,916	71,690	71,097
Service Retirees	41,009	35,779	34,581	33,290	32,231	31,169
Disabilitants	630	581	589	558	551	518
Survivors	3,044	2,597	2,479	2,351	2,192	2,070
Deferred Retirees	11,773	9,880	10,767	9,304	8,680	7,959
Nonvested Former Members	<u>21,956</u>	<u>19,151</u>	<u>18,223</u>	<u>19,256</u>	<u>19,022</u>	<u>19,344</u>
Total Membership	157,576	142,540	138,647	136,675	134,366	132,157
<b>Funded Status</b>						
Accrued Liability	\$20,679,110,879	\$18,021,410,061	\$17,518,783,700	\$16,856,379,000	\$16,503,099,000	\$15,903,984,000
Current Assets	<u>\$19,035,611,839</u>	<u>\$17,752,917,313</u>	<u>\$17,519,909,350</u>	<u>\$17,384,179,000</u>	<u>\$17,378,994,000</u>	<u>\$16,834,024,000</u>
Unfunded Accrued Liability	\$1,643,499,040	\$268,492,748	(\$1,125,650)	(\$527,800,000)	(\$875,895,000)	(\$930,040,000)
Funding Ratio	92.05%	98.51%	100.01%	103.13%	105.31%	105.85%
<b>Financing Requirements</b>						
Covered Payroll	\$3,707,900,584	\$3,389,066,754	\$3,206,759,440	\$3,163,057,000	\$3,040,422,000	\$2,937,962,000
Benefits Payable	\$1,224,212,024	\$1,048,440,524	\$1,008,410,471	\$978,466,000	\$946,344,000	\$861,788,000
Normal Cost	9.43% \$349,678,399	8.02% \$271,801,325	8.07% \$258,898,450	8.84% \$279,583,000	8.68% \$264,209,000	9.09% \$267,166,000
Administrative Expenses	0.33% \$12,236,072	0.34% \$11,522,827	0.39% \$12,506,362	0.43% \$13,601,000	0.44% \$13,378,000	0.46% \$13,515,000
Normal Cost & Expense	9.76% \$361,914,471	8.36% \$283,324,152	8.46% \$271,404,812	9.27% \$293,184,000	9.12% \$277,587,000	9.55% \$280,681,000
Normal Cost & Expense	9.76% \$361,914,471	8.36% \$283,324,152	8.46% \$271,404,812	9.27% \$293,184,000	9.12% \$277,587,000	9.55% \$280,681,000
Amortization	<u>2.34%</u> <u>\$86,764,874</u>	<u>0.69%</u> <u>\$23,384,561</u>	<u>0.00%</u> <u>\$0</u>	<u>(0.90%)</u> <u>(\$28,468,000)</u>	<u>(1.55%)</u> <u>(\$47,127,000)</u>	<u>(1.70%)</u> <u>(\$49,945,000)</u>
Total Requirements	12.11% \$448,679,345	9.05% \$306,708,713	8.46% \$271,404,812	8.37% \$264,716,000	7.57% \$230,460,000	7.85% \$230,736,000
Employee Contributions	5.51% \$204,456,479	5.00% \$169,453,338	5.00% \$160,337,972	5.00% \$158,163,000	5.00% \$152,031,000	5.00% \$146,914,000
Employer Contributions	5.23% \$193,832,020	5.00% \$169,453,338	5.00% \$160,337,972	5.00% \$158,163,000	5.00% \$152,031,000	5.00% \$146,914,000
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Direct State Funding	0.51% \$18,819,110	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Other Govt. Funding	0.07% \$2,500,000	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>
Total Contributions	11.31% \$419,607,609	10.00% \$338,906,676	10.00% \$320,675,944	10.00% \$316,326,000	10.00% \$304,062,000	10.00% \$293,828,000
Total Requirements	12.11% \$448,679,345	9.05% \$306,708,713	8.46% \$271,404,812	8.37% \$264,716,000	7.57% \$230,460,000	7.85% \$230,736,000
Total Contributions	<u>11.31%</u> <u>\$419,607,609</u>	<u>10.00%</u> <u>\$338,906,676</u>	<u>10.00%</u> <u>\$320,675,944</u>	<u>10.00%</u> <u>\$316,326,000</u>	<u>10.00%</u> <u>\$304,062,000</u>	<u>10.00%</u> <u>\$293,828,000</u>
Deficiency (Surplus)	0.80% \$29,071,736	(0.95%) (\$32,197,963)	(1.54%) (\$49,271,132)	(1.63%) (\$51,610,000)	(2.43%) (\$73,602,000)	(2.15%) (\$63,092,000)
<i>*Reflects MTRFA/TRA Merger</i>						
Amortization Target Date	2037	2020	2034	2033	2032	2031
Actuary	Segal	Segal	Segal	Milliman USA	Milliman USA	Milliman USA

in results do not reflect the 2007 Asset Valuation Method chang

Actuarial Valuation Data

Teachers Retirement Association

(TRA)

	2000	1999	1998	1997	1996	1995
<b>Membership</b>						
Active Members	70,508	68,613	68,247	68,554	68,490	67,558
Service Retirees	29,525	27,457	25,088	23,678	22,434	21,458
Disabilitants	509	476	454	425	409	379
Survivors	1,912	1,816	1,686	1,578	1,464	1,331
Deferred Retirees	7,375	7,020	6,356	6,356	5,767	5,103
Nonvested Former Members	<u>17,833</u>	<u>18,317</u>	<u>16,653</u>	<u>16,653</u>	<u>16,444</u>	<u>16,411</u>
Total Membership	127,662	123,699	118,484	117,244	115,008	112,240
<b>Funded Status</b>						
Accrued Liability	\$14,802,441,000	\$13,259,569,000	\$12,046,312,000	\$10,963,637,000	\$10,366,168,000	\$9,717,623,000
Current Assets	<u>\$15,573,151,000</u>	<u>\$14,011,247,000</u>	<u>\$12,727,546,000</u>	<u>\$11,103,759,000</u>	<u>\$9,541,221,000</u>	<u>\$8,348,124,000</u>
Unfunded Accrued Liability	(\$770,710,000)	(\$751,678,000)	(\$681,234,000)	(\$140,122,000)	\$824,947,000	\$1,369,499,000
Funding Ratio	105.21%	105.67%	105.66%	101.28%	92.04%	85.91%
<b>Financing Requirements</b>						
Covered Payroll	\$2,813,696,000	\$2,692,960,000	\$2,569,368,000	\$2,475,599,000	\$2,391,385,000	\$2,325,059,000
Benefits Payable	\$755,036,000	\$620,938,000	\$533,851,000	\$427,587,000	\$378,073,000	\$338,857,000
Normal Cost	9.09% \$255,746,000	9.55% \$257,386,000	9.60% \$246,514,000	9.66% \$238,907,000	10.49% \$250,856,287	10.59% \$246,223,748
Administrative Expenses	<u>0.30%</u> \$8,441,000	<u>0.31%</u> \$8,348,000	<u>0.22%</u> \$5,653,000	<u>0.19%</u> \$4,704,000	<u>0.16%</u> \$3,826,216	<u>0.16%</u> \$3,720,094
Normal Cost & Expense	9.39% \$264,187,000	9.86% \$265,734,000	9.82% \$252,167,000	9.85% \$243,611,000	10.65% \$254,682,503	10.75% \$249,943,843
Normal Cost & Expense	9.39% \$264,187,000	9.86% \$265,734,000	9.82% \$252,167,000	9.85% \$243,611,000	10.65% \$254,682,503	10.75% \$249,943,843
Amortization	<u>(1.47%)</u> <u>(\$41,361,000)</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>2.13%</u> <u>\$50,936,501</u>	<u>3.55%</u> <u>\$82,539,595</u>
Total Requirements	7.92% \$222,826,000	9.86% \$265,734,000	9.82% \$252,167,000	9.85% \$243,611,000	12.78% \$305,619,003	14.30% \$332,483,437
Employee Contributions	5.00% \$140,710,000	5.00% \$134,698,000	5.00% \$128,538,000	5.00% \$123,892,000	6.15% \$147,070,178	6.51% \$151,361,341
Employer Contributions	5.00% \$140,710,000	5.00% \$134,698,000	5.00% \$128,538,000	6.64% \$164,492,000	8.15% \$194,897,878	8.15% \$189,492,309
Employer Add'l Cont.	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
Other Govt. Funding	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>
Total Contributions	10.00% \$281,420,000	10.00% \$269,396,000	10.00% \$257,076,000	11.64% \$288,384,000	14.66% \$341,968,055	14.66% \$340,853,649
Total Requirements	7.92% \$222,826,000	9.86% \$265,734,000	9.82% \$252,167,000	9.85% \$243,611,000	12.78% \$305,619,003	14.30% \$332,483,437
Total Contributions	<u>10.00%</u> <u>\$281,420,000</u>	<u>10.00%</u> <u>\$269,396,000</u>	<u>10.00%</u> <u>\$257,076,000</u>	<u>11.64%</u> <u>\$288,384,000</u>	<u>14.66%</u> <u>\$341,968,055</u>	<u>14.66%</u> <u>\$340,853,649</u>
Deficiency (Surplus)	(2.08%) (\$58,594,000)	(0.14%) (\$3,662,000)	(0.18%) (\$4,909,000)	(1.79%) (\$44,773,000)	(1.88%) (\$36,349,052)	(0.36%) (\$8,370,212)
Amortization Target Date	2030	2020	2020	2020	2020	2020
Actuary	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson

Actuarial Valuation Data

Teachers Retirement Association

(TRA)

	1994		1993		1992		1991		1990		1989		1988	
<b>Membership</b>														
Active Members		66,514		65,268		65,557		65,093		64,324		64,796		63,326
Service Retirees		20,563		19,343		17,863		16,851		16,133		15,406		14,974
Disabilitants		345		354		297		280		257		241		221
Survivors		1,229		1,113		1,049		955		929		903		869
Deferred Retirees		4,499		4,030		3,548		3,134		1,955		1,887		1,878
Nonvested Former Members		<u>16,147</u>		<u>15,994</u>		<u>15,447</u>		<u>15,151</u>		<u>15,356</u>		<u>14,205</u>		<u>13,310</u>
Total Membership		109,297		106,102		103,761		101,464		98,954		97,438		94,578
<b>Funded Status</b>														
Accrued Liability		\$9,115,266,000		\$8,266,059		\$7,662,522,000		\$7,213,720,000		\$6,611,074,000		\$6,249,413,000		\$5,413,782,000
Current Assets		<u>\$7,611,935,000</u>		<u>\$7,045,937</u>		<u>\$6,324,733,000</u>		<u>\$5,614,924,000</u>		<u>\$5,131,999,000</u>		<u>\$4,567,997,000</u>		<u>\$3,806,239,000</u>
Unfunded Accrued Liability		\$1,503,331,000		\$1,220,122		\$1,337,789,000		\$1,598,796,000		\$1,479,075,000		\$1,681,416,000		\$1,607,543,000
Funding Ratio	83.51%		85.24%		82.54%		77.84%		77.63%		73.09%		70.31%	
<b>Financing Requirements</b>														
Covered Payroll		\$2,235,636,000		\$2,156,000,000		\$2,112,401,000		\$2,044,754,000		\$1,931,669,000		\$1,887,073,000		\$1,752,322,000
Benefits Payable		\$309,036,000		\$256,630,000		\$227,067,000		\$200,415,000		\$179,792,000		\$160,850,000		\$148,243,000
Normal Cost	10.63%	\$237,648,107	9.84%	\$212,150,400	9.73%	\$205,536,617	9.06%	\$185,254,712	9.24%	\$178,486,216	8.30%	\$156,627,059	7.77%	\$136,155,419
Administrative Expenses	0.15%	\$3,353,454	0.15%	\$3,234,000	0.40%	\$8,449,604	0.37%	\$7,565,590	0.42%	\$8,113,010	0.30%	\$5,661,219	0.30%	\$5,256,966
Normal Cost & Expense	10.78%	\$241,001,561	9.99%	\$215,384,400	10.13%	\$213,986,221	9.43%	\$192,820,302	9.66%	\$186,599,225	8.60%	\$162,288,278	8.07%	\$141,412,385
Normal Cost & Expense	10.78%	\$241,001,561	9.99%	\$215,384,400	10.13%	\$213,986,221	9.43%	\$192,820,302	9.66%	\$186,599,225	8.60%	\$162,288,278	8.07%	\$141,412,385
Amortization	<u>3.95%</u>	<u>\$88,307,622</u>	<u>2.76%</u>	<u>\$59,505,600</u>	<u>3.00%</u>	<u>\$63,372,030</u>	<u>3.61%</u>	<u>\$73,815,619</u>	<u>3.45%</u>	<u>\$66,642,581</u>	<u>3.92%</u>	<u>\$73,973,262</u>	<u>5.22%</u>	<u>\$91,471,208</u>
Total Requirements	14.73%	\$329,309,183	12.75%	\$274,890,000	13.13%	\$277,358,251	13.04%	\$266,635,922	13.11%	\$253,241,806	12.52%	\$236,261,540	13.29%	\$232,883,594
Employee Contributions	6.51%	\$145,539,904	4.52%	\$97,451,200	4.54%	\$95,903,005	4.56%	\$93,240,782	4.58%	\$88,470,440	4.59%	\$86,616,651	4.60%	\$80,606,812
Employer Contributions	8.15%	\$182,204,334	8.16%	\$175,929,600	8.18%	\$172,794,402	8.20%	\$167,669,828	8.22%	\$158,783,192	9.07%	\$171,157,521	9.09%	\$159,286,070
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	14.66%	\$327,744,238	12.68%	\$273,380,800	12.72%	\$268,697,407	12.76%	\$260,910,610	12.80%	\$247,253,632	13.66%	\$257,774,172	13.69%	\$239,892,882
Total Requirements	14.73%	\$329,309,183	12.75%	\$274,890,000	13.13%	\$275,003,000	13.04%	\$266,635,922	13.11%	\$253,241,806	12.52%	\$236,261,540	13.29%	\$232,883,594
Total Contributions	<u>14.66%</u>	<u>\$327,744,238</u>	<u>12.68%</u>	<u>\$273,380,800</u>	<u>12.72%</u>	<u>\$273,637,000</u>	<u>12.76%</u>	<u>\$260,910,610</u>	<u>12.80%</u>	<u>\$247,253,632</u>	<u>13.66%</u>	<u>\$257,774,172</u>	<u>13.69%</u>	<u>\$239,892,882</u>
Deficiency (Surplus)	0.07%	\$1,564,945	0.07%	\$1,509,200	0.41%	\$1,366,000	0.28%	\$5,725,311	0.31%	\$5,988,174	(1.14%)	(\$21,512,632)	(0.40%)	(\$7,009,288)
Amortization Target Date	2020		2020		2020		2020		2020		2020		2009	
Actuary	Milliman & Robertson		Milliman & Robertson		Milliman & Robertson		Milliman & Robertson		Wyatt		Wyatt		Wyatt	

Actuarial Valuation Data

Teachers Retirement Association

(TRA)

	1987	1986	1985	1984	1983	1982	1981
<b>Membership</b>							
Active Members	61,283	60,174	58,533	58,190	57,831	63,573	65,189
Service Retirees	14,582	13,695	12,798	11,885	12,427	10,667	9,961
Disabilitants	217	222	223	222	0	214	199
Survivors	830	808	781	737	0	654	645
Deferred Retirees	1,926	2,088	2,191	0	0	0	0
Nonvested Former Members	<u>13,106</u>	<u>12,957</u>	<u>13,628</u>	<u>0</u>	<u>16,842</u>	<u>14,411</u>	<u>14,245</u>
Total Membership	91,944	89,944	88,154	71,034	87,100	89,519	90,239
<b>Funded Status</b>							
Accrued Liability	\$5,000,785,000	\$4,539,359,000	\$4,166,116,000	\$3,716,432,337	\$3,472,264,036	\$3,108,085,664	\$2,690,945,880
Current Assets	<u>\$3,467,205,000</u>	<u>\$2,962,050,000</u>	<u>\$2,585,778,000</u>	<u>\$2,216,249,806</u>	<u>\$1,983,579,211</u>	<u>\$1,710,750,595</u>	<u>\$1,462,538,605</u>
Unfunded Accrued Liability	\$1,533,580,000	\$1,577,309,000	\$1,580,338,000	\$1,500,182,531	\$1,488,684,825	\$1,397,335,069	\$1,228,407,275
Funding Ratio	69.33%	65.25%	62.07%	59.63%	57.13%	55.04%	54.35%
<b>Financing Requirements</b>							
Covered Payroll	\$1,601,809,000	\$1,498,590,000	\$1,393,716,000	\$1,232,356,505	\$1,146,613,563	\$1,129,420,339	\$1,040,186,471
Benefits Payable	\$125,152,000	\$110,908,000	\$91,606,536	\$75,269,396	\$62,177,636	\$52,692,963	\$43,664,862
Normal Cost	7.82% \$125,261,464	7.96% \$119,287,764	7.94% \$110,661,050	8.66% \$106,722,073	9.47% \$108,584,304	9.49% \$107,181,990	9.52% \$99,025,752
Administrative Expenses	0.31% \$4,965,608	0.32% \$4,795,488	0.33% \$4,599,263	0.16% \$1,971,770	0.13% \$1,490,598	0.12% \$1,355,304	0.10% \$1,040,186
Normal Cost & Expense	8.13% \$130,227,072	8.28% \$124,083,252	8.27% \$115,260,313	8.82% \$108,693,844	9.60% \$110,074,902	9.61% \$108,537,295	9.62% \$100,065,939
Normal Cost & Expense	8.13% \$130,227,072	8.28% \$124,083,252	8.27% \$115,260,313	8.82% \$108,693,844	9.60% \$110,074,902	9.61% \$108,537,295	9.62% \$100,065,939
Amortization	<u>5.23%</u> <u>\$83,774,611</u>	<u>5.54%</u> <u>\$83,021,886</u>	<u>5.76%</u> <u>\$80,278,042</u>	<u>5.73%</u> <u>\$70,614,028</u>	<u>9.03%</u> <u>\$103,539,205</u>	<u>8.45%</u> <u>\$95,436,019</u>	<u>7.93%</u> <u>\$82,486,787</u>
Total Requirements	13.36% \$214,001,682	13.82% \$207,105,138	14.03% \$195,538,355	14.55% \$179,307,871	18.63% \$213,614,107	18.06% \$203,973,313	17.55% \$182,552,726
Employee Contributions	4.62% \$74,003,576	4.64% \$69,534,576	4.68% \$65,225,909	4.71% \$58,043,991	4.73% \$54,234,822	4.75% \$53,647,466	4.76% \$49,512,876
Employer Contributions	9.09% \$145,604,438	9.13% \$136,821,267	9.15% \$127,525,014	4.71% \$58,043,991	4.73% \$54,234,822	4.75% \$53,647,466	4.76% \$49,512,876
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	4.48% \$55,209,571	3.05% \$34,971,714	3.05% \$34,447,320	3.05% \$31,725,687
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	13.71% \$219,608,014	13.77% \$206,355,843	13.83% \$192,750,923	13.90% \$171,297,554	12.51% \$143,441,357	12.55% \$141,742,253	12.57% \$130,751,439
Total Requirements	13.36% \$214,001,682	13.82% \$207,105,138	14.03% \$195,538,355	14.55% \$179,307,871	18.63% \$213,614,107	18.06% \$203,973,313	17.55% \$182,552,726
Total Contributions	<u>13.71%</u> <u>\$219,608,014</u>	<u>13.77%</u> <u>\$206,355,843</u>	<u>13.83%</u> <u>\$192,750,923</u>	<u>13.90%</u> <u>\$171,297,554</u>	<u>12.51%</u> <u>\$143,441,357</u>	<u>12.55%</u> <u>\$141,742,253</u>	<u>12.57%</u> <u>\$130,751,439</u>
Deficiency (Surplus)	(0.35%) (\$5,606,331)	0.05% \$749,295	0.20% \$2,787,432	0.65% \$8,010,317	6.12% \$70,172,750	5.51% \$62,231,061	4.98% \$51,801,286
Amortization Target Date	2009	2009	2009	2009	2009	2009	2009
Actuary	Wyatt	Wyatt	Wyatt	Flott	Flott	Flott	Flott

Actuarial Valuation Data

Teachers Retirement Association

(TRA)

	1980	1979	1978	1977	1976	1975	1974
<b>Membership</b>							
Active Members	65,423	64,360	62,683	63,967	64,088	60,457	59,528
Service Retirees	9,411	8,879	8,432	7,842	7,176	6,566	5,985
Disabilitants	200	179	155	137	120	97	80
Survivors	587	578	556	562	529	538	536
Deferred Retirees	0	0	0	0	0	0	0
Nonvested Former Members	<u>13,460</u>	<u>14,530</u>	<u>14,312</u>	<u>17,129</u>	<u>15,894</u>	<u>16,509</u>	<u>18,133</u>
Total Membership	89,081	88,526	86,138	89,637	87,807	84,167	84,262
<b>Funded Status</b>							
Accrued Liability	\$2,361,121,244	\$2,080,173,976	\$1,732,776,686	\$1,462,982,613	\$1,293,764,171	\$1,131,946,700	\$1,078,633,461
Current Assets	<u>\$1,232,115,128</u>	<u>\$1,048,516,231</u>	<u>\$940,345,339</u>	<u>\$822,410,185</u>	<u>\$695,640,890</u>	<u>\$606,495,423</u>	<u>\$538,893,416</u>
Unfunded Accrued Liability	\$1,129,006,116	\$1,031,657,745	\$792,431,347	\$640,572,428	\$598,123,281	\$525,451,277	\$539,740,045
Funding Ratio	52.18%	50.41%	54.27%	56.21%	53.77%	53.58%	49.96%
<b>Financing Requirements</b>							
Covered Payroll	\$971,670,262	\$899,989,326	\$845,898,496	\$802,761,084	\$752,040,857	\$663,335,223	\$598,421,409
Benefits Payable	\$38,399,281	\$34,612,214	\$31,452,536	\$27,383,954	\$23,029,011	\$19,828,513	\$16,715,896
Normal Cost	9.55% \$92,794,510	9.58% \$86,218,977	8.89% \$75,200,376	9.11% \$73,131,535	8.72% \$65,577,963	8.76% \$58,108,166	8.84% \$52,900,453
Administrative Expenses	<u>0.10%</u> <u>\$971,670</u>	<u>0.11%</u> <u>\$989,988</u>	<u>0.11%</u> <u>\$930,488</u>	<u>0.10%</u> <u>\$802,761</u>	<u>0.10%</u> <u>\$752,041</u>	<u>0.11%</u> <u>\$729,669</u>	<u>0.10%</u> <u>\$598,421</u>
Normal Cost & Expense	9.65% \$93,766,180	9.69% \$87,208,966	9.00% \$76,130,865	9.21% \$73,934,296	8.82% \$66,330,004	8.87% \$58,837,834	8.94% \$53,498,874
Normal Cost & Expense	9.65% \$93,766,180	9.69% \$87,208,966	9.00% \$76,130,865	9.21% \$73,934,296	8.82% \$66,330,004	8.87% \$58,837,834	8.94% \$53,498,874
Amortization	<u>7.67%</u> <u>\$74,527,109</u>	<u>7.46%</u> <u>\$67,139,204</u>	<u>6.14%</u> <u>\$51,938,168</u>	<u>6.40%</u> <u>\$51,376,709</u>	<u>6.20%</u> <u>\$46,626,533</u>	<u>6.02%</u> <u>\$39,932,780</u>	<u>6.69%</u> <u>\$40,034,392</u>
Total Requirements	17.32% \$168,293,289	17.15% \$154,348,169	15.14% \$128,069,032	15.61% \$125,311,005	15.02% \$112,956,537	14.89% \$98,770,615	15.63% \$93,533,266
Employee Contributions	4.78% \$46,445,839	4.30% \$38,699,541	4.32% \$36,542,815	4.84% \$38,828,751	4.36% \$32,788,981	4.38% \$29,054,083	4.40% \$26,330,542
Employer Contributions	4.78% \$46,445,839	4.30% \$38,699,541	4.32% \$36,542,815	4.34% \$34,814,945	4.36% \$32,788,981	4.38% \$29,054,083	3.90% \$23,338,435
Employer Add'l Cont.	3.05% \$29,635,943	3.00% \$26,999,680	3.00% \$25,376,955	3.00% \$24,082,833	2.50% \$18,801,021	2.50% \$16,583,381	2.00% \$11,968,428
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	12.61% \$122,527,620	11.60% \$104,398,762	11.64% \$98,462,585	12.17% \$97,726,529	11.22% \$84,378,984	11.26% \$74,691,546	10.30% \$61,637,405
Total Requirements	17.32% \$168,293,289	17.15% \$154,348,169	15.14% \$128,069,032	15.61% \$125,311,005	15.02% \$112,956,537	14.89% \$98,770,615	15.63% \$93,533,266
Total Contributions	<u>12.61%</u> <u>\$122,527,620</u>	<u>11.60%</u> <u>\$104,398,762</u>	<u>11.64%</u> <u>\$98,462,585</u>	<u>12.17%</u> <u>\$97,726,529</u>	<u>11.22%</u> <u>\$84,378,984</u>	<u>11.26%</u> <u>\$74,691,546</u>	<u>10.30%</u> <u>\$61,637,405</u>
Deficiency (Surplus)	4.71% \$45,765,669	5.55% \$49,949,408	3.50% \$29,606,447	3.44% \$27,584,476	3.80% \$28,577,553	3.63% \$24,079,069	5.33% \$31,895,861
Amortization Target Date	2009	2009	1997	1997	1997	1997	1997
Actuary	Flott	Flott	Flott	Flott	Flott	Flott	Flott

Actuarial Valuation Data

Teachers Retirement Association

(TRA)

	1973	1972	1971	1970	1969	1968	1967
<b>Membership</b>							
Active Members	59,286	58,192	57,616	53,425	50,152	46,055	43,029
Service Retirees	4,917	4,476	3,884	3,351	2,778	2,505	2,279
Disabilitants	74	69	66	47	47	39	31
Survivors	496	479	454	454	439	406	373
Deferred Retirees	0	0	0	0	0	0	0
Nonvested Former Members	<u>16,717</u>	<u>13,089</u>	<u>11,384</u>	<u>10,061</u>	<u>7,945</u>	<u>0</u>	<u>0</u>
Total Membership	81,490	76,305	73,404	67,338	61,361	49,005	45,712
<b>Funded Status</b>							
Accrued Liability	\$877,735,084	\$543,695,637	\$443,057,442	\$385,137,356	\$319,201,924	\$240,558,837	\$228,026,093
Current Assets	<u>\$468,427,531</u>	<u>\$389,407,363</u>	<u>\$324,917,889</u>	<u>\$269,479,109</u>	<u>\$224,941,093</u>	<u>\$192,196,688</u>	<u>\$164,155,966</u>
Unfunded Accrued Liability	\$409,307,553	\$154,288,274	\$118,139,553	\$115,658,247	\$94,260,831	\$48,362,149	\$63,870,127
Funding Ratio	53.37%	71.62%	73.34%	69.97%	70.47%	79.90%	71.99%
<b>Financing Requirements</b>							
Covered Payroll	\$583,341,059	\$549,393,938	\$482,642,693	\$431,774,990	\$386,300,000	\$320,000,000	\$277,000,000
Benefits Payable	\$10,655,203	\$8,359,031	\$7,139,254	\$5,700,849	\$4,370,606	\$3,638,231	\$3,719,568
Normal Cost	8.94% \$52,150,691	7.56% \$41,534,182	7.75% \$37,404,809	7.92% \$34,196,579	8.23% \$31,792,490	7.20% \$23,040,000	7.34% \$20,331,800
Administrative Expenses	0.09% \$525,007	0.10% \$549,394	0.10% \$482,643	0.09% \$388,597	0.00% \$0	0.00% \$0	0.00% \$0
Normal Cost & Expense	9.03% \$52,675,698	7.66% \$42,083,576	7.85% \$37,887,451	8.01% \$34,585,177	8.23% \$31,792,490	7.20% \$23,040,000	7.34% \$20,331,800
Normal Cost & Expense	9.03% \$52,675,698	7.66% \$42,083,576	7.85% \$37,887,451	8.01% \$34,585,177	8.23% \$31,792,490	7.20% \$23,040,000	7.34% \$20,331,800
Amortization	5.09% \$29,692,060	1.70% \$9,339,697	1.45% \$6,998,319	1.37% \$5,915,317	1.33% \$5,137,790	0.69% \$2,208,000	0.95% \$2,631,500
Total Requirements	14.12% \$82,367,758	9.36% \$51,423,273	9.30% \$44,885,770	9.38% \$40,500,494	9.56% \$36,930,280	7.89% \$25,248,000	8.29% \$22,963,300
Employee Contributions	4.45% \$25,958,677	3.93% \$21,591,182	3.96% \$19,112,651	4.00% \$17,271,000	4.11% \$15,876,930	3.60% \$11,520,000	3.67% \$10,165,900
Employer Contributions	3.90% \$22,750,301	3.93% \$21,591,182	3.96% \$19,112,651	4.00% \$17,271,000	4.11% \$15,876,930	3.60% \$11,520,000	3.67% \$10,165,900
Employer Add'l Cont.	2.00% \$11,666,821	2.00% \$10,987,879	2.00% \$9,652,854	2.00% \$8,635,500	2.00% \$7,726,000	1.50% \$4,800,000	1.39% \$3,850,300
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	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Total Contributions	10.35% \$60,375,800	9.86% \$54,170,242	9.92% \$47,878,155	10.00% \$43,177,499	10.22% \$39,479,860	8.70% \$27,840,000	8.73% \$24,182,100
Total Requirements	14.12% \$82,367,758	9.36% \$51,423,273	9.30% \$44,885,770	9.38% \$40,500,494	9.56% \$36,930,280	7.89% \$25,248,000	8.29% \$22,963,300
Total Contributions	10.35% \$60,375,800	9.86% \$54,170,242	9.92% \$47,878,155	10.00% \$43,177,499	10.22% \$39,479,860	8.70% \$27,840,000	8.73% \$24,182,100
Deficiency (Surplus)	3.77% \$21,991,958	(0.50%) (\$2,746,970)	(0.62%) (\$2,992,385)	(0.62%) (\$2,677,005)	(0.66%) (\$2,549,580)	(0.81%) (\$2,592,000)	(0.44%) (\$1,218,800)
Amortization Target Date	1997	1997	1997	1997	1997	1997	1997
Actuary	Flott	Flott	Flott	Flott	Flott	Flott	Flott

Actuarial Valuation Data

Teachers Retirement Association

(TRA)

	1966		1965		1964		1959		1958	
<b>Membership</b>										
Active Members		39,710		34,604		33,386		24,680		22,015
Service Retirees		2,149		2,022		1,914		1,524		1,443
Disabilitants		28		21		15		0		0
Survivors		357		343		315		0		0
Deferred Retirees		0		0		0		0		0
Nonvested Former Members		<u>0</u>		<u>0</u>		<u>3,683</u>		<u>3,712</u>		<u>2,981</u>
Total Membership		42,244		36,990		39,313		29,916		26,439
<b>Funded Status</b>										
Accrued Liability		\$205,043,514		\$188,452,999		\$138,888,318		\$128,344,426		\$111,135,545
Current Assets		<u>\$142,506,850</u>		<u>\$123,148,877</u>		<u>\$102,813,388</u>		<u>\$56,661,932</u>		<u>\$38,697,202</u>
Unfunded Accrued Liability		\$62,536,664		\$65,304,122		\$36,074,930		\$71,682,494		\$72,438,343
Funding Ratio	69.50%		65.35%		74.03%		44.15%		34.82%	
<b>Financing Requirements</b>										
Covered Payroll		\$220,000,000		\$228,000,000		\$105,230,561		\$109,200,000		\$94,300,000
Benefits Payable		\$3,163,455		\$2,959,696		\$2,755,809		\$1,600,000		\$1,500,000
Normal Cost	7.53%	\$16,566,000	7.61%	\$17,350,800	8.05%	\$8,471,060	10.27%	\$11,214,840	12.00%	\$11,316,000
Administrative Expenses	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>
Normal Cost & Expense	7.53%	\$16,566,000	7.61%	\$17,350,800	8.05%	\$8,471,060	10.27%	\$11,214,840	12.00%	\$11,316,000
Normal Cost & Expense	7.53%	\$16,566,000	7.61%	\$17,350,800	8.05%	\$8,471,060	10.27%	\$11,214,840	12.00%	\$11,316,000
Amortization	1.40%	<u>\$3,080,000</u>	1.40%	<u>\$3,192,000</u>	1.30%	<u>\$1,367,997</u>	2.40%	<u>\$2,620,800</u>	2.60%	<u>\$2,451,800</u>
Total Requirements	8.93%	\$19,646,000	9.01%	\$20,542,800	9.35%	\$9,839,057	12.67%	\$13,835,640	14.60%	\$13,767,800
Employee Contributions	3.76%	\$8,272,000	3.80%	\$8,664,000	4.03%	\$4,240,792	5.14%	\$5,607,420	6.00%	\$5,658,000
Employer Contributions	3.76%	\$8,272,000	3.80%	\$8,664,000	4.03%	\$4,240,792	5.14%	\$5,607,420	6.00%	\$5,658,000
Employer Add'l Cont.	1.37%	\$3,014,000	1.37%	\$3,123,600	1.33%	\$1,399,566	0.00%	\$0	0.00%	\$0
Direct State Funding	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
Administrative Assessment	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>
Total Contributions	8.89%	\$19,558,000	8.97%	\$20,451,600	9.39%	\$9,881,150	10.27%	\$11,214,840	12.00%	\$11,316,000
Total Requirements	8.93%	\$19,646,000	9.01%	\$20,542,800	9.35%	\$9,839,057	12.67%	\$13,835,640	14.60%	\$13,767,800
Total Contributions	8.89%	<u>\$19,558,000</u>	8.97%	<u>\$20,451,600</u>	9.39%	<u>\$9,881,150</u>	10.27%	<u>\$11,214,840</u>	12.00%	<u>\$11,316,000</u>
Deficiency (Surplus)	0.04%	\$88,000	0.04%	\$91,200	(0.04%)	(\$42,092)	2.40%	\$2,620,800	2.60%	\$2,451,800
Amortization Target Date	1997		1997		1997		1997		1997	
Actuary	Brown		Brown		Brown		Brown		Brown	