

Actuarial Valuation Data

Public Employees Retirement Fund

(PERA)

	2011	2010	2009	2008	2007*	2007**	2006
Membership							
Active Members	139,952	140,389	142,097	145,238	146,226	146,226	144,244
Service Retirees	62,198	59,159	56,948	54,855	52,554	52,554	50,320
Disabilitants	2,334	2,215	2,075	2,046	1,988	1,988	1,940
Survivors	7,289	7,120	7,036	6,979	6,894	6,894	6,818
Deferred Retirees	45,325	45,151	43,645	42,308	39,722	39,722	37,476
Nonvested Former Members	<u>109,630</u>	<u>126,027</u>	<u>122,434</u>	<u>116,805</u>	<u>109,599</u>	<u>109,599</u>	<u>105,590</u>
Total Membership	366,728	380,061	374,235	368,231	356,983	356,983	346,388
Funded Status							
Accrued Liability	\$17,898,849,000	\$17,180,956,000	\$18,799,416,000	\$17,729,847,000	\$17,705,626,649	\$17,705,626,649	\$16,737,756,758
Current Assets	<u>\$13,455,753,000</u>	<u>\$13,126,993,000</u>	<u>\$13,158,490,000</u>	<u>\$13,048,970,000</u>	<u>\$12,985,324,048</u>	<u>\$13,500,024,678</u>	<u>\$12,495,207,148</u>
Unfunded Accrued Liability	\$4,443,096,000	\$4,053,963,000	\$5,640,926,000	\$4,680,877,000	\$4,720,302,601	\$4,205,601,971	\$4,242,549,610
Funding Ratio	75.18%	76.40%	69.99%	73.60%	73.34%	76.25%	74.65%
Financing Requirements							
Covered Payroll	\$5,183,629,000	\$5,160,545,000	\$5,130,307,000	\$4,952,751,000	\$4,957,789,826	\$4,957,789,826	\$4,703,895,104
Benefits Payable	\$950,708,000	\$906,300,000	\$863,910,000	\$824,372,000	\$784,013,433	\$784,013,433	\$748,390,506
Normal Cost	6.65% \$344,925,000	6.50% \$335,526,000	7.82% \$400,956,000	7.74% \$383,111,000	7.77% \$385,359,657	7.78% \$385,359,657	7.78% \$366,059,040
Administrative Expenses	<u>0.19%</u> <u>\$9,849,000</u>	<u>0.18%</u> <u>\$9,289,000</u>	<u>0.20%</u> <u>\$10,261,000</u>	<u>0.19%</u> <u>\$9,410,000</u>	<u>0.19%</u> <u>\$9,419,801</u>	<u>0.19%</u> <u>\$9,419,801</u>	<u>0.20%</u> <u>\$9,407,790</u>
Normal Cost & Expense	6.84% \$354,774,000	6.68% \$344,815,000	8.02% \$411,217,000	7.93% \$392,521,000	7.96% \$394,779,458	7.97% \$394,779,458	7.98% \$375,466,830
Normal Cost & Expense	6.84% \$354,774,000	6.68% \$344,815,000	8.02% \$411,217,000	7.93% \$392,521,000	7.96% \$394,779,458	7.97% \$394,779,458	7.98% \$375,466,830
Amortization	<u>6.63%</u> <u>\$343,675,000</u>	<u>5.78%</u> <u>\$298,280,000</u>	<u>7.53%</u> <u>\$386,312,000</u>	<u>6.29%</u> <u>\$311,528,000</u>	<u>5.35%</u> <u>\$265,241,756</u>	<u>4.77%</u> <u>\$236,486,575</u>	<u>4.92%</u> <u>\$231,431,639</u>
Total Requirements	13.47% \$698,449,000	12.46% \$643,095,000	15.55% \$797,529,000	14.22% \$704,049,000	13.31% \$660,021,214	12.74% \$631,266,033	12.90% \$606,898,469
Employee Contributions	6.25% \$323,996,000	6.13% \$316,120,000	6.00% \$307,819,000	6.00% \$297,220,000	5.88% \$291,588,497	5.88% \$291,588,497	5.63% \$264,931,649
Employer Contributions	7.25% \$375,846,000	7.13% \$367,746,000	6.88% \$352,965,000	6.63% \$328,211,000	6.38% \$316,425,146	6.38% \$316,425,146	6.13% \$288,515,428
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	13.50% \$699,842,000	13.25% \$683,866,000	12.88% \$660,784,000	12.63% \$625,431,000	12.26% \$608,013,643	12.26% \$608,013,643	11.76% \$553,447,077
Total Requirements	13.47% \$698,449,000	12.46% \$643,095,000	15.55% \$797,529,000	14.22% \$704,049,000	13.31% \$660,021,214	12.74% \$631,266,033	12.90% \$606,898,469
Total Contributions	<u>13.50%</u> <u>\$699,842,000</u>	<u>13.25%</u> <u>\$683,866,000</u>	<u>12.88%</u> <u>\$660,784,000</u>	<u>12.63%</u> <u>\$625,431,000</u>	<u>12.26%</u> <u>\$608,013,643</u>	<u>12.26%</u> <u>\$608,013,643</u>	<u>11.76%</u> <u>\$553,447,077</u>
Deficiency (Surplus)	(0.03%) (\$1,393,000)	(0.79%) (\$40,771,000)	2.67% \$136,745,000	1.59% \$78,618,000	1.05% \$52,007,571	0.48% \$23,252,390	1.14% \$53,451,392
Amortization Target Date	2031	2031	2031	2031	2031	2031	2031
Actuary	Mercer	Mercer	Mercer	Mercer	Segal	Segal	Segal

* Reflects 2007 Asset Valuation Method change ** Current Assets and Amortization results do not reflect the 2007

Actuarial Valuation Data

Public Employees Retirement Fund

(PERA)

	2005	2004	2003	2002	2001	2000	1999
Membership							
Active Members	142,303	138,164	140,066	137,817	138,759	135,560	137,528
Service Retirees	48,147	46,470	44,532	43,037	41,797	39,940	38,077
Disabilitants	1,853	1,760	1,640	1,565	1,468	1,397	1,301
Survivors	6,650	6,550	6,391	6,276	6,149	6,010	5,881
Deferred Retirees	35,768	33,915	32,128	29,353	25,917	21,495	16,340
Nvested Former Members	<u>100,369</u>	<u>102,265</u>	<u>94,340</u>	<u>87,114</u>	<u>83,027</u>	<u>79,362</u>	<u>18,491</u>
Total Membership	335,090	329,124	319,097	305,162	297,117	283,764	217,618
Funded Status							
Accrued Liability	\$15,892,554,615	\$14,959,464,879	\$13,776,198,000	\$12,958,105,000	\$12,105,337,000	\$11,133,682,000	\$9,443,678,000
Current Assets	<u>\$11,843,935,692</u>	<u>\$11,477,960,861</u>	<u>\$11,195,902,000</u>	<u>\$11,017,414,000</u>	<u>\$10,527,270,000</u>	<u>\$9,609,367,000</u>	<u>\$8,489,177,000</u>
Unfunded Accrued Liability	\$4,048,618,923	\$3,481,504,018	\$2,580,296,000	\$1,940,691,000	\$1,578,067,000	\$1,524,315,000	\$954,501,000
Funding Ratio	74.53%	76.73%	81.27%	85.02%	86.96%	86.31%	89.89%
Financing Requirements							
Covered Payroll	\$4,530,882,628	\$4,220,502,712	\$4,233,217,000	\$3,967,335,000	\$3,835,448,000	\$3,602,750,000	\$3,544,488,000
Benefits Payable	\$715,043,179	\$687,124,293	\$664,459,000	\$642,088,000	\$592,209,000	\$527,119,000	\$467,602,000
Normal Cost	7.79% \$352,964,350	7.78% \$328,196,111	8.61% \$364,657,000	8.60% \$341,299,000	9.40% \$360,850,000	9.33% \$336,088,000	7.49% \$265,778,000
Administrative Expenses	<u>0.22%</u> <u>\$9,967,942</u>	<u>0.21%</u> <u>\$8,863,056</u>	<u>0.22%</u> <u>\$9,313,000</u>	<u>0.23%</u> <u>\$9,125,000</u>	<u>0.23%</u> <u>\$8,822,000</u>	<u>0.23%</u> <u>\$8,286,000</u>	<u>0.28%</u> <u>\$9,925,000</u>
Normal Cost & Expense	8.01% \$362,932,292	7.99% \$337,059,167	8.83% \$373,970,000	8.83% \$350,424,000	9.63% \$369,672,000	9.56% \$344,374,000	7.77% \$275,703,000
Normal Cost & Expense	8.01% \$362,932,292	7.99% \$337,059,167	8.83% \$373,970,000	8.83% \$350,424,000	9.63% \$369,672,000	9.56% \$344,374,000	7.77% \$275,703,000
Amortization	<u>4.73%</u> <u>\$214,310,748</u>	<u>4.25%</u> <u>\$179,371,365</u>	<u>3.06%</u> <u>\$129,536,000</u>	<u>2.40%</u> <u>\$95,216,000</u>	<u>1.97%</u> <u>\$75,558,000</u>	<u>2.38%</u> <u>\$85,745,000</u>	<u>1.67%</u> <u>\$59,193,000</u>
Total Requirements	12.74% \$577,243,040	12.24% \$516,430,532	11.89% \$503,506,000	11.23% \$445,640,000	11.60% \$445,230,000	11.94% \$430,119,000	9.44% \$334,896,000
Employee Contributions	5.30% \$240,262,784	5.10% \$215,425,739	5.11% \$216,169,000	5.11% \$202,715,000	4.94% \$189,604,000	4.77% \$171,898,000	4.78% \$169,398,000
Employer Contributions	5.77% \$261,631,214	5.54% \$233,675,208	5.54% \$234,526,000	5.55% \$219,990,000	5.38% \$206,389,000	5.21% \$187,823,000	5.23% \$185,221,000
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	11.07% \$501,893,998	10.64% \$449,100,947	10.65% \$450,695,000	10.66% \$422,705,000	10.32% \$395,993,000	9.98% \$359,721,000	10.01% \$354,619,000
Total Requirements	12.74% \$577,243,040	12.24% \$516,430,532	11.89% \$503,506,000	11.23% \$445,640,000	11.60% \$445,230,000	11.94% \$430,119,000	9.44% \$334,896,000
Total Contributions	<u>11.07%</u> <u>\$501,893,998</u>	<u>10.64%</u> <u>\$449,100,947</u>	<u>10.65%</u> <u>\$450,695,000</u>	<u>10.66%</u> <u>\$422,705,000</u>	<u>10.32%</u> <u>\$395,993,000</u>	<u>9.98%</u> <u>\$359,721,000</u>	<u>10.01%</u> <u>\$354,619,000</u>
Deficiency (Surplus)	1.67% \$75,349,042	1.60% \$67,329,585	1.24% \$52,811,000	0.57% \$22,935,000	1.28% \$49,237,000	1.96% \$70,398,000	(0.57%) (\$19,723,000)
Amortization Target Date	2031	2031	2031	2031	2031	2024	2020
Actuary	Segal	Segal	Milliman USA	Milliman USA	Milliman USA	Milliman & Robertson	Milliman & Robertson

007 Asset Valuation Method change

Actuarial Valuation Data

Public Employees Retirement Fund

(PERA)

	1998	1997	1996	1995	1994	1993	1992
Membership							
Active Members	136,166	130,865	129,431	126,612	120,199	114,932	110,100
Service Retirees	36,187	34,168	32,906	31,487	30,414	28,279	27,057
Disabilitants	1,223	1,115	1,051	959	871	794	781
Survivors	5,732	5,531	5,423	5,260	5,091	4,895	4,721
Deferred Retirees	10,817	10,817	8,605	7,156	6,277	5,402	4,502
Nvested Former Members	<u>15,162</u>	<u>15,162</u>	<u>11,448</u>	<u>9,683</u>	<u>9,180</u>	<u>9,307</u>	<u>8,711</u>
Total Membership	205,287	197,658	188,864	181,157	172,032	163,609	155,872
Funded Status							
Accrued Liability	\$8,769,303,000	\$8,049,666,000	\$7,270,073,000	\$6,622,069,000	\$6,223,622,000	\$5,784,318,000	\$5,439,953,000
Current Assets	<u>\$7,636,668,000</u>	<u>\$6,658,410,000</u>	<u>\$5,786,398,000</u>	<u>\$5,138,461,000</u>	<u>\$4,747,128,000</u>	<u>\$4,374,459,000</u>	<u>\$3,978,110,000</u>
Unfunded Accrued Liability	\$1,132,635,000	\$1,391,256,000	\$1,483,675,000	\$1,483,608,000	\$1,476,494,000	\$1,409,859,000	\$1,461,843,000
Funding Ratio	87.08%	82.72%	79.59%	77.60%	76.28%	75.63%	73.13%
Financing Requirements							
Covered Payroll	\$3,385,720,000	\$3,214,578,000	\$3,073,106,000	\$2,930,993,000	\$2,749,217,000	\$2,578,604,000	\$2,455,401,000
Benefits Payable	\$412,746,000	\$342,154,000	\$312,511,000	\$290,483,000	\$264,233,000	\$236,420,000	\$216,952,000
Normal Cost	7.61% \$257,628,000	7.11% \$228,459,000	6.85% \$210,507,761	6.68% \$195,790,332	6.75% \$185,572,148	6.82% \$175,860,793	6.91% \$169,668,209
Administrative Expenses	<u>0.22%</u> <u>\$7,449,000</u>	<u>0.18%</u> <u>\$5,786,000</u>	<u>0.19%</u> <u>\$5,838,901</u>	<u>0.17%</u> <u>\$4,982,688</u>	<u>0.17%</u> <u>\$4,673,669</u>	<u>0.16%</u> <u>\$4,125,766</u>	<u>0.29%</u> <u>\$7,120,663</u>
Normal Cost & Expense	7.83% \$265,077,000	7.29% \$234,245,000	7.04% \$216,346,662	6.85% \$200,773,021	6.92% \$190,245,816	6.98% \$179,986,559	7.20% \$176,788,872
Normal Cost & Expense	7.83% \$265,077,000	7.29% \$234,245,000	7.04% \$216,346,662	6.85% \$200,773,021	6.92% \$190,245,816	6.98% \$179,986,559	7.20% \$176,788,872
Amortization	<u>2.01%</u> <u>\$68,053,000</u>	<u>2.51%</u> <u>\$80,686,000</u>	<u>2.71%</u> <u>\$83,281,173</u>	<u>2.76%</u> <u>\$80,895,407</u>	<u>2.84%</u> <u>\$78,077,763</u>	<u>2.60%</u> <u>\$67,043,704</u>	<u>2.75%</u> <u>\$67,523,528</u>
Total Requirements	9.84% \$333,130,000	9.80% \$314,931,000	9.75% \$299,627,835	9.61% \$281,668,427	9.76% \$268,323,579	9.58% \$247,030,263	9.95% \$244,312,400
Employee Contributions	4.79% \$162,179,000	4.55% \$146,127,000	4.29% \$131,836,247	4.31% \$126,325,798	4.30% \$118,216,331	4.36% \$112,427,134	4.38% \$107,546,564
Employer Contributions	5.24% \$177,504,000	4.92% \$158,067,000	4.58% \$140,748,255	4.60% \$134,825,678	4.60% \$126,463,982	4.68% \$120,678,667	4.72% \$115,894,927
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	10.03% \$339,683,000	9.47% \$304,194,000	8.88% \$272,584,502	8.91% \$261,151,476	8.90% \$244,680,313	9.04% \$233,105,802	9.10% \$223,441,491
Total Requirements	9.84% \$333,130,000	9.80% \$314,931,000	9.75% \$299,627,835	9.61% \$281,668,427	9.76% \$268,323,579	9.58% \$247,030,263	9.95% \$244,312,400
Total Contributions	<u>10.03%</u> <u>\$339,683,000</u>	<u>9.47%</u> <u>\$304,194,000</u>	<u>8.88%</u> <u>\$272,584,502</u>	<u>8.91%</u> <u>\$261,151,476</u>	<u>8.90%</u> <u>\$244,680,313</u>	<u>9.04%</u> <u>\$233,105,802</u>	<u>9.10%</u> <u>\$223,441,491</u>
Deficiency (Surplus)	(0.19%) (\$6,553,000)	0.33% \$10,737,000	0.87% \$27,043,333	0.70% \$20,516,951	0.86% \$23,643,266	0.54% \$13,924,462	0.85% \$20,870,909
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

Actuarial Valuation Data

Public Employees Retirement Fund

(PERA)

	1991	1990	1989	1988	1987	1986	1985
Membership							
Active Members	107,025	102,664	99,515	95,224	92,497	89,336	86,312
Service Retirees	25,634	24,314	22,932	21,882	20,341	18,719	17,277
Disabilitants	739	708	689	650	645	633	654
Survivors	4,553	4,414	4,251	4,168	4,029	3,970	3,854
Deferred Retirees	3,655	2,699	2,349	2,094	2,152	1,746	1,863
Nonvested Former Members	<u>7,995</u>	<u>7,695</u>	<u>6,805</u>	<u>6,621</u>	<u>40,185</u>	<u>40,023</u>	<u>38,986</u>
Total Membership	149,601	142,494	136,541	130,639	159,849	154,427	148,946
Funded Status							
Accrued Liability	\$4,988,671,000	\$4,560,469,000	\$4,175,240,000	\$3,755,608,000	\$3,188,962,000	\$2,925,006,000	\$2,614,116,000
Current Assets	<u>\$3,570,304,000</u>	<u>\$3,297,216,000</u>	<u>\$2,992,285,000</u>	<u>\$2,657,038,000</u>	<u>\$2,457,899,000</u>	<u>\$2,148,114,000</u>	<u>\$1,842,957,000</u>
Unfunded Accrued Liability	\$1,418,367,000	\$1,263,253,000	\$1,182,955,000	\$1,098,570,000	\$731,063,000	\$776,892,000	\$771,159,000
Funding Ratio	71.57%	72.30%	71.67%	70.75%	77.08%	73.44%	70.50%
Financing Requirements							
Covered Payroll	\$2,286,179,000	\$2,074,092,000	\$1,932,674,000	\$1,767,041,000	\$1,645,876,000	\$1,551,555,000	\$1,423,911,000
Benefits Payable	\$198,324,000	\$182,363,000	\$162,130,000	\$148,587,000	\$128,009,000	\$109,613,000	\$92,891,000
Normal Cost	6.38% \$145,858,220	6.98% \$144,771,622	5.85% \$113,061,429	5.72% \$101,074,745	5.45% \$89,700,242	5.59% \$86,731,925	5.68% \$80,878,145
Administrative Expenses	<u>0.27%</u> <u>\$6,172,683</u>	<u>0.32%</u> <u>\$6,637,094</u>	<u>0.29%</u> <u>\$5,604,755</u>	<u>0.30%</u> <u>\$5,301,123</u>	<u>0.33%</u> <u>\$5,431,391</u>	<u>0.32%</u> <u>\$4,964,976</u>	<u>0.35%</u> <u>\$4,983,689</u>
Normal Cost & Expense	6.65% \$152,030,904	7.30% \$151,408,716	6.14% \$118,666,184	6.02% \$106,375,868	5.78% \$95,131,633	5.91% \$91,696,901	6.03% \$85,861,833
Normal Cost & Expense	6.65% \$152,030,904	7.30% \$151,408,716	6.14% \$118,666,184	6.02% \$106,375,868	5.78% \$95,131,633	5.91% \$91,696,901	6.03% \$85,861,833
Amortization	2.79% \$63,784,394	2.74% \$56,830,121	2.69% \$51,988,931	3.40% \$60,079,394	2.43% \$39,994,787	2.64% \$40,961,052	2.75% \$39,157,553
Total Requirements	9.44% \$215,815,298	10.04% \$208,238,837	8.83% \$170,655,114	9.42% \$166,455,262	8.21% \$135,126,420	8.55% \$132,657,953	8.78% \$125,019,386
Employee Contributions	4.41% \$100,820,494	4.44% \$92,089,685	4.47% \$86,390,528	4.27% \$75,452,651	4.31% \$70,937,256	4.37% \$67,802,954	4.43% \$63,079,257
Employer Contributions	4.76% \$108,822,120	4.81% \$99,763,825	4.86% \$93,927,956	4.67% \$82,520,815	4.74% \$78,014,522	4.37% \$67,802,954	4.43% \$63,079,257
Employer Add'l Cont.	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.46% \$7,137,153	0.50% \$7,119,555
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	9.17% \$209,642,614	9.25% \$191,853,510	9.33% \$180,318,484	8.94% \$157,973,465	9.05% \$148,951,778	9.20% \$142,743,060	9.36% \$133,278,070
Total Requirements	9.44% \$215,815,298	10.04% \$208,238,837	8.83% \$170,655,114	9.42% \$166,455,262	8.21% \$135,126,420	8.55% \$132,657,953	8.78% \$125,019,386
Total Contributions	<u>9.17%</u> <u>\$209,642,614</u>	<u>9.25%</u> <u>\$191,853,510</u>	<u>9.33%</u> <u>\$180,318,484</u>	<u>8.94%</u> <u>\$157,973,465</u>	<u>9.05%</u> <u>\$148,951,778</u>	<u>9.20%</u> <u>\$142,743,060</u>	<u>9.36%</u> <u>\$133,278,070</u>
Deficiency (Surplus)	0.27% \$6,172,683	0.79% \$16,385,327	(0.50%) (\$9,663,370)	0.48% \$8,481,797	(0.84%) (\$13,825,358)	(0.65%) (\$10,085,108)	(0.58%) (\$8,258,684)
Amortization Target Date	2020	2020	2020	2010	2009	2009	2009
Actuary	Milliman & Robertson	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt

Actuarial Valuation Data

Public Employees Retirement Fund

(PERA)

	1984	1983	1982	1981	1980	1979	1978
Membership							
Active Members	83,702	83,378	85,437	87,857	85,860	81,665	81,328
Service Retirees	15,765	14,577	13,332	12,252	11,296	10,422	9,753
Disabilitants	638	658	670	624	622	628	582
Survivors	3,665	3,581	3,526	3,737	3,514	3,542	3,531
Deferred Retirees	1,843	1,831	1,743	1,708	1,539	1,394	1,232
Nonvested Former Members	0	0	0	0	0	0	0
Total Membership	105,613	104,025	104,708	106,178	102,831	97,651	96,426
Funded Status							
Accrued Liability	\$2,228,361,179	\$1,875,559,860	\$1,646,987,789	\$1,427,498,580	\$1,262,499,353	\$1,137,905,498	\$1,023,270,439
Current Assets	<u>\$1,599,673,540</u>	<u>\$1,474,041,241</u>	<u>\$1,278,462,836</u>	<u>\$1,101,847,894</u>	<u>\$923,152,292</u>	<u>\$812,971,819</u>	<u>\$702,543,189</u>
Unfunded Accrued Liability	\$628,687,639	\$401,518,619	\$368,524,953	\$325,650,686	\$339,347,061	\$324,933,679	\$320,727,250
Funding Ratio	71.79%	78.59%	77.62%	77.19%	73.12%	71.44%	68.66%
Financing Requirements							
Covered Payroll	\$1,225,625,000	\$1,135,785,000	\$1,079,973,418	\$1,037,047,955	\$930,299,069	\$817,578,613	\$763,483,570
Benefits Payable	\$76,064,731	\$64,156,295	\$66,870,163	\$45,556,533	\$39,887,823	\$36,163,202	\$33,180,101
Normal Cost	5.64% \$69,125,250	7.44% \$84,502,404	8.10% \$87,477,847	8.04% \$83,378,656	8.15% \$75,819,374	8.28% \$67,695,509	8.22% \$62,758,349
Administrative Expenses	<u>0.25%</u> <u>\$3,064,063</u>	<u>0.15%</u> <u>\$1,703,678</u>	<u>0.15%</u> <u>\$1,619,960</u>	<u>0.15%</u> <u>\$1,555,572</u>	<u>0.15%</u> <u>\$1,395,449</u>	<u>0.15%</u> <u>\$1,226,368</u>	<u>0.15%</u> <u>\$1,145,225</u>
Normal Cost & Expense	5.89% \$72,189,313	7.59% \$86,206,082	8.25% \$89,097,807	8.19% \$84,934,228	8.30% \$77,214,823	8.43% \$68,921,877	8.37% \$63,903,575
Normal Cost & Expense	5.89% \$72,189,313	7.59% \$86,206,082	8.25% \$89,097,807	8.19% \$84,934,228	8.30% \$77,214,823	8.43% \$68,921,877	8.37% \$63,903,575
Amortization	<u>2.43%</u> <u>\$29,782,688</u>	<u>2.46%</u> <u>\$27,940,311</u>	<u>2.33%</u> <u>\$25,163,381</u>	<u>2.11%</u> <u>\$21,881,712</u>	<u>2.41%</u> <u>\$22,420,208</u>	<u>2.59%</u> <u>\$21,175,286</u>	<u>3.48%</u> <u>\$26,569,228</u>
Total Requirements	8.32% \$101,972,000	10.05% \$114,146,393	10.58% \$114,261,188	10.30% \$106,815,939	10.71% \$99,635,030	11.02% \$90,097,163	11.85% \$90,472,803
Employee Contributions	4.53% \$55,520,813	4.59% \$52,132,532	4.64% \$50,110,767	4.66% \$48,326,435	4.74% \$44,096,176	4.87% \$39,816,078	4.91% \$37,487,043
Employer Contributions	4.53% \$55,520,813	4.59% \$52,132,532	4.64% \$50,110,767	4.66% \$48,326,435	4.74% \$44,096,176	4.87% \$39,816,078	4.91% \$37,487,043
Employer Add'l Cont.	0.55% \$6,740,938	1.65% \$18,740,453	1.66% \$17,927,559	1.67% \$17,318,701	1.68% \$15,629,024	1.72% \$14,062,352	1.73% \$13,208,266
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	9.61% \$117,782,563	10.83% \$123,005,516	10.94% \$118,149,092	10.99% \$113,971,570	11.16% \$103,821,376	11.46% \$93,694,509	11.55% \$88,182,352
Total Requirements	8.32% \$101,972,000	10.05% \$114,146,393	10.58% \$114,261,188	10.30% \$106,815,939	10.71% \$99,635,030	11.02% \$90,097,163	11.85% \$90,472,803
Total Contributions	<u>9.61%</u> <u>\$117,782,563</u>	<u>10.83%</u> <u>\$123,005,516</u>	<u>10.94%</u> <u>\$118,149,092</u>	<u>10.99%</u> <u>\$113,971,570</u>	<u>11.16%</u> <u>\$103,821,376</u>	<u>11.46%</u> <u>\$93,694,509</u>	<u>11.55%</u> <u>\$88,182,352</u>
Deficiency (Surplus)	(1.29%) (\$15,810,563)	(0.78%) (\$8,859,123)	(0.36%) (\$3,887,904)	(0.69%) (\$7,155,631)	(0.45%) (\$4,186,346)	(0.44%) (\$3,597,346)	0.30% \$2,290,451
Amortization Target Date	2009	2009	2009	2009	2009	2009	1997
Actuary	Comp. & Capital	Comp. & Capital	Comp. & Capital	Comp. & Capital	Comp. & Capital	Comp. & Capital	Comp. & Capital

Actuarial Valuation Data

Public Employees Retirement Fund

(PERA)

	1977	1976	1975	1974	1973	1972	1971
Membership							
Active Members	82,026	83,798	81,140	76,863	72,981	70,873	66,130
Service Retirees	9,123	8,447	7,874	7,337	6,836	6,379	6,019
Disabilitants	499	458	396	322	300	236	215
Survivors	3,631	3,730	3,149	2,973	3,599	3,534	3,328
Deferred Retirees	1,094	994	911	842	801	746	367
Nonvested Former Members	0	0	0	0	0	0	0
Total Membership	96,373	97,427	93,470	88,337	84,517	81,768	76,059
Funded Status							
Accrued Liability	\$930,363,154	\$816,093,861	\$725,173,867	\$684,662,736	\$610,959,698	\$411,420,144	\$365,882,167
Current Assets	<u>\$613,887,437</u>	<u>\$511,152,418</u>	<u>\$449,178,269</u>	<u>\$407,163,809</u>	<u>\$349,259,698</u>	<u>\$302,157,370</u>	<u>\$261,422,831</u>
Unfunded Accrued Liability	\$316,475,717	\$304,941,443	\$275,995,598	\$277,498,927	\$261,700,000	\$109,262,774	\$104,459,336
Funding Ratio	65.98%	62.63%	61.94%	59.47%	57.17%	73.44%	71.45%
Financing Requirements							
Covered Payroll	\$707,400,545	\$657,609,766	\$582,912,058	\$506,950,682	\$459,146,137	\$431,228,970	\$376,256,783
Benefits Payable	\$28,895,452	\$24,370,696	\$22,039,631	\$19,617,342	\$14,179,695	\$12,298,554	\$11,437,564
Normal Cost	8.81% \$62,321,988	9.14% \$60,105,533	9.36% \$54,560,569	9.26% \$46,943,633	8.64% \$39,670,226	8.24% \$35,533,267	8.50% \$31,981,827
Administrative Expenses	<u>0.15%</u> <u>\$1,061,101</u>	<u>0.15%</u> <u>\$986,415</u>	<u>0.14%</u> <u>\$816,077</u>	<u>0.16%</u> <u>\$811,121</u>	<u>0.17%</u> <u>\$780,548</u>	<u>0.20%</u> <u>\$862,458</u>	<u>0.20%</u> <u>\$752,514</u>
Normal Cost & Expense	8.96% \$63,383,089	9.29% \$61,091,947	9.50% \$55,376,646	9.42% \$47,754,754	8.81% \$40,450,775	8.44% \$36,395,725	8.70% \$32,734,340
Normal Cost & Expense	8.96% \$63,383,089	9.29% \$61,091,947	9.50% \$55,376,646	9.42% \$47,754,754	8.81% \$40,450,775	8.44% \$36,395,725	8.70% \$32,734,340
Amortization	<u>3.59%</u> <u>\$25,395,680</u>	<u>3.62%</u> <u>\$23,805,474</u>	<u>3.60%</u> <u>\$20,984,834</u>	<u>4.07%</u> <u>\$20,632,893</u>	<u>4.13%</u> <u>\$18,962,735</u>	<u>1.54%</u> <u>\$6,640,926</u>	<u>1.63%</u> <u>\$6,132,986</u>
Total Requirements	12.55% \$88,778,768	12.91% \$84,897,421	13.10% \$76,361,480	13.49% \$68,387,647	12.94% \$59,413,510	9.98% \$43,036,651	10.33% \$38,867,326
Employee Contributions	4.98% \$35,228,547	5.16% \$33,932,664	5.29% \$30,836,048	5.45% \$27,628,812	5.60% \$25,712,184	4.32% \$18,629,092	4.47% \$16,818,678
Employer Contributions	4.98% \$35,228,547	5.16% \$33,932,664	5.29% \$30,836,048	5.45% \$27,628,812	5.60% \$25,712,184	4.32% \$18,629,092	4.47% \$16,818,678
Employer Add'l Cont.	1.75% \$12,379,510	1.78% \$11,705,454	1.82% \$10,608,999	1.86% \$9,429,283	1.90% \$8,723,777	1.93% \$8,322,719	1.99% \$7,487,510
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	11.71% \$82,836,604	12.10% \$79,570,782	12.40% \$72,281,095	12.76% \$64,686,907	13.10% \$60,148,144	10.57% \$45,580,902	10.93% \$41,124,866
Total Requirements	12.55% \$88,778,768	12.91% \$84,897,421	13.10% \$76,361,480	13.49% \$68,387,647	12.94% \$59,413,510	9.98% \$43,036,651	10.33% \$38,867,326
Total Contributions	<u>11.71%</u> <u>\$82,836,604</u>	<u>12.10%</u> <u>\$79,570,782</u>	<u>12.40%</u> <u>\$72,281,095</u>	<u>12.76%</u> <u>\$64,686,907</u>	<u>13.10%</u> <u>\$60,148,144</u>	<u>10.57%</u> <u>\$45,580,902</u>	<u>10.93%</u> <u>\$41,124,866</u>
Deficiency (Surplus)	0.84% \$5,942,165	0.81% \$5,326,639	0.70% \$4,080,384	0.73% \$3,700,740	(0.16%) (\$734,634)	(0.59%) (\$2,544,251)	(0.60%) (\$2,257,541)
Amortization Target Date	1997	1997	1997	1997	1997	1997	1997
Actuary	Comp. & Capital	Comp. & Capital	Comp. & Capital	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.S. Hansen

Actuarial Valuation Data

Public Employees Retirement Fund

(PERA)

	1970	1969	1968	1967	1966	1965	1963
<u>Membership</u>							
Active Members	61,206	56,406	51,584	46,517	44,460	42,025	40,413
Service Retirees	5,663	5,394	5,129	4,865	4,588	4,344	3,697
Disabilitants	181	166	142	163	145	133	115
Survivors	3,245	3,040	2,924	2,669	1,972	1,780	1,802
Deferred Retirees	319	294	304	472	257	352	0
Nonvested Former Members	0	0	0	0	0	0	0
Total Membership	70,614	65,300	60,083	54,686	51,422	48,634	46,027
<u>Funded Status</u>							
Accrued Liability	\$327,954,392	\$308,290,143	\$311,701,345	\$302,792,892	\$275,801,933	\$274,074,898	\$196,619,405
Current Assets	<u>\$224,484,103</u>	<u>\$198,968,527</u>	<u>\$176,117,656</u>	<u>\$160,588,744</u>	<u>\$142,337,557</u>	<u>\$126,246,374</u>	<u>\$100,126,193</u>
Unfunded Accrued Liability	\$103,470,289	\$109,321,616	\$135,583,689	\$142,204,148	\$133,464,376	\$147,828,524	\$96,493,212
Funding Ratio	68.45%	64.54%	56.50%	53.04%	51.61%	46.06%	50.92%
<u>Financing Requirements</u>							
Covered Payroll	\$326,503,596	\$278,964,560	\$231,466,338	\$206,254,241	\$169,623,104	\$154,895,063	\$146,807,028
Benefits Payable	\$10,807,318	\$10,288,345	\$9,691,879	\$8,994,475	\$8,407,258	\$7,708,877	\$6,472,749
Normal Cost	8.64% \$28,209,911	9.21% \$25,692,636	10.65% \$24,651,165	10.73% \$22,131,080	10.75% \$18,234,484	10.11% \$15,659,891	\$0
Administrative Expenses	<u>0.20%</u> <u>\$653,007</u>	<u>0.20%</u> <u>\$557,929</u>	<u>0.21%</u> <u>\$486,079</u>	<u>0.20%</u> <u>\$412,508</u>	<u>0.22%</u> <u>\$373,171</u>	--	<u>\$0</u>
Normal Cost & Expense	8.84% \$28,862,918	9.41% \$26,250,565	10.86% \$25,137,244	10.93% \$22,543,589	10.97% \$18,607,655	10.11% \$15,659,891	\$0
Normal Cost & Expense	8.84% \$28,862,918	9.41% \$26,250,565	10.86% \$25,137,244	10.93% \$22,543,589	10.97% \$18,607,655	10.11% \$15,659,891	\$0
Amortization	<u>1.84%</u> <u>\$6,007,666</u>	<u>2.22%</u> <u>\$6,193,013</u>	<u>3.05%</u> <u>\$7,059,723</u>	<u>3.52%</u> <u>\$7,260,149</u>	<u>3.93%</u> <u>\$6,666,188</u>	<u>4.68%</u> <u>\$7,249,089</u>	<u>\$0</u>
Total Requirements	10.68% \$34,870,584	11.63% \$32,443,578	13.91% \$32,196,968	14.45% \$29,803,738	14.90% \$25,273,842	14.79% \$22,908,980	\$0
Employee Contributions	4.63% \$15,117,116	4.92% \$13,725,056	5.32% \$12,314,009	6.00% \$12,375,254	6.00% \$10,177,386	6.00% \$9,293,704	\$0
Employer Contributions	4.63% \$15,117,116	4.92% \$13,725,056	5.32% \$12,314,009	6.00% \$12,375,254	6.00% \$10,177,386	6.00% \$9,293,704	\$0
Employer Add'l Cont.	2.04% \$6,660,673	2.14% \$5,969,842	2.27% \$5,254,286	2.50% \$5,156,356	2.50% \$4,240,578	2.50% \$3,872,377	\$0
Direct State Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	\$0
Other Govt. Funding	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$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>0.00%</u> <u>\$0</u>	<u>\$0</u>
Total Contributions	11.30% \$36,894,906	11.98% \$33,419,954	12.91% \$29,882,304	14.50% \$29,906,865	14.50% \$24,595,350	14.50% \$22,459,784	\$0
Total Requirements	10.68% \$34,870,584	11.63% \$32,443,578	13.91% \$32,196,968	14.45% \$29,803,738	14.90% \$25,273,842	14.79% \$22,908,980	\$0
Total Contributions	<u>11.30%</u> <u>\$36,894,906</u>	<u>11.98%</u> <u>\$33,419,954</u>	<u>12.91%</u> <u>\$29,882,304</u>	<u>14.50%</u> <u>\$29,906,865</u>	<u>14.50%</u> <u>\$24,595,350</u>	<u>14.50%</u> <u>\$22,459,784</u>	<u>\$0</u>
Deficiency (Surplus)	(0.62%) (\$2,024,322)	(0.35%) (\$976,376)	1.00% \$2,314,663	(0.05%) (\$103,127)	0.40% \$678,492	0.29% \$449,196	\$0
Amortization Target Date	1997	1997	1997	1997	1997	1997	--
Actuary	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.S. Hansen	A.A. Weinberg

Actuarial Valuation Data

Public Employees Retirement Fund

(PERA)

	1958	1957	1956	1955	1947	1943
<u>Membership</u>						
Active Members	37,896			36,798	8,784	7,176
Service Retirees	1,972			1,104	279	196
Disabilitants	4			0	0	0
Survivors	348			92	0	0
Deferred Retirees	153			74	0	0
Nonvested Former Members	<u>142</u>			<u>0</u>	<u>0</u>	<u>0</u>
Total Membership	40,515			38,068	9,063	7,372
<u>Funded Status</u>						
Accrued Liability	\$111,602,876			\$144,432,518	--	--
Current Assets	<u>\$26,090,948</u>			<u>\$16,345,982</u>	<u>\$3,223,280</u>	<u>\$2,246,195</u>
Unfunded Accrued Liability	\$85,511,928			\$128,086,536		
Funding Ratio	23.38%			11.32%		
<u>Financing Requirements</u>						
Covered Payroll	\$114,055,965			\$85,755,000		
Benefits Payable	\$2,517,462				\$1,833,830	\$180,359
Normal Cost	8.60% \$9,808,813			\$0	\$0	\$0
Administrative Expenses	<u>0.17%</u> <u>\$193,895</u>			<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Normal Cost & Expense	8.77% \$10,002,708			\$0	\$0	\$0
Normal Cost & Expense	8.77% \$10,002,708			\$0	\$0	\$0
Amortization	<u>3.28%</u> <u>\$3,741,036</u>			<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Requirements	12.05% \$13,743,744			\$0	\$0	\$0
Employee Contributions	6.00% \$6,843,358			\$0	\$0	\$0
Employer Contributions	6.00% \$6,843,358			\$0	\$0	\$0
Employer Add'l Cont.	2.50% \$2,851,399			\$0	\$0	\$0
Direct State Funding	0.00% \$0			\$0	\$0	\$0
Other Govt. Funding	0.00% \$0			\$0	\$0	\$0
Administrative Assessment	<u>0.00%</u> <u>\$0</u>			<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Total Contributions	14.50% \$16,538,115			\$0	\$0	\$0
Total Requirements	12.05% \$13,743,744			\$0	\$0	\$0
Total Contributions	<u>14.50%</u> <u>\$16,538,115</u>			<u>\$0</u>	<u>\$0</u>	<u>\$0</u>
Deficiency (Surplus)	(2.45%) (\$2,794,371)			\$0	\$0	\$0
Amortization Target Date	1997			--	--	--
Actuary	J.B. St.John			J.B. St.John	E.D. Brown	E.D. Brown