

Actuarial Valuation Data

Correctional State Employees Retirement Fund

(MSRS-C)

	2011	2010	2009	2008	2007*	2007**	2006
<b>Membership</b>							
Active Members	4,322	4,268	4,403	4,520	4,332	4,332	3,910
Service Retirees	1,621	1,505	1,381	1,293	1,210	1,210	1,101
Disabilitants	230	206	194	184	174	174	168
Survivors	165	148	134	123	118	118	106
Deferred Retirees	1,035	993	949	888	851	851	817
Nonvested Former Members	<u>501</u>	<u>585</u>	<u>626</u>	<u>548</u>	<u>494</u>	<u>494</u>	<u>388</u>
Total Membership	7,874	7,705	7,687	7,556	7,179	7,179	6,490
<b>Funded Status</b>							
Accrued Liability	\$907,012,000	\$851,086,000	\$821,250,000	\$760,363,000	\$708,291,710	\$708,291,710	\$647,480,269
Current Assets	<u>\$637,027,000</u>	<u>\$603,863,000</u>	<u>\$590,339,000</u>	<u>\$572,719,000</u>	<u>\$559,851,700</u>	<u>\$583,318,116</u>	<u>\$535,356,819</u>
Unfunded Accrued Liability	\$269,985,000	\$247,223,000	\$230,911,000	\$187,644,000	\$148,440,010	\$124,973,594	\$112,123,450
Funding Ratio	70.23%	70.95%	71.88%	75.32%	79.04%	82.36%	82.68%
<b>Financing Requirements</b>							
Covered Payroll	\$205,608,000	\$205,574,000	\$208,388,000	\$205,537,000	\$187,309,014	\$187,309,014	\$162,744,640
Benefits Payable	\$39,116,000	\$36,078,000	\$33,239,000	\$30,932,000	\$28,564,915	\$28,564,915	\$26,506,726
Normal Cost	17.89% \$36,793,000	18.09% \$37,188,000	18.22% \$37,970,000	18.24% \$37,500,000	17.68% \$33,124,289	17.68% \$33,124,289	17.69% \$28,786,714
Administrative Expenses	<u>0.17%</u> <u>\$350,000</u>	<u>0.22%</u> <u>\$452,000</u>	<u>0.20%</u> <u>\$417,000</u>	<u>0.22%</u> <u>\$452,000</u>	<u>0.22%</u> <u>\$412,080</u>	<u>0.22%</u> <u>\$412,080</u>	<u>0.21%</u> <u>\$341,764</u>
Normal Cost & Expense	18.06% \$37,143,000	18.31% \$37,640,000	18.42% \$38,387,000	18.46% \$37,952,000	17.90% \$33,536,369	17.90% \$33,536,369	17.90% \$29,128,478
Normal Cost & Expense	18.06% \$37,143,000	18.31% \$37,640,000	18.42% \$38,387,000	18.46% \$37,952,000	17.90% \$33,536,369	17.90% \$33,536,369	17.90% \$29,128,478
Amortization	7.94% \$16,325,000	7.12% \$14,637,000	6.43% \$13,399,000	5.20% \$10,688,000	6.54% \$12,250,010	5.51% \$10,320,727	5.44% \$8,853,309
Total Requirements	26.00% \$53,468,000	25.43% \$52,277,000	24.85% \$51,786,000	23.66% \$48,640,000	24.44% \$45,786,379	23.41% \$43,857,096	23.34% \$37,981,787
Employee Contributions	8.60% \$17,682,000	8.60% \$17,679,000	7.70% \$16,046,000	7.00% \$14,388,000	6.40% \$11,987,777	6.40% \$11,987,777	5.69% \$9,260,170
Employer Contributions	12.10% \$24,879,000	12.10% \$24,875,000	11.10% \$23,131,000	10.10% \$20,759,000	9.10% \$17,045,120	9.10% \$17,045,120	7.98% \$12,987,022
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	20.70% \$42,561,000	20.70% \$42,554,000	18.80% \$39,177,000	17.10% \$35,147,000	15.50% \$29,032,897	15.50% \$29,032,897	13.67% \$22,247,192
Total Requirements	26.00% \$53,468,000	25.43% \$52,277,000	24.85% \$51,786,000	23.66% \$48,640,000	24.44% \$45,786,379	23.41% \$43,857,096	23.34% \$37,981,787
Total Contributions	<u>20.70%</u> <u>\$42,561,000</u>	<u>20.70%</u> <u>\$42,554,000</u>	<u>18.80%</u> <u>\$39,177,000</u>	<u>17.10%</u> <u>\$35,147,000</u>	<u>15.50%</u> <u>\$29,032,897</u>	<u>15.50%</u> <u>\$29,032,897</u>	<u>13.67%</u> <u>\$22,247,192</u>
Deficiency (Surplus)	5.30% \$10,907,000	4.73% \$9,723,000	6.05% \$12,609,000	6.56% \$13,493,000	8.94% \$16,753,482	7.91% \$14,824,199	9.67% \$15,734,595
Amortization Target Date	2038	2038	2038	2038	2023	2023	2023
Actuary	Mercer	Mercer	Mercer	Mercer	Segal	Segal	Segal

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

Actuarial Valuation Data

Correctional State Employees Retirement Fund

(MSRS-C)

	2005		2004		2003		2002		2001		2000		1999	
<b>Membership</b>														
Active Members		3,607		3,326		3,262		3,249		3,182		3,098		2,882
Service Retirees		1,025		943		843		754		655		616		542
Disabilitants		150		154		135		115		92		75		60
Survivors		104		91		82		69		61		56		50
Deferred Retirees		738		678		601		550		483		419		337
Nonvested Former Members		<u>351</u>		<u>339</u>		<u>340</u>		<u>268</u>		<u>220</u>		<u>163</u>		<u>135</u>
Total Membership		5,975		5,531		5,263		5,005		4,693		4,427		4,006
<b>Funded Status</b>														
Accrued Liability		\$546,117,680		\$524,215,028		\$484,974,000		\$446,426,000		\$398,633,000		\$359,885,000		\$307,408,000
Current Assets		<u>\$503,573,272</u>		<u>\$486,617,032</u>		<u>\$470,716,000</u>		<u>\$457,416,000</u>		<u>\$431,134,000</u>		<u>\$386,964,000</u>		<u>\$335,408,000</u>
Unfunded Accrued Liability		\$42,544,408		\$37,597,996		\$14,258,000		(\$10,990,000)		(\$32,501,000)		(\$27,079,000)		(\$28,000,000)
Funding Ratio	92.21%		92.83%		97.06%		102.46%		108.15%		107.52%		109.11%	
<b>Financing Requirements</b>														
Covered Payroll		\$147,385,402		\$134,117,624		\$138,518,000		\$131,232,000		\$127,835,000		\$127,557,000		\$112,202,000
Benefits Payable		\$19,025,766		\$17,265,693		\$17,276,000		\$17,105,000		\$14,911,000		\$12,414,000		\$10,190,000
Normal Cost	15.01%	\$22,111,459	14.96%	\$20,066,740	15.04%	\$20,857,000	14.97%	\$19,646,000	14.99%	\$19,161,000	14.64%	\$18,670,000	14.85%	\$16,664,000
Administrative Expenses	<u>0.20%</u>	<u>\$294,771</u>	<u>0.20%</u>	<u>\$268,235</u>	<u>0.22%</u>	<u>\$305,000</u>	<u>0.21%</u>	<u>\$276,000</u>	<u>0.19%</u>	<u>\$243,000</u>	<u>0.22%</u>	<u>\$281,000</u>	<u>0.15%</u>	<u>\$168,000</u>
Normal Cost & Expense	15.21%	\$22,406,230	15.16%	\$20,334,975	15.26%	\$21,162,000	15.18%	\$19,922,000	15.18%	\$19,404,000	14.86%	\$18,951,000	15.00%	\$16,832,000
Normal Cost & Expense	15.21%	\$22,406,230	15.16%	\$20,334,975	15.26%	\$21,162,000	15.18%	\$19,922,000	15.18%	\$19,404,000	14.86%	\$18,951,000	15.00%	\$16,832,000
Amortization	<u>2.50%</u>	<u>\$3,684,635</u>	<u>2.31%</u>	<u>\$3,098,117</u>	<u>0.57%</u>	<u>\$790,000</u>	<u>(0.45%)</u>	<u>(\$591,000)</u>	<u>(1.37%)</u>	<u>(\$1,751,000)</u>	<u>(1.14%)</u>	<u>(\$1,454,000)</u>	<u>(1.69%)</u>	<u>(\$1,896,000)</u>
Total Requirements	17.71%	\$26,090,865	17.48%	\$23,433,092	15.83%	\$21,952,000	14.73%	\$19,331,000	13.81%	\$17,653,000	13.72%	\$17,497,000	13.31%	\$14,936,000
Employee Contributions	5.69%	\$8,386,229	5.69%	\$7,631,293	5.69%	\$7,882,000	5.69%	\$7,467,000	5.69%	\$7,274,000	5.69%	\$7,258,000	5.69%	\$6,384,000
Employer Contributions	7.98%	\$11,761,355	7.98%	\$10,702,586	7.98%	\$11,054,000	7.98%	\$10,472,000	7.98%	\$10,201,000	7.98%	\$10,179,000	7.98%	\$8,954,000
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	13.67%	\$20,147,584	13.67%	\$18,333,879	13.67%	\$18,936,000	13.67%	\$17,939,000	13.67%	\$17,475,000	13.67%	\$17,437,000	13.67%	\$15,338,000
Total Requirements	17.71%	\$26,090,865	17.48%	\$23,433,092	15.83%	\$21,952,000	14.73%	\$19,331,000	13.81%	\$17,653,000	13.72%	\$17,497,000	13.31%	\$14,936,000
Total Contributions	<u>13.67%</u>	<u>\$20,147,584</u>	<u>13.67%</u>	<u>\$18,333,879</u>	<u>13.67%</u>	<u>\$18,936,000</u>	<u>13.67%</u>	<u>\$17,939,000</u>	<u>13.67%</u>	<u>\$17,475,000</u>	<u>13.67%</u>	<u>\$17,437,000</u>	<u>13.67%</u>	<u>\$15,338,000</u>
Deficiency (Surplus)	4.04%	\$5,943,281	3.81%	\$5,099,213	2.16%	\$3,016,000	1.06%	\$1,392,000	0.14%	\$178,000	0.05%	\$60,000	(0.36%)	(\$402,000)
Amortization Target Date	2020		2020		2032		2032		2031		2030		2020	
Actuary	Segal		Segal		Milliman USA		Milliman USA		Milliman USA		Milliman & Robertson		Milliman & Robertson	

2007 Asset Valuation Method change

Actuarial Valuation Data

Correctional State Employees Retirement Fund

(MSRS-C)

	1998	1997	1996	1995	1994	1993	1992
<b>Membership</b>							
Active Members	2,817	2,600	2,264	2,117	1,761	1,618	1,573
Service Retirees	503	444	413	399	393	374	363
Disabilitants	49	39	33	25	21	20	17
Survivors	39	36	27	25	17	15	14
Deferred Retirees	291	282	324	296	248	225	181
Nonvested Former Members	114	90	84	74	44	51	44
Total Membership	3,813	3,491	3,145	2,936	2,484	2,303	2,192
<b>Funded Status</b>							
Accrued Liability	\$261,869,000	\$212,638,000	\$170,959,000	\$153,491,000	\$152,702,000	\$134,939,000	\$123,515,000
Current Assets	<u>\$295,291,000</u>	<u>\$241,916,000</u>	<u>\$193,833,000</u>	<u>\$165,427,000</u>	<u>\$148,163,000</u>	<u>\$135,939,000</u>	<u>\$121,051,000</u>
Unfunded Accrued Liability	(\$33,422,000)	(\$29,278,000)	(\$22,874,000)	(\$11,936,000)	\$4,539,000	(\$1,000,000)	\$2,464,000
Funding Ratio	112.76%	113.77%	113.38%	107.78%	97.02%	101.24%	98.01%
<b>Financing Requirements</b>							
Covered Payroll	\$106,178,000	\$91,847,000	\$78,030,000	\$71,022,000	\$70,562,000	\$60,330,000	\$56,044,000
Benefits Payable	\$8,226,000	\$6,267,000	\$5,460,000	\$4,971,000	\$4,557,000	\$4,150,000	\$3,773,000
Normal Cost	14.88% \$15,789,000	14.34% \$13,162,000	11.05% \$8,622,315	10.96% \$7,784,011	10.81% \$7,627,752	10.82% \$6,527,706	10.74% \$6,019,126
Administrative Expenses	<u>0.17%</u> <u>\$181,000</u>	<u>0.18%</u> <u>\$165,000</u>	<u>0.16%</u> <u>\$124,848</u>	<u>0.15%</u> <u>\$106,533</u>	<u>0.17%</u> <u>\$119,955</u>	<u>0.15%</u> <u>\$90,495</u>	<u>0.46%</u> <u>\$257,802</u>
Normal Cost & Expense	15.05% \$15,970,000	14.52% \$13,327,000	11.21% \$8,747,163	11.11% \$7,890,544	10.98% \$7,747,708	10.97% \$6,618,201	11.20% \$6,276,928
Normal Cost & Expense	15.05% \$15,970,000	14.52% \$13,327,000	11.21% \$8,747,163	11.11% \$7,890,544	10.98% \$7,747,708	10.97% \$6,618,201	11.20% \$6,276,928
Amortization	<u>(2.06%)</u> <u>(\$2,187,000)</u>	<u>(2.03%)</u> <u>(\$1,864,000)</u>	<u>0.00%</u> <u>\$0</u>	<u>0.00%</u> <u>\$0</u>	<u>0.32%</u> <u>\$225,798</u>	<u>0.00%</u> <u>\$0</u>	<u>0.21%</u> <u>\$117,692</u>
Total Requirements	12.99% \$13,783,000	12.49% \$11,463,000	11.21% \$8,747,163	11.11% \$7,890,544	11.30% \$7,973,506	10.97% \$6,618,201	11.41% \$6,394,620
Employee Contributions	5.50% \$5,840,000	5.50% \$5,052,000	4.90% \$3,823,470	4.90% \$3,480,078	4.90% \$3,457,538	4.90% \$2,956,170	4.90% \$2,746,156
Employer Contributions	7.70% \$8,176,000	7.70% \$7,072,000	6.27% \$4,892,481	6.27% \$4,453,079	6.27% \$4,424,237	6.27% \$3,782,691	6.27% \$3,513,959
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	13.20% \$14,016,000	13.20% \$12,124,000	11.17% \$8,715,951	11.17% \$7,933,157	11.17% \$7,881,775	11.17% \$6,738,861	11.17% \$6,260,115
Total Requirements	12.99% \$13,783,000	12.49% \$11,463,000	11.21% \$8,747,163	11.11% \$7,890,544	11.30% \$7,973,506	10.97% \$6,618,201	11.41% \$6,394,620
Total Contributions	<u>13.20%</u> <u>\$14,016,000</u>	<u>13.20%</u> <u>\$12,124,000</u>	<u>11.17%</u> <u>\$8,715,951</u>	<u>11.17%</u> <u>\$7,933,157</u>	<u>11.17%</u> <u>\$7,881,775</u>	<u>11.17%</u> <u>\$6,738,861</u>	<u>11.17%</u> <u>\$6,260,115</u>
Deficiency (Surplus)	(0.21%) (\$233,000)	(0.71%) (\$661,000)	0.04% \$31,212	(0.06%) (\$42,613)	0.13% \$91,731	(0.20%) (\$120,660)	0.24% \$134,506
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

Correctional State Employees Retirement Fund

(MSRS-C)

	1991	1990	1989	1988	1987	1986	1985	1984
<b>Membership</b>								
Active Members	1,467	1,416	1,317	1,267	1,232	1,220	1,191	1,174
Service Retirees	358	340	337	328	313	309	309	326
Disabilitants	12	9	8	6	11	11	12	0
Survivors	13	15	12	12	9	8	8	0
Deferred Retirees	157	113	58	47	43	35	30	25
Nonvested Former Members	<u>48</u>	<u>45</u>	<u>57</u>	<u>80</u>	<u>84</u>	<u>83</u>	<u>79</u>	<u>95</u>
Total Membership	2,055	1,938	1,789	1,740	1,692	1,666	1,629	1,620
<b>Funded Status</b>								
Accrued Liability	\$112,171,000	\$102,217,000	\$92,684,000	\$81,454,000	\$72,081,000	\$59,042,000	\$53,345,000	\$43,887,970
Current Assets	<u>\$105,926,000</u>	<u>\$96,945,000</u>	<u>\$85,441,000</u>	<u>\$74,065,000</u>	<u>\$67,488,000</u>	<u>\$56,894,000</u>	<u>\$48,568,000</u>	<u>\$40,152,963</u>
Unfunded Accrued Liability	\$6,245,000	\$5,272,000	\$7,243,000	\$7,389,000	\$4,593,000	\$2,148,000	\$4,777,000	\$3,735,007
Funding Ratio	94.43%	94.84%	92.19%	90.93%	93.63%	96.36%	91.04%	91.49%
<b>Financing Requirements</b>								
Covered Payroll	\$50,821,000	\$47,075,000	\$41,976,000	\$38,807,000	\$35,155,000	\$33,561,000	\$31,055,000	\$26,993,968
Benefits Payable	\$3,493,000	\$3,188,000	\$2,964,000	\$2,678,000	\$1,951,829	\$1,681,000	\$1,647,000	\$1,942,689
Normal Cost	9.81% \$4,985,540	9.67% \$4,552,153	9.70% \$4,071,672	9.24% \$3,585,767	9.26% \$3,255,353	7.98% \$2,678,168	7.92% \$2,459,556	9.49% \$2,561,728
Administrative Expenses	<u>0.44%</u> <u>\$223,612</u>	<u>0.56%</u> <u>\$263,620</u>	<u>0.41%</u> <u>\$172,102</u>	<u>0.30%</u> <u>\$116,421</u>	<u>0.27%</u> <u>\$94,919</u>	<u>0.27%</u> <u>\$90,615</u>	<u>0.28%</u> <u>\$86,954</u>	<u>0.18%</u> <u>\$48,589</u>
Normal Cost & Expense	10.25% \$5,209,153	10.23% \$4,815,773	10.11% \$4,243,774	9.54% \$3,702,188	9.53% \$3,350,272	8.25% \$2,768,783	8.20% \$2,546,510	9.67% \$2,610,317
Normal Cost & Expense	10.25% \$5,209,153	10.23% \$4,815,773	10.11% \$4,243,774	9.54% \$3,702,188	9.53% \$3,350,272	8.25% \$2,768,783	8.20% \$2,546,510	9.67% \$2,610,317
Amortization	<u>0.57%</u> <u>\$289,680</u>	<u>0.50%</u> <u>\$235,375</u>	<u>0.76%</u> <u>\$319,018</u>	<u>0.83%</u> <u>\$322,098</u>	<u>0.55%</u> <u>\$193,353</u>	<u>0.32%</u> <u>\$107,395</u>	<u>0.75%</u> <u>\$232,913</u>	<u>0.66%</u> <u>\$178,160</u>
Total Requirements	10.82% \$5,498,832	10.73% \$5,051,148	10.87% \$4,562,791	10.37% \$4,024,286	10.08% \$3,543,624	8.57% \$2,876,178	8.95% \$2,779,423	10.33% \$2,788,477
Employee Contributions	4.90% \$2,490,229	4.90% \$2,306,675	4.90% \$2,056,824	4.90% \$1,901,543	4.90% \$1,722,595	4.90% \$1,644,489	4.90% \$1,521,695	4.90% \$1,322,704
Employer Contributions	6.27% \$3,186,477	6.27% \$2,951,603	8.70% \$3,651,912	8.70% \$3,376,209	8.70% \$3,058,485	8.70% \$2,919,807	8.70% \$2,701,785	8.70% \$2,348,475
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	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	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	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>	<u>0.00%</u> <u>\$0</u>
Total Contributions	11.17% \$5,676,706	11.17% \$5,258,278	13.60% \$5,708,736	13.60% \$5,277,752	13.60% \$4,781,080	13.60% \$4,564,296	13.60% \$4,223,480	13.60% \$3,671,180
Total Requirements	10.82% \$5,498,832	10.73% \$5,051,148	10.87% \$4,562,791	10.37% \$4,024,286	10.08% \$3,543,624	8.57% \$2,876,178	8.95% \$2,779,423	10.33% \$2,788,477
Total Contributions	<u>11.17%</u> <u>\$5,676,706</u>	<u>11.17%</u> <u>\$5,258,278</u>	<u>13.60%</u> <u>\$5,708,736</u>	<u>13.60%</u> <u>\$5,277,752</u>	<u>13.60%</u> <u>\$4,781,080</u>	<u>13.60%</u> <u>\$4,564,296</u>	<u>13.60%</u> <u>\$4,223,480</u>	<u>13.60%</u> <u>\$3,671,180</u>
Deficiency (Surplus)	(0.35%) (\$177,873)	(0.44%) (\$207,130)	(2.73%) (\$1,145,945)	(3.23%) (\$1,253,466)	(3.52%) (\$1,237,456)	(5.03%) (\$1,688,118)	(4.65%) (\$1,444,058)	(3.27%) (\$882,703)
Amortization Target Date	2020	2020	2020	2017	2017	2010	2010	2010
Actuary	Milliman & Robertson	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Wyatt	Touche Ross

Actuarial Valuation Data

Correctional State Employees Retirement Fund

(MSRS-C)

	1983	1982	1981	1980	1979	1978	1977	1976
<b>Membership</b>								
Active Members	1,124	1,010	965	990	964	995	932	926
Service Retirees	295	293	275	247	225	211	197	162
Disabilitants	0	0	0	7	5	3	3	2
Survivors	0	0	0	3	2	2	1	0
Deferred Retirees	12	10	5	7	7	3	1	1
Nonvested Former Members	27	39	38	0	0	0	0	0
Total Membership	1,458	1,352	1,283	1,254	1,203	1,214	1,134	1,091
<b>Funded Status</b>								
Accrued Liability	\$39,550,404	\$34,519,532	\$29,876,042	\$29,259,602	\$25,331,420	\$26,353,129	\$23,940,039	\$23,063,989
Current Assets	<u>\$36,067,783</u>	<u>\$30,400,184</u>	<u>\$26,284,198</u>	<u>\$22,178,309</u>	<u>\$18,596,210</u>	<u>\$18,100,000</u>	<u>\$16,400,000</u>	<u>\$14,400,000</u>
Unfunded Accrued Liability	\$3,482,621	\$4,119,348	\$3,591,844	\$7,081,293	\$6,735,210	\$8,253,129	\$7,540,039	\$8,663,989
Funding Ratio	91.19%	88.07%	87.98%	75.80%	73.41%	68.68%	68.50%	62.43%
<b>Financing Requirements</b>								
Covered Payroll	\$24,511,088	\$20,431,200	\$18,264,697	\$16,151,502	\$15,199,761	\$14,828,207	\$12,399,810	\$11,733,927
Benefits Payable	\$1,596,030	\$1,566,286	\$1,357,965	\$1,222,560	\$1,086,351	\$1,005,437	\$911,040	\$744,492
Normal Cost	10.62% \$2,603,078	10.52% \$2,149,362	11.05% \$2,018,249	10.64% \$1,718,520	10.24% \$1,556,456	11.02% \$1,634,068	11.04% \$1,368,939	10.78% \$1,264,917
Administrative Expenses	<u>0.18%</u> <u>\$44,120</u>	<u>0.18%</u> <u>\$36,776</u>	<u>0.18%</u> <u>\$32,876</u>	<u>0.18%</u> <u>\$29,073</u>	<u>0.14%</u> <u>\$21,280</u>	<u>0.14%</u> <u>\$20,759</u>	<u>0.14%</u> <u>\$17,360</u>	<u>0.14%</u> <u>\$16,427</u>
Normal Cost & Expense	10.80% \$2,647,198	10.70% \$2,186,138	11.23% \$2,051,125	10.82% \$1,747,593	10.38% \$1,577,735	11.16% \$1,654,828	11.18% \$1,386,299	10.92% \$1,281,345
Normal Cost & Expense	10.80% \$2,647,198	10.70% \$2,186,138	11.23% \$2,051,125	10.82% \$1,747,593	10.38% \$1,577,735	11.16% \$1,654,828	11.18% \$1,386,299	10.92% \$1,281,345
Amortization	<u>0.95%</u> <u>\$232,855</u>	<u>1.34%</u> <u>\$273,778</u>	<u>1.32%</u> <u>\$241,094</u>	<u>2.78%</u> <u>\$449,012</u>	<u>2.86%</u> <u>\$434,713</u>	<u>4.76%</u> <u>\$705,823</u>	<u>4.65%</u> <u>\$576,591</u>	<u>5.39%</u> <u>\$632,459</u>
Total Requirements	11.75% \$2,880,053	12.04% \$2,459,916	12.55% \$2,292,219	13.60% \$2,196,604	13.24% \$2,012,448	15.92% \$2,360,651	15.83% \$1,962,890	16.31% \$1,913,803
Employee Contributions	4.89% \$1,198,592	4.50% \$919,404	6.00% \$1,095,882	6.00% \$969,090	6.00% \$911,986	6.00% \$889,692	6.00% \$743,989	6.00% \$704,036
Employer Contributions	7.34% \$1,799,114	6.75% \$1,379,106	9.00% \$1,643,823	9.00% \$1,453,635	9.00% \$1,367,978	9.00% \$1,334,539	9.00% \$1,115,983	9.00% \$1,056,053
Employer Add'l Cont.	4.08% \$1,000,052	1.32% \$269,692	5.00% \$913,235	5.00% \$807,575	5.00% \$759,988	5.00% \$741,410	5.00% \$619,991	5.00% \$586,696
Direct State Funding	0.00% \$0	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	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>	<u>0.00%</u> <u>\$0</u>
Total Contributions	16.31% \$3,997,758	12.57% \$2,568,202	20.00% \$3,652,939	20.00% \$3,230,300	20.00% \$3,039,952	20.00% \$2,965,641	20.00% \$2,479,962	20.00% \$2,346,785
Total Requirements	11.75% \$2,880,053	12.04% \$2,459,916	12.55% \$2,292,219	13.60% \$2,196,604	13.24% \$2,012,448	15.92% \$2,360,651	15.83% \$1,962,890	16.31% \$1,913,803
Total Contributions	<u>16.31%</u> <u>\$3,997,758</u>	<u>12.57%</u> <u>\$2,568,202</u>	<u>20.00%</u> <u>\$3,652,939</u>	<u>20.00%</u> <u>\$3,230,300</u>	<u>20.00%</u> <u>\$3,039,952</u>	<u>20.00%</u> <u>\$2,965,641</u>	<u>20.00%</u> <u>\$2,479,962</u>	<u>20.00%</u> <u>\$2,346,785</u>
Deficiency (Surplus)	(4.56%) (\$1,117,706)	(0.53%) (\$108,285)	(7.45%) (\$1,360,720)	(6.40%) (\$1,033,696)	(6.76%) (\$1,027,504)	(4.08%) (\$604,991)	(4.17%) (\$517,072)	(3.69%) (\$432,982)
Amortization Target Date	2010	2010	2009	2009	2009	1997	1997	1997
Actuary	Touche Ross	Touche Ross	Touche Ross	Wyatt	Wyatt	TPF&C	TPF&C	TPF&C

Actuarial Valuation Data

Correctional State Employees Retirement Fund

(MSRS-C)

	1975		1974		1973	
<u>Membership</u>						
Active Members		901		737		677
Service Retirees		107		17		0
Disabilitants		0		0		0
Survivors		0		0		0
Deferred Retirees		0		0		0
Nonvested Former Members		0		0		0
Total Membership		1,008		754		677
<u>Funded Status</u>						
Accrued Liability		\$18,790,688		\$16,387,147		\$10,613,186
Current Assets		<u>\$9,700,000</u>		<u>\$5,500,000</u>		<u>\$3,300,000</u>
Unfunded Accrued Liability		\$9,090,688		\$10,887,147		\$7,313,186
Funding Ratio	51.62%		33.56%		31.09%	
<u>Financing Requirements</u>						
Covered Payroll		\$9,922,071		\$7,440,827		\$6,062,311
Benefits Payable		\$538,573		\$92,665		\$0
Normal Cost	10.79%	\$1,070,591	10.72%	\$797,657	11.92%	\$722,627
Administrative Expenses	<u>0.14%</u>	<u>\$13,891</u>	<u>0.14%</u>	<u>\$10,417</u>	<u>0.19%</u>	<u>\$11,518</u>
Normal Cost & Expense	10.93%	\$1,084,482	10.86%	\$808,074	12.11%	\$734,146
Normal Cost & Expense	10.93%	\$1,084,482	10.86%	\$808,074	12.11%	\$734,146
Amortization	<u>6.28%</u>	<u>\$623,106</u>	<u>9.66%</u>	<u>\$718,784</u>	<u>7.85%</u>	<u>\$475,891</u>
Total Requirements	17.21%	\$1,707,588	20.52%	\$1,526,858	19.96%	\$1,210,037
Employee Contributions	6.00%	\$595,324	6.00%	\$446,450	6.00%	\$363,739
Employer Contributions	9.00%	\$892,986	9.00%	\$669,674	9.00%	\$545,608
Employer Add'l Cont.	5.00%	\$496,104	5.00%	\$372,041	5.00%	\$303,116
Direct State Funding	0.00%	\$0	0.00%	\$0	0.00%	\$0
Other Govt. Funding	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>
Total Contributions	20.00%	\$1,984,414	20.00%	\$1,488,165	20.00%	\$1,212,462
Total Requirements	17.21%	\$1,707,588	20.52%	\$1,526,858	19.96%	\$1,210,037
Total Contributions	<u>20.00%</u>	<u>\$1,984,414</u>	<u>20.00%</u>	<u>\$1,488,165</u>	<u>20.00%</u>	<u>\$1,212,462</u>
Deficiency (Surplus)	(2.79%)	(\$276,826)	0.52%	\$38,692	(0.04%)	(\$2,425)
Amortization Target Date	1997		1997		1997	
Actuary	Little Church		Coates & Crawford		Coates & Crawford	