

Actuarial Valuation Data

Duluth Teachers Retirement Fund Association

(DTRFA)

	2011	2010	2009	2008	2007	2006	2005	2004								
Membership																
Active Members	1,006	1,054	1,016	1,140	1,150	1,174	1,164	1,178								
Service Retirees	1,216	1,171	1,151	1,128	1,119	1,076	1,043	1,036								
Disabilitants	19	19	17	17	15	17	16	14								
Survivors	109	105	96	98	93	97	94	87								
Deferred Retirees	290	301	348	310	321	312	313	312								
Nonvested Former Members	<u>735</u>	<u>721</u>	<u>750</u>	<u>676</u>	<u>682</u>	<u>570</u>	<u>638</u>	<u>650</u>								
Total Membership	3,375	3,371	3,378	3,369	3,380	3,246	3,268	3,277								
Funded Status																
Accrued Liability	\$321,065,000	\$312,649,572	\$364,811,453	\$363,044,284	\$332,216,981	\$322,229,167	\$310,923,929	\$301,704,445								
Current Assets	<u>\$235,071,975</u>	<u>\$255,308,913</u>	<u>\$279,255,559</u>	<u>\$298,067,085</u>	<u>\$288,264,749</u>	<u>\$270,925,689</u>	<u>\$268,480,821</u>	<u>\$276,949,052</u>								
Unfunded Accrued Liability	\$85,993,025	\$57,340,659	\$85,555,894	\$64,977,199	\$43,952,232	\$51,303,478	\$42,443,108	\$24,755,393								
Funding Ratio	73.22%	81.66%	76.55%	82.10%	86.77%	84.08%	86.35%	91.79%								
Financing Requirements																
Covered Payroll	\$54,279,300	\$56,152,078	\$55,344,873	\$59,548,231	\$58,666,809	\$57,482,791	\$56,237,262	\$55,820,306								
Benefits Payable	\$24,067,915	\$23,596,191	\$22,704,163	\$21,579,521	\$20,065,048	\$19,229,911	\$18,290,640	\$17,347,576								
Normal Cost	6.08%	\$3,298,919	5.85%	\$3,287,998	7.42%	\$4,108,948	8.43%	\$5,022,602	9.23%	\$5,416,358	9.19%	\$5,281,712	9.05%	\$5,092,255	8.78%	\$4,903,049
Administrative Expenses	<u>0.89%</u>	<u>\$483,086</u>	<u>0.91%</u>	<u>\$510,984</u>	<u>0.85%</u>	<u>\$470,431</u>	<u>0.83%</u>	<u>\$494,250</u>	<u>0.79%</u>	<u>\$463,468</u>	<u>0.76%</u>	<u>\$436,869</u>	<u>0.78%</u>	<u>\$438,651</u>	<u>0.85%</u>	<u>\$474,473</u>
Normal Cost & Expense	6.97%	\$3,782,005	6.76%	\$3,798,982	8.27%	\$4,579,379	9.26%	\$5,516,852	10.02%	\$5,879,826	9.95%	\$5,718,581	9.83%	\$5,530,906	9.63%	\$5,377,522
Normal Cost & Expense	6.97%	\$3,782,005	6.76%	\$3,798,982	8.27%	\$4,579,379	9.26%	\$5,516,852	10.02%	\$5,879,826	9.95%	\$5,718,581	9.83%	\$5,530,906	9.63%	\$5,377,522
Amortization	<u>10.27%</u>	<u>\$5,574,484</u>	<u>6.46%</u>	<u>\$3,627,424</u>	<u>9.55%</u>	<u>\$5,285,435</u>	<u>6.60%</u>	<u>\$3,930,183</u>	<u>4.51%</u>	<u>\$2,645,873</u>	<u>5.24%</u>	<u>\$3,012,098</u>	<u>4.33%</u>	<u>\$2,435,073</u>	<u>2.49%</u>	<u>\$1,389,926</u>
Total Requirements	17.23%	\$9,356,489	13.22%	\$7,426,406	17.82%	\$9,864,814	15.87%	\$9,447,035	14.53%	\$8,525,699	15.19%	\$8,730,679	14.16%	\$7,965,979	12.12%	\$6,767,448
Employee Contributions	6.00%	\$3,256,758	5.50%	\$3,088,365	5.50%	\$3,043,968	5.50%	\$3,275,153	5.50%	\$3,226,675	5.50%	\$3,161,554	5.50%	\$3,093,049	5.50%	\$3,070,117
Employer Contributions	6.29%	\$3,414,168	5.79%	\$3,251,205	5.79%	\$3,204,468	5.79%	\$3,447,843	5.79%	\$3,396,808	5.79%	\$3,328,254	5.79%	\$3,256,137	5.79%	\$3,231,996
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	1.21%	\$658,535	1.19%	\$666,361	0.63%	\$346,000	0.58%	\$346,000	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	13.50%	\$7,329,461	12.48%	\$7,005,931	11.92%	\$6,594,436	11.87%	\$7,068,996	11.29%	\$6,623,483	11.29%	\$6,489,808	11.29%	\$6,349,186	11.29%	\$6,302,113
Total Requirements	17.23%	\$9,356,489	13.22%	\$7,426,406	17.82%	\$9,864,814	15.87%	\$9,447,035	14.53%	\$8,525,699	15.19%	\$8,730,679	14.16%	\$7,965,979	12.12%	\$6,767,448
Total Contributions	<u>13.50%</u>	<u>\$7,329,461</u>	<u>12.48%</u>	<u>\$7,005,931</u>	<u>11.92%</u>	<u>\$6,594,436</u>	<u>11.87%</u>	<u>\$7,068,996</u>	<u>11.29%</u>	<u>\$6,623,483</u>	<u>11.29%</u>	<u>\$6,489,808</u>	<u>11.29%</u>	<u>\$6,349,186</u>	<u>11.29%</u>	<u>\$6,302,113</u>
Deficiency (Surplus)	3.73%	\$2,027,028	0.74%	\$420,475	5.90%	\$3,270,378	4.00%	\$2,378,039	3.24%	\$1,902,216	3.90%	\$2,240,871	2.87%	\$1,616,793	0.83%	\$465,335
Amortization Target Date	2035	2035	2035	2032	2032	2032	2032	2032								
Actuary	Segal	Segal	Segal	Segal	Segal	Segal	Segal	Segal								

Actuarial Valuation Data

Duluth Teachers Retirement Fund Association

(DTRFA)

	2003	2002	2001	2000	1999	1998	1997	1996
Membership								
Active Members	1,373	1,276	1,420	1,441	1,509	1,437	1,416	1,415
Service Retirees	1,019	1,004	992	937	880	849	823	805
Disabilitants	14	13	6	6	11	10	7	8
Survivors	74	68	60	53	56	51	49	47
Deferred Retirees	187	305	179	172	165	155	151	150
Nonvested Former Members	<u>826</u>	<u>769</u>	<u>649</u>	<u>575</u>	<u>539</u>	<u>563</u>	<u>588</u>	<u>609</u>
Total Membership	3,493	3,435	3,306	3,184	3,160	3,065	3,034	3,034
Funded Status								
Accrued Liability	\$291,109,000	\$279,428,000	\$254,255,000	\$241,899,000	\$220,540,000	\$197,078,000	\$197,820,000	\$189,518,000
Current Assets	<u>\$278,467,000</u>	<u>\$280,515,000</u>	<u>\$273,618,000</u>	<u>\$251,007,000</u>	<u>\$218,698,000</u>	<u>\$187,482,000</u>	<u>\$170,059,000</u>	<u>\$157,007,000</u>
Unfunded Accrued Liability	\$12,642,000	(\$1,087,000)	(\$19,363,000)	(\$9,108,000)	\$1,842,000	\$9,596,000	\$27,761,000	\$32,511,000
Funding Ratio	95.66%	100.39%	107.62%	103.77%	99.16%	95.13%	85.97%	82.85%
Financing Requirements								
Covered Payroll	\$52,972,000	\$50,438,000	\$53,307,000	\$53,102,000	\$53,229,000	\$48,158,000	\$47,923,000	\$46,770,000
Benefits Payable	\$16,768,000	\$15,968,000	\$14,341,000	\$12,360,000	\$10,926,000	\$9,744,000	\$8,678,000	\$8,797,000
Normal Cost	9.08% \$4,812,000	9.13% \$4,602,000	8.66% \$4,609,000	8.68% \$4,609,000	8.19% \$4,362,000	8.22% \$3,958,000	8.51% \$4,077,000	9.18% \$4,293,486
Administrative Expenses	<u>0.88%</u> <u>\$466,000</u>	<u>0.84%</u> <u>\$424,000</u>	<u>0.79%</u> <u>\$421,000</u>	<u>0.75%</u> <u>\$398,000</u>	<u>0.74%</u> <u>\$394,000</u>	<u>0.71%</u> <u>\$342,000</u>	<u>0.67%</u> <u>\$321,000</u>	<u>0.70%</u> <u>\$327,390</u>
Normal Cost & Expense	9.96% \$5,278,000	9.97% \$5,026,000	9.45% \$5,030,000	9.43% \$5,007,000	8.93% \$4,756,000	8.93% \$4,300,000	9.18% \$4,398,000	9.88% \$4,620,876
Normal Cost & Expense	9.96% \$5,278,000	9.97% \$5,026,000	9.45% \$5,030,000	9.43% \$5,007,000	8.93% \$4,756,000	8.93% \$4,300,000	9.18% \$4,398,000	9.88% \$4,620,876
Amortization	<u>1.31%</u> <u>\$694,000</u>	<u>(0.12%)</u> <u>(\$61,000)</u>	<u>(1.96%)</u> <u>(\$1,045,000)</u>	<u>(0.92%)</u> <u>(\$489,000)</u>	<u>0.23%</u> <u>\$122,000</u>	<u>1.31%</u> <u>\$631,000</u>	<u>3.69%</u> <u>\$1,768,000</u>	<u>3.72%</u> <u>\$1,739,844</u>
Total Requirements	11.27% \$5,972,000	9.85% \$4,965,000	7.49% \$3,985,000	8.51% \$4,518,000	9.16% \$4,878,000	10.24% \$4,931,000	12.87% \$6,166,000	13.60% \$6,360,720
Employee Contributions	5.50% \$2,913,000	5.50% \$2,775,000	5.50% \$2,932,000	5.50% \$2,921,000	5.50% \$2,928,000	5.50% \$2,649,000	5.50% \$2,636,000	5.50% \$2,572,350
Employer Contributions	5.79% \$3,067,000	5.79% \$2,920,000	5.79% \$3,086,000	5.79% \$3,075,000	5.79% \$3,082,000	5.79% \$2,788,000	5.79% \$2,775,000	5.79% \$2,707,983
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	0.91% \$486,000	0.92% \$486,000	0.91% \$486,000	1.01% \$486,000	1.01% \$486,000	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	11.29% \$5,980,000	11.29% \$5,695,000	12.20% \$6,504,000	12.21% \$6,482,000	12.20% \$6,496,000	12.30% \$5,923,000	12.30% \$5,897,000	11.29% \$5,280,333
Total Requirements	11.27% \$5,972,000	9.85% \$4,965,000	7.49% \$3,985,000	8.51% \$4,518,000	9.16% \$4,878,000	10.24% \$4,931,000	12.87% \$6,166,000	13.60% \$6,360,720
Total Contributions	<u>11.29%</u> <u>\$5,980,000</u>	<u>11.29%</u> <u>\$5,695,000</u>	<u>12.20%</u> <u>\$6,504,000</u>	<u>12.21%</u> <u>\$6,482,000</u>	<u>12.20%</u> <u>\$6,496,000</u>	<u>12.30%</u> <u>\$5,923,000</u>	<u>12.30%</u> <u>\$5,897,000</u>	<u>11.29%</u> <u>\$5,280,333</u>
Deficiency (Surplus)	(0.02%) (\$8,000)	(1.44%) (\$730,000)	(4.71%) (\$2,519,000)	(3.70%) (\$1,964,000)	(3.04%) (\$1,618,000)	(2.06%) (\$992,000)	0.57% \$269,000	2.31% \$1,080,387
Amortization Target Date	2032	2032	2031	2030	2020	2020	2020	2020
Actuary	Milliman USA	Milliman USA	Milliman USA	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson

Actuarial Valuation Data

Duluth Teachers Retirement Fund Association

(DTRFA)

	1995	1994	1993	1992	1991	1990	1989	1988								
Membership																
Active Members	1,512	1,484	1,453	1,558	1,615	1,553	1,620	1,578								
Service Retirees	788	774	770	675	654	634	627	625								
Disabilitants	7	8	8	12	12	29	28	30								
Survivors	46	50	44	41	39	11	13	10								
Deferred Retirees	122	124	94	85	51	42	43	51								
Nonvested Former Members	<u>561</u>	<u>559</u>	<u>554</u>	<u>515</u>	<u>526</u>	<u>435</u>	<u>304</u>	<u>159</u>								
Total Membership	3,036	2,999	2,923	2,886	2,897	2,704	2,635	2,453								
Funded Status																
Accrued Liability	\$173,965,000	\$137,042,000	\$132,700,000	\$124,140,000	\$117,582,000	\$103,824,000	\$99,899,000	\$90,759,000								
Current Assets	<u>\$142,852,000</u>	<u>\$133,632,000</u>	<u>\$130,857,000</u>	<u>\$116,492,000</u>	<u>\$105,087,000</u>	<u>\$97,187,000</u>	<u>\$86,539,000</u>	<u>\$76,279,000</u>								
Unfunded Accrued Liability	\$31,113,000	\$3,410,000	\$1,843,000	\$7,648,000	\$12,495,000	\$6,637,000	\$13,360,000	\$14,480,000								
Funding Ratio	82.16%	97.51%	98.61%	93.84%	89.37%	93.61%	86.63%	84.05%								
Financing Requirements																
Covered Payroll	\$48,465,000	\$45,415,000	\$42,180,000	\$44,429,000	\$45,395,000	\$40,548,000	\$41,314,000	\$38,751,000								
Benefits Payable	\$7,737,000	\$7,906,000	\$5,891,000	\$5,458,000	\$5,011,000	\$4,873,000	\$3,668,000	\$4,535,000								
Normal Cost	9.17%	\$4,444,241	9.22%	\$4,187,263	9.17%	\$3,867,906	9.12%	\$4,051,925	8.59%	\$3,899,431	8.69%	\$3,523,621	8.69%	\$3,590,187	8.16%	\$3,162,082
Administrative Expenses	<u>0.74%</u>	<u>\$358,641</u>	<u>0.76%</u>	<u>\$345,154</u>	<u>0.83%</u>	<u>\$350,094</u>	<u>1.48%</u>	<u>\$657,549</u>	<u>1.23%</u>	<u>\$558,359</u>	<u>1.27%</u>	<u>\$514,960</u>	<u>1.05%</u>	<u>\$433,797</u>	<u>0.89%</u>	<u>\$344,884</u>
Normal Cost & Expense	9.91%	\$4,802,882	9.98%	\$4,532,417	10.00%	\$4,218,000	10.60%	\$4,709,474	9.82%	\$4,457,789	9.96%	\$4,038,581	9.74%	\$4,023,984	9.05%	\$3,506,966
Normal Cost & Expense	9.91%	\$4,802,882	9.98%	\$4,532,417	10.00%	\$4,218,000	10.60%	\$4,709,474	9.82%	\$4,457,789	9.96%	\$4,038,581	9.74%	\$4,023,984	9.05%	\$3,506,966
Amortization	<u>3.32%</u>	<u>\$1,609,038</u>	<u>0.38%</u>	<u>\$172,577</u>	<u>0.21%</u>	<u>\$88,578</u>	<u>0.82%</u>	<u>\$364,318</u>	<u>1.27%</u>	<u>\$576,517</u>	<u>0.74%</u>	<u>\$300,055</u>	<u>1.42%</u>	<u>\$586,659</u>	<u>2.13%</u>	<u>\$825,396</u>
Total Requirements	13.23%	\$6,411,920	10.36%	\$4,704,994	10.21%	\$4,306,578	11.42%	\$5,073,792	11.09%	\$5,034,306	10.70%	\$4,338,636	11.16%	\$4,610,642	11.18%	\$4,332,362
Employee Contributions	5.50%	\$2,665,575	4.50%	\$2,043,675	4.50%	\$1,898,100	4.50%	\$1,999,305	4.50%	\$2,042,775	4.50%	\$1,824,660	4.50%	\$1,859,130	4.50%	\$1,743,795
Employer Contributions	5.79%	\$2,806,124	5.79%	\$2,629,529	5.79%	\$2,442,222	5.79%	\$2,572,439	5.79%	\$2,628,371	5.79%	\$2,347,729	5.79%	\$2,392,081	5.79%	\$2,243,683
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	11.29%	\$5,471,699	10.29%	\$4,673,204	10.29%	\$4,340,322	10.29%	\$4,571,744	10.29%	\$4,671,146	10.29%	\$4,172,389	10.29%	\$4,251,211	10.29%	\$3,987,478
Total Requirements	13.23%	\$6,411,920	10.36%	\$4,704,994	10.21%	\$4,306,578	11.42%	\$5,073,792	11.09%	\$5,034,306	10.70%	\$4,338,636	11.16%	\$4,610,642	11.18%	\$4,332,362
Total Contributions	<u>11.29%</u>	<u>\$5,471,699</u>	<u>10.29%</u>	<u>\$4,673,204</u>	<u>10.29%</u>	<u>\$4,340,322</u>	<u>10.29%</u>	<u>\$4,571,744</u>	<u>10.29%</u>	<u>\$4,671,146</u>	<u>10.29%</u>	<u>\$4,172,389</u>	<u>10.29%</u>	<u>\$4,251,211</u>	<u>10.29%</u>	<u>\$3,987,478</u>
Deficiency (Surplus)	1.94%	\$940,221	0.07%	\$31,791	(0.08%)	(\$33,744)	1.13%	\$502,048	0.80%	\$363,160	0.41%	\$166,247	0.87%	\$359,432	0.89%	\$344,884
Amortization Target Date	2020	2020	2020	2020	2020	2020	2020	2009								
Actuary	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Milliman & Robertson	Wyatt	Wyatt								

Actuarial Valuation Data

Duluth Teachers Retirement Fund Association

(DTRFA)

	1987	1986	1985	1984	1983	1982	1981	1980								
Membership																
Active Members	1,605	1,251	1,182	1,137	1,119	1,173	1,221	1,268								
Service Retirees	628	576	562	531	526	503	482	475								
Disabilitants	26	25	23	23	23	23	23	23								
Survivors	11	7	8	8	8	5	3	3								
Deferred Retirees	60	58	50	47	50	63	53	50								
Nonvested Former Members	0	0	0	0	0	0	0	0								
Total Membership	2,330	1,917	1,825	1,746	1,726	1,767	1,782	1,819								
Funded Status																
Accrued Liability	\$85,504,000	\$78,011,000	\$71,154,000	\$73,174,515	\$63,630,916	\$58,568,245	\$47,322,626	\$43,713,374								
Current Assets	\$75,130,000	\$64,673,000	\$53,839,000	\$47,859,415	\$42,901,016	\$39,004,140	\$36,521,054	\$33,801,048								
Unfunded Accrued Liability	\$10,374,000	\$13,338,000	\$17,315,000	\$25,315,100	\$20,729,900	\$19,564,105	\$10,801,572	\$9,912,326								
Funding Ratio	87.87%	82.90%	75.67%	65.40%	67.42%	66.60%	77.17%	77.32%								
Financing Requirements																
Covered Payroll	\$36,683,000	\$33,497,000	\$31,222,000	\$28,519,250	\$25,545,672	\$25,213,173	\$24,084,826	\$23,054,277								
Benefits Payable	\$3,960,000	\$2,581,000	\$2,365,050	\$2,323,413	\$2,215,013	\$2,163,562	\$1,772,998	\$1,765,745								
Normal Cost	8.11%	\$2,974,991	8.14%	\$2,726,656	8.03%	\$2,507,127	8.37%	\$2,387,061	7.87%	\$2,010,444	7.94%	\$2,001,926	7.22%	\$1,738,924	7.25%	\$1,671,435
Administrative Expenses	0.73%	\$267,786	0.78%	\$261,277	0.71%	\$221,676	0.54%	\$154,004	0.57%	\$145,610	0.50%	\$126,066	0.47%	\$113,199	0.46%	\$106,050
Normal Cost & Expense	8.84%	\$3,242,777	8.92%	\$2,987,932	8.74%	\$2,728,803	8.91%	\$2,541,065	8.44%	\$2,156,055	8.44%	\$2,127,992	7.69%	\$1,852,123	7.71%	\$1,777,485
Normal Cost & Expense	8.84%	\$3,242,777	8.92%	\$2,987,932	8.74%	\$2,728,803	8.91%	\$2,541,065	8.44%	\$2,156,055	8.44%	\$2,127,992	7.69%	\$1,852,123	7.71%	\$1,777,485
Amortization	1.55%	\$568,587	2.10%	\$703,437	2.81%	\$877,338	4.35%	\$1,240,587	5.38%	\$1,374,357	5.05%	\$1,273,265	2.90%	\$698,460	2.84%	\$654,741
Total Requirements	10.39%	\$3,811,364	11.02%	\$3,691,369	11.55%	\$3,606,141	13.26%	\$3,781,653	13.82%	\$3,530,412	13.49%	\$3,401,257	10.59%	\$2,550,583	10.55%	\$2,432,226
Employee Contributions	4.50%	\$1,650,735	4.50%	\$1,507,365	4.50%	\$1,404,990	4.50%	\$1,283,366	4.50%	\$1,149,555	4.50%	\$1,134,593	4.00%	\$963,393	4.00%	\$922,171
Employer Contributions	5.79%	\$2,123,946	5.79%	\$1,939,476	5.79%	\$1,807,754	5.79%	\$1,651,265	5.79%	\$1,479,094	5.79%	\$1,459,843	5.79%	\$1,394,511	5.79%	\$1,334,843
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	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Total Contributions	10.29%	\$3,774,681	10.29%	\$3,446,841	10.29%	\$3,212,744	10.29%	\$2,934,631	10.29%	\$2,628,650	10.29%	\$2,594,436	9.79%	\$2,357,904	9.79%	\$2,257,014
Total Requirements	10.39%	\$3,811,364	11.02%	\$3,691,369	11.55%	\$3,606,141	13.26%	\$3,781,653	13.82%	\$3,530,412	13.49%	\$3,401,257	10.59%	\$2,550,583	10.55%	\$2,432,226
Total Contributions	10.29%	\$3,774,681	10.29%	\$3,446,841	10.29%	\$3,212,744	10.29%	\$2,934,631	10.29%	\$2,628,650	10.29%	\$2,594,436	9.79%	\$2,357,904	9.79%	\$2,257,014
Deficiency (Surplus)	0.10%	\$36,683	0.73%	\$244,528	1.26%	\$393,397	2.97%	\$847,022	3.53%	\$901,762	3.20%	\$806,822	0.80%	\$192,679	0.76%	\$175,213
Amortization Target Date	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009	2009
Actuary	Wyatt	Wyatt	Wyatt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt

Actuarial Valuation Data

Duluth Teachers Retirement Fund Association

(DTRFA)

	1979	1978	1977	1976	1975	1974	1973	1972
Membership								
Active Members	1,272	1,182	1,207	1,175	1,173	1,201	1,136	1,127
Service Retirees	471	469	460	452	446	434	411	389
Disabilitants	21	23	21	18	18	20	19	16
Survivors	2	2	2	3	2	2	2	2
Deferred Retirees	51	52	42	24	7	5	6	0
Nonvested Former Members	0	0	0	0	0	0	0	0
Total Membership	1,817	1,728	1,732	1,672	1,646	1,662	1,574	1,534
Funded Status								
Accrued Liability	\$39,882,072	\$38,132,156	\$36,166,640	\$33,348,142	\$30,992,067	\$26,513,900	\$23,863,130	\$26,489,426
Current Assets	\$31,774,026	\$30,393,700	\$29,385,022	\$26,956,796	\$25,090,799	\$23,523,124	\$22,035,561	\$20,592,141
Unfunded Accrued Liability	\$8,108,046	\$7,738,456	\$6,781,618	\$6,391,346	\$5,901,268	\$2,990,776	\$1,827,569	\$5,897,285
Funding Ratio	79.67%	79.71%	81.25%	80.83%	80.96%	88.72%	92.34%	77.74%
Financing Requirements								
Covered Payroll	\$21,530,456	\$20,738,546	\$20,009,266	\$18,683,515	\$17,296,845	\$16,567,579	\$14,071,277	\$12,767,734
Benefits Payable	\$1,620,677	\$1,597,220	\$1,562,693	\$14,587,889	\$1,426,309	\$1,287,043	\$1,197,104	\$1,109,958
Normal Cost	7.33% \$1,578,182	7.34% \$1,522,209	7.27% \$1,454,674	7.41% \$1,384,448	7.28% \$1,259,210	7.76% \$1,285,644	7.56% \$1,063,789	12.51% \$1,597,244
Administrative Expenses	0.42% \$90,428	0.42% \$87,102	0.42% \$84,039	0.41% \$76,602	0.43% \$74,376	0.40% \$66,270	0.47% \$66,135	0.58% \$74,053
Normal Cost & Expense	7.75% \$1,668,610	7.76% \$1,609,311	7.69% \$1,538,713	7.82% \$1,461,051	7.71% \$1,333,587	8.16% \$1,351,914	8.03% \$1,129,924	13.09% \$1,671,296
Normal Cost & Expense	7.75% \$1,668,610	7.76% \$1,609,311	7.69% \$1,538,713	7.82% \$1,461,051	7.71% \$1,333,587	8.16% \$1,351,914	8.03% \$1,129,924	13.09% \$1,671,296
Amortization	2.33% \$501,660	3.38% \$700,963	2.59% \$518,240	2.59% \$483,903	2.47% \$427,232	1.34% \$222,006	0.94% \$132,270	2.80% \$357,497
Total Requirements	10.08% \$2,170,270	11.14% \$2,310,274	10.28% \$2,056,953	10.41% \$1,944,954	10.18% \$1,760,819	9.50% \$1,573,920	8.97% \$1,262,194	15.89% \$2,028,793
Employee Contributions	4.00% \$861,218	4.00% \$829,542	4.00% \$800,371	4.00% \$747,341	4.00% \$691,874	4.00% \$662,703	4.00% \$562,851	4.00% \$510,709
Employer Contributions	5.79% \$1,246,613	5.62% \$1,164,469	6.14% \$1,228,569	6.40% \$1,195,745	5.00% \$864,842	5.00% \$828,379	5.00% \$703,564	5.00% \$638,387
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	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0	0.00% \$0
Total Contributions	9.79% \$2,107,832	9.62% \$1,994,011	10.14% \$2,028,940	10.40% \$1,943,086	9.00% \$1,556,716	9.00% \$1,491,082	9.00% \$1,266,415	9.00% \$1,149,096
Total Requirements	10.08% \$2,170,270	11.14% \$2,310,274	10.28% \$2,056,953	10.41% \$1,944,954	10.18% \$1,760,819	9.50% \$1,573,920	8.97% \$1,262,194	15.89% \$2,028,793
Total Contributions	9.79% \$2,107,832	9.62% \$1,994,011	10.14% \$2,028,940	10.40% \$1,943,086	9.00% \$1,556,716	9.00% \$1,491,082	9.00% \$1,266,415	9.00% \$1,149,096
Deficiency (Surplus)	0.29% \$62,438	1.53% \$316,263	0.14% \$28,013	0.01% \$1,868	1.18% \$204,103	0.50% \$82,838	(0.03%) (\$4,221)	6.89% \$879,697
Amortization Target Date	2009	1997	1997	1997	1997	1997	1997	1997
Actuary	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Hewitt	Buck

Actuarial Valuation Data

Duluth Teachers Retirement Fund Association

(DTRFA)

	1971	1969	1955	1952
Membership				
Active Members	1,152	1,159	632	575
Service Retirees	360	318	194	168
Disabilitants	15	12	4	4
Survivors	3	1	0	0
Deferred Retirees	0	0	0	0
Nonvested Former Members	0	0	0	0
Total Membership	1,530	1,490	830	747
Funded Status				
Accrued Liability	\$24,523,454	\$17,400,951	\$10,235,609	\$8,142,196
Current Assets	\$18,671,482	\$16,849,895	\$6,827,231	\$5,425,692
Unfunded Accrued Liability	\$5,851,972	\$551,056	\$3,408,378	\$2,716,504
Funding Ratio	76.14%	96.83%	66.70%	66.64%
Financing Requirements				
Covered Payroll	\$12,765,375	\$11,849,015	\$3,037,222	\$2,517,628
Benefits Payable	\$977,952	\$778,023	\$234,172	\$176,295
Normal Cost	12.79% \$1,632,691	10.21% \$1,209,784	--	--
Administrative Expenses	0.50% \$63,827	0.67% \$79,388	--	--
Normal Cost & Expense	13.29% \$1,696,518	10.88% \$1,289,173	--	--
Normal Cost & Expense	13.29% \$1,696,518	10.88% \$1,289,173	--	--
Amortization	2.72% \$347,218	0.26% \$30,807	--	--
Total Requirements	16.01% \$2,043,737	11.14% \$1,319,980	--	--
Employee Contributions	4.00% \$510,615	4.00% \$473,961	--	--
Employer Contributions	5.00% \$638,269	5.00% \$592,451	--	--
Employer Add'l Cont.	0.00% \$0	0.00% \$0	--	--
Direct State Funding	0.00% \$0	0.00% \$0	--	--
Other Govt. Funding	0.00% \$0	0.00% \$0	--	--
Administrative Assessment	0.00% \$0	0.00% \$0	--	--
Total Contributions	9.00% \$1,148,884	9.00% \$1,066,411	--	--
Total Requirements	16.01% \$2,043,737	11.14% \$1,319,980	--	--
Total Contributions	9.00% \$1,148,884	9.00% \$1,066,411	--	--
Deficiency (Surplus)	7.01% \$894,853	2.14% \$253,569	--	--
Amortization Target Date	1997	1997	--	--
Actuary	Buck	Buck	Buck	Buck