

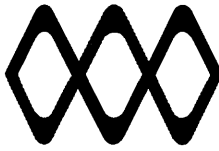
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Minneapolis Teachers' Retirement Fund
ACTUARIAL VALUATION REPORT

July 1, 1998



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October 30, 1998

Legislative Commission on
Pensions and Retirement
55 State Office Building
St. Paul, Minnesota 55155

Re: *Minneapolis Teachers' Retirement Fund*
July 1, 1998 Actuarial Valuation Report

Commission Members:

Pursuant the terms of our actuarial services contract, we have performed an actuarial valuation of the Minneapolis Teachers' Retirement Fund as of July 1, 1998.

The results of our calculations are set forth in the following report, as are the actuarial assumptions upon which our calculations have been made. We have relied on the basic employee data and asset figures as submitted by the Minneapolis Teachers' Retirement Fund.

On the basis of the foregoing, we hereby certify that, to the best of our knowledge and belief, this report is complete and accurate and has been prepared in accordance with the requirements of Section 356.215, Minnesota Statutes, and the requirements of the Standards of Actuarial Work as adopted by the Commission on Pensions and Retirement.

Respectfully submitted,

Thomas K. Custis, F.S.A., M.A.A.A.
Consulting Actuary

Lance M. Burma, F.S.A., M.A.A.A.
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Enclosure

Minneapolis Teachers' Retirement Fund
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Minneapolis Teachers' Retirement Fund
Report Highlights
(dollars in thousands)

	July 1, 1997 Valuation	July 1, 1998 Valuation
A. CONTRIBUTIONS % OF PAYROLL (Table 11)		
1. Statutory Contributions - Chapter 422A	28.61%	25.39%
2. Required Contributions - Chapter 356	28.23%	25.80%
3. Sufficiency / (Deficiency)	0.38%	(0.41%)
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	\$ 673,209	\$ 809,978
b. Current Benefit Obligations (Table 8)	1,124,008	1,217,128
c. Funding Ratio	59.89%	66.55%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$ 673,209	\$ 809,978
b. Actuarial Accrued Liability (Table 9)	1,173,412	1,267,424
c. Funding Ratio	57.37%	63.91%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$ 1,210,232	\$ 1,380,010
b. Current and Expected Future Benefit Obligations	1,358,287	1,467,320
c. Funding Ratio	89.10%	94.05%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	4,653	4,996
b. Projected Annual Earnings	\$ 194,183	\$ 210,326
c. Average Annual Earnings (Actual dollars)	\$ 41,733	\$ 42,099
d. Average Age	43.7	43.4
e. Average Service	10.1	9.5
f. Additional Members on Leave of Absence *	77	72
2. Others		
a. Service Retirements (Table 4)	2,614	2,745
b. Disability Retirements (Table 5)	21	19
c. Survivors (Table 6)	232	260
d. Deferred Retirements (Table 7)	669	711
e. Terminated Other Non-Vested (Table 7)	1,311	1,443
f. Total	4,847	5,178

* Valued as deferred retirements, liability included with actives.

Minneapolis Teachers' Retirement Fund

Commentary

Purpose

The purpose of this valuation is to determine the financial status of the Plan. To achieve this purpose, an actuarial valuation is made at the beginning of each fiscal year as required by Section 356.215 of Minnesota Statutes.

Report Highlights

The financial status of the Plan can be measured by three different funding ratios:

The *Accrued Benefit Funding Ratio* is a measure of current funding status and, when viewed over a period of years, presents a view of the funding progress. It is based upon benefits which have been earned by service to the valuation date. This year's ratio is 66.55%. The corresponding ratio for the prior year was 59.89%.

The *Accrued Liability Funding Ratio* is also a measure of funding status and funding progress. It is based on the actuarial cost method that has historically been used by the State. For 1998 the ratio is 63.91%, which is an increase from the 1997 value of 57.37%.

The *Projected Benefit Funding Ratio* is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 94.05% shows that the current statutory contributions are insufficient in the long run but improving compared to 1997's ratio of 89.10%.

Asset Information (Tables 1 and 2)

Minnesota Statutes require that the asset value used for actuarial purposes recognize only one third of the unrealized gains and losses. This requirement exists because market values (which include all unrealized gains and losses) are typically volatile and can produce erratic changes in the contribution requirements from year to year.

The calculation of the Actuarial Value of Assets is shown in Table 1 on lines F.1 to F.6. It combines the cost value of the Assets Available for Benefits and one-third of the difference between the market value and cost value of those assets.

The term "Actuarial Value of Assets" is used to indicate that the value was determined for use in this actuarial valuation. Since Minnesota Statutes refer to this value as "Current Assets", the latter phrase will be used in the remainder of this report.

Actuarial Balance Sheet (Table 8)

An actuarial balance sheet provides a method for evaluating current and future levels of funding. The Current Benefit Obligation used to measure current funding level is calculated as follows:

For Active Members - salary and service are projected to retirement to determine benefits for each member and the ratio of credited service to total service establishes the portion of the projected benefit to be used in calculating the current funding level.

For Non-active Members - the discounted value of benefits, including augmentation in cases where benefits have not commenced.

Actuarial Cost Method (Table 9)

The approach used by the State of Minnesota to determine contribution sufficiency is the Entry Age Normal Actuarial Cost Method. The primary characteristic of this method is that it allocates costs as a level of percentage of payroll.

A comparison of this actuarial method (Table 9) to the actuarial balance sheet (Table 8) illustrates the two techniques for allocating liabilities of active Members to past and future. As noted in the prior section, the balance sheet allocates benefits and the corresponding liabilities, on the basis of service. The method used in Table 9 allocates liabilities so that the cost each year will be a constant percentage of payroll. Both approaches, however, calculate the value of all future benefits the same way (see line F of Table 8 and line A.6, column 1, of Table 9).

An Unfunded Actuarial Accrued Liability is computed under the Entry Age Normal Actuarial Cost Method by comparing the liabilities allocated to past service (Actuarial Accrued Liability) to the Current Assets. This amount, line B.3, is funded over the remaining years to the amortization date by a series of payments that remain a constant percentage of payroll each year.

The payments will increase 5.0% each year because that is the assumed rate of increase in payroll. Although the payment schedule will be adequate to amortize the existing unfunded, the lower payments in the earlier years will not be sufficient to cover the interest on the unfunded liability. After a few years, the annual payment will cover the interest and also repay a portion of the unfunded.

Sources of Actuarial Gains and Losses (Table 10)

The assumptions used in making the calculations using the Entry Age Normal Actuarial Cost Method are based on long-term expectations. Each year, the actual experience will deviate from the long-term expectation. For an analysis of the major components of the Actuarial Gain or Loss refer to Table 10.

Contribution Sufficiency (Table 11)

This report determines the adequacy of Statutory Contributions by comparing the Statutory Contributions to the Required Contributions.

The Required Contributions, set forth in Chapter 356, consist of:

Normal Costs based on the Entry Age Normal Actuarial Cost Method.

A Supplemental Contribution for amortizing any Unfunded Actuarial Accrued Liability.

An Allowance for Expenses.

Table 11 shows the Fund has a current year contribution deficiency since the Statutory Contribution Rate is 25.80% compared to the Required Contribution Rate of 25.39%.

Changes in Actuarial Assumption

All actuarial assumptions are the same as those used in the prior valuation. Table 12 contains a summary of all actuarial assumptions and methods.

Changes in Plan Provisions

No significant legislation affecting the plan was enacted or became effective during the year. All plan provisions are the same as those as incorporated into the prior valuation.

Tables 13A and 13B contain summaries of current plan benefits.

TABLE 1

Minneapolis Teachers' Retirement Fund
Accounting Balance Sheet
(dollars in thousands)

July 1, 1998

	Market Value	Cost Value
A. ASSETS		
1. Cash, Equivalents, Short-Term Securities	\$ 109,150	\$ 109,150
2. Investments		
a. Fixed Income	243,153	223,928
b. Equity	568,908	442,249
c. Real Estate	28,367	28,367
3. Equity in Minnesota Post-Retirement Investment Fund	-	-
4. Other Assets	11,724	11,577
B. TOTAL ASSETS	<u>\$ 961,302</u>	<u>\$ 815,271</u>
C. AMOUNTS CURRENTLY PAYABLE	\$ 53,970	\$ 53,970
D. ASSETS AVAILABLE FOR BENEFITS		
1. Member Reserves	\$ 290,047	\$ 290,047
2. Employer Reserves	617,285	471,254
3. MPRIF Reserves	-	-
4. Non-MPRIF Reserves	-	-
5. Total Assets Available for Benefits	<u>\$ 907,332</u>	<u>\$ 761,301</u>
E. TOTAL AMOUNTS CURRENTLY PAYABLE AND ASSETS AVAILABLE FOR BENEFITS	<u>\$ 961,302</u>	<u>\$ 815,271</u>
F. DETERMINATION OF ACTUARIAL VALUE OF ASSETS		
1. Cost Value of Assets Available for Benefits (D.5)		\$ 761,301
2. Market Value of Assets Available for Benefits (D.5)	\$ 907,332	
3. Cost Value of Assets Available for Benefits (D.5)	<u>761,301</u>	
4. Market over Cost (F.2 - F.3)	\$ 146,031	
5. 1/3 of Market over Cost (F.4 / 3)		<u>48,677</u>
6. Actuarial Value of Assets (F.1 + F.5)		<u>\$ 809,978</u>

TABLE 2

Minneapolis Teachers' Retirement Fund
Change In Assets Available for Benefits
(dollars in thousands)

June 30, 1998

	Market Value	Cost Value
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$ 796,276	\$ 611,675
B. OPERATING REVENUES		
1. Member Contributions	\$ 13,852	\$ 13,852
2. Employer Contributions	18,884	18,884
3. Supplemental Contributions *	24,756	24,756
4. Investment Income	31,051	31,051
5. MPRIF Income	-	-
6. Net Realized Gain / (Loss)	134,362	134,362
7. Other	-	-
8. Net Change in Unrealized Gain / (Loss)	(38,570)	-
9. Total Operating Revenue	\$ 184,335	\$ 222,905
C. OPERATING EXPENSES		
1. Service Retirements	\$ 61,336	\$ 61,336
2. Disability Benefits	638	638
3. Survivor Benefits	4,807	4,807
4. Refunds	638	638
5. Administrative Expenses	527	527
6. Investment Expenses	5,333	5,333
7. Total Operating Expenses	\$ 73,279	\$ 73,279
D. CHANGE IN ACCOUNTING METHOD	\$ -	\$ -
E. ASSETS AVAILABLE AT END OF PERIOD	\$ 907,332	\$ 761,301

* Includes contributions from School District #1, the City of Minneapolis, and matching State contributions.

TABLE 3
Total Plan

Minneapolis Teachers' Retirement Fund
Active Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF SERVICE								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<20	1	-	-	-	-	-	-	-	1
20-24	83	20	-	-	-	-	-	-	103
25-29	186	320	37	-	-	-	-	-	543
30-34	87	271	210	7	-	-	-	-	575
35-39	60	160	246	131	15	-	-	-	612
40-44	117	202	225	134	42	7	-	-	727
45-49	47	138	252	150	73	69	39	-	768
50-54	33	91	172	113	92	81	252	77	911
55-59	14	44	91	80	59	40	101	82	511
60-64	13	13	40	25	18	21	31	21	182
65+	3	6	14	6	5	6	11	12	63
All	644	1,265	1,287	646	304	224	434	192	4,996

Age	Average Annual Earnings								TOTAL
	YEARS OF SERVICE								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<20	22,409	-	-	-	-	-	-	-	22,409
20-24	9,833	23,568	-	-	-	-	-	-	12,500
25-29	14,303	26,174	32,705	-	-	-	-	-	22,553
30-34	17,032	30,185	34,945	45,517	-	-	-	-	30,120
35-39	15,256	32,696	40,667	46,781	55,633	-	-	-	37,767
40-44	14,853	30,191	42,236	48,652	51,232	52,907	-	-	36,287
45-49	21,093	32,361	42,640	53,277	54,466	60,074	62,751	-	45,264
50-54	17,144	37,655	42,889	54,305	55,618	55,179	60,726	61,660	51,748
55-59	22,047	36,073	38,746	52,612	55,306	56,232	62,440	61,761	51,886
60-64	15,550	30,271	35,274	43,468	54,941	55,965	59,387	56,842	45,562
65+	2,261	5,545	23,452	40,179	54,720	48,821	55,150	42,836	36,455
All	15,075	30,248	39,971	50,512	54,621	56,707	61,070	59,999	39,907

Total Annual Earnings (in Thousands)								
YEARS OF SERVICE								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
9,709	38,263	51,443	32,631	16,605	12,702	26,504	11,520	199,377

TABLE 3
Total Plan

Minneapolis Employees Retirement Fund
Active Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF SERVICE								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<20	1	-	-	-	-	-	-	-	1
20-24	83	20	-	-	-	-	-	-	103
25-29	186	320	37	-	-	-	-	-	543
30-34	87	271	210	7	-	-	-	-	575
35-39	60	160	246	131	15	-	-	-	612
40-44	117	202	225	134	42	7	-	-	727
45-49	47	138	252	150	73	69	39	-	768
50-54	33	91	172	113	92	81	252	77	911
55-59	14	44	91	80	59	40	101	82	511
60-64	13	13	40	25	18	21	31	21	182
65+	3	6	14	6	5	6	11	12	63
All	644	1,265	1,287	646	304	224	434	192	4,996

Age	Average Annual Earnings								TOTAL
	YEARS OF SERVICE								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<20	22,409	-	-	-	-	-	-	-	22,409
20-24	9,833	23,568	-	-	-	-	-	-	12,500
25-29	14,303	26,174	32,705	-	-	-	-	-	22,553
30-34	17,032	30,185	34,945	45,517	-	-	-	-	30,120
35-39	15,256	32,696	40,667	46,781	55,633	-	-	-	37,767
40-44	14,853	30,191	42,236	48,652	51,232	52,907	-	-	36,287
45-49	21,093	32,361	42,640	53,277	54,466	60,074	62,751	-	45,264
50-54	17,144	37,655	42,889	54,305	55,618	55,179	60,726	61,660	51,748
55-59	22,047	36,073	38,746	52,612	55,306	56,232	62,440	61,761	51,886
60-64	15,550	30,271	35,274	43,468	54,941	55,965	59,387	56,842	45,562
65+	2,261	5,545	23,452	40,179	54,720	48,821	55,150	42,836	36,455
All	15,075	30,248	39,971	50,512	54,621	56,707	61,070	59,999	39,907

Total Annual Earnings (in Thousands)									
YEARS OF SERVICE									
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>	
9,709	38,263	51,443	32,631	16,605	12,702	26,504	11,520	199,377	

TABLE 4
Total Plan

Minneapolis Teachers' Retirement Fund
Retired Members as of June 30, 1998

Participant Count									
YEARS OF RETIREMENT									
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30+	TOTAL
<50	1	-	-	-	-	-	-	-	1
50-54	32	30	-	-	-	-	-	-	62
55-59	92	147	40	-	-	-	-	-	279
60-64	56	239	112	16	-	-	-	-	423
65-69	26	164	229	84	20	-	-	-	523
70-74	3	29	158	139	114	8	1	-	452
75-79	1	4	36	94	198	29	4	-	366
80-84	-	-	3	27	122	104	11	4	271
85+	-	-	-	1	4	165	134	64	368
All	211	613	578	361	458	306	150	68	2,745

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	1,994	-	-	-	-	-	-	-	1,994
50-54	28,103	16,729	-	-	-	-	-	-	22,600
55-59	31,005	29,644	18,009	-	-	-	-	-	28,424
60-64	20,310	25,929	33,282	11,795	-	-	-	-	26,597
65-69	22,362	22,296	27,093	27,041	16,977	-	-	-	24,958
70-74	2,555	25,417	28,021	22,706	29,639	8,057	11,624	-	26,069
75-79	8,594	21,573	25,935	20,769	22,801	13,809	13,058	-	21,716
80-84	-	-	17,801	26,350	20,310	16,173	14,445	8,963	18,891
85+	-	-	-	5,283	14,331	15,820	13,828	13,853	14,708
All	26,013	25,345	27,797	22,951	23,511	15,547	13,838	13,565	23,279

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
5,489	15,536	16,067	8,285	10,768	4,757	2,076	922	63,901

TABLE 4
Total Plan

Minneapolis Employees Retirement Fund
Retired Members as of June 30, 1998

Participant Count									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	1	-	-	-	-	-	-	-	1
50-54	32	30	-	-	-	-	-	-	62
55-59	92	147	40	-	-	-	-	-	279
60-64	56	239	112	16	-	-	-	-	423
65-69	26	164	229	84	20	-	-	-	523
70-74	3	29	158	139	114	8	1	-	452
75-79	1	4	36	94	198	29	4	-	366
80-84	-	-	3	27	122	104	11	4	271
85+	-	-	-	1	4	165	134	64	368
All	211	613	578	361	458	306	150	68	2,745

Average Annual Annuity									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	1,994	-	-	-	-	-	-	-	1,994
50-54	28,103	16,729	-	-	-	-	-	-	22,600
55-59	31,005	29,644	18,009	-	-	-	-	-	28,424
60-64	20,310	25,929	33,282	11,795	-	-	-	-	26,597
65-69	22,362	22,296	27,093	27,041	16,977	-	-	-	24,958
70-74	2,555	25,417	28,021	22,706	29,639	8,057	11,624	-	26,069
75-79	8,594	21,573	25,935	20,769	22,801	13,809	13,058	-	21,716
80-84	-	-	17,801	26,350	20,310	16,173	14,445	8,963	18,891
85+	-	-	-	5,283	14,331	15,820	13,828	13,853	14,708
All	26,013	25,345	27,797	22,951	23,511	15,547	13,838	13,565	23,279

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<u>≤1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
5,489	15,536	16,067	8,285	10,768	4,757	2,076	922	63,901

TABLE 5
Total Plan

Minneapolis Teachers' Retirement Fund
Disabled Members as of June 30, 1998

	Participant Count								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	1	-	1	-	-	-	-	-	2
50-54	-	4	-	1	-	-	-	-	5
55-59	-	2	2	1	-	-	-	-	5
60-64	-	1	2	3	-	1	-	-	7
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	1	7	5	5	-	1	-	-	19

Age	Average Annual Annuity								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	39,525	-	30,566	-	-	-	-	-	35,045
50-54	-	30,710	-	27,364	-	-	-	-	30,041
55-59	-	51,927	33,104	24,200	-	-	-	-	38,852
60-64	-	6,929	26,366	28,512	-	10,910	-	-	22,301
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	39,525	33,375	29,901	27,420	-	10,910	-	-	30,035

Total Annual Annuity (in Thousands)									
YEARS OF RETIREMENT									
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
	40	234	150	137	-	11	-	-	571

TABLE 5
Total Plan

Minneapolis Employees Retirement Fund
Disabled Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	1	-	1	-	-	-	-	-	2
50-54	-	4	-	1	-	-	-	-	5
55-59	-	2	2	1	-	-	-	-	5
60-64	-	1	2	3	-	1	-	-	7
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	1	7	5	5	-	1	-	-	19

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	39,525	-	30,566	-	-	-	-	-	35,045
50-54	-	30,710	-	27,364	-	-	-	-	30,041
55-59	-	51,927	33,104	24,200	-	-	-	-	38,852
60-64	-	6,929	26,366	28,512	-	10,910	-	-	22,301
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	39,525	33,375	29,901	27,420	-	10,910	-	-	30,035

Total Annual Annuity (in Thousands)									
YEARS OF RETIREMENT									
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
	40	234	150	137	-	11	-	-	571

TABLE 6
Total Plan

Minneapolis Teachers' Retirement Fund
Survivor Members as of June 30, 1998

Participant Count									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	17	18	22	4	-	-	-	61
50-54	-	2	2	2	-	-	-	-	6
55-59	-	6	-	1	1	-	1	-	9
60-64	-	4	10	6	1	1	-	-	22
65-69	-	3	12	14	7	2	1	-	39
70-74	-	1	3	15	14	3	1	-	37
75-79	-	1	1	8	9	7	1	-	27
80-84	-	1	1	-	4	11	2	2	21
85+	-	3	2	2	-	10	10	11	38
All	-	38	49	70	40	34	16	13	260

Average Annual Annuity									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	12,519	13,275	8,438	10,287	-	-	-	11,124
50-54	-	18,023	26,288	8,178	-	-	-	-	17,496
55-59	-	15,935	-	20,080	1,798	-	9,292	-	14,086
60-64	-	30,459	30,050	20,758	16,939	13,148	-	-	26,226
65-69	-	14,114	32,150	25,607	20,491	10,526	11,882	-	24,692
70-74	-	33,519	28,684	25,080	19,491	12,437	9,596	-	22,042
75-79	-	26,754	26,423	12,929	19,575	17,309	7,312	-	17,084
80-84	-	15,798	17,716	-	19,779	12,659	12,981	9,825	14,166
85+	-	35,665	13,603	5,294	-	13,962	16,072	10,256	14,683
All	-	18,203	23,168	17,076	18,287	13,869	14,048	10,190	17,625

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<1	1-4	5-9	10-14	15-19	20-24	25-29	30+	TOTAL
-	692	1,135	1,195	731	472	225	132	4,583

TABLE 6
Total Plan

Minneapolis Employees Retirement Fund
Survivor Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	-	17	18	22	4	-	-	-	61
50-54	-	2	2	2	-	-	-	-	6
55-59	-	6	-	1	1	-	1	-	9
60-64	-	4	10	6	1	1	-	-	22
65-69	-	3	12	14	7	2	1	-	39
70-74	-	1	3	15	14	3	1	-	37
75-79	-	1	1	8	9	7	1	-	27
80-84	-	1	1	-	4	11	2	2	21
85+	-	3	2	2	-	10	10	11	38
All	-	38	49	70	40	34	16	13	260

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	12,519	13,275	8,438	10,287	-	-	-	11,124
50-54	-	18,023	26,288	8,178	-	-	-	-	17,496
55-59	-	15,935	-	20,080	1,798	-	9,292	-	14,086
60-64	-	30,459	30,050	20,758	16,939	13,148	-	-	26,226
65-69	-	14,114	32,150	25,607	20,491	10,526	11,882	-	24,692
70-74	-	33,519	28,684	25,080	19,491	12,437	9,596	-	22,042
75-79	-	26,754	26,423	12,929	19,575	17,309	7,312	-	17,084
80-84	-	15,798	17,716	-	19,779	12,659	12,981	9,825	14,166
85+	-	35,665	13,603	5,294	-	13,962	16,072	10,256	14,683
All	-	18,203	23,168	17,076	18,287	13,869	14,048	10,190	17,625

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
-	692	1,135	1,195	731	472	225	132	4,583

Minneapolis Teachers' Retirement Fund
Reconciliation of Members

	Actives	Terminated		
		Leave of Absence	Deferred Retirement	Other Non-Vested
A. ON JUNE 30, 1997	4,653	77	669	1,311
B. ADDITIONS	792	3	102	222
C. DELETIONS				
1 Service Retirement	(157)	(1)	(31)	(22)
2 Disability	(4)	(1)	-	-
3 Death – Survivor	(1)	-	(1)	-
4 Death – Other	-	-	-	-
5 Terminated – Deferred	(94)	(1)	-	-
6 Terminated – Refund	(31)	-	(4)	(131)
7 Terminated - Other Non-Vested	(214)	-	(2)	-
8 Returned as Active	52	(4)	(18)	(30)
D. DATA ADJUSTMENTS	-	(1)	(4)	93
1 Vested	-			
2 Non-Vested	-			
E. TOTAL ON JUNE 30, 1998	4,996	72	711	1,443

	Recipients		
	Retirement Annuitants	Disabled	Survivors
A. ON JUNE 30, 1997	2,620	21	232
B. ADDITIONS	221	1	37
C. DELETIONS			
1 Service Retirement	-	(2)	-
2 Death	(86)	(1)	(9)
3 Annuity Expired	-	-	-
4 Returned as Active	-	-	-
D. DATA ADJUSTMENTS	(10)	-	-
E. TOTAL ON JUNE 30, 1998	2,745	19	260

Minneapolis Teachers' Retirement Fund
Actuarial Balance Sheet
(dollars in thousands)

July 1, 1998

A. CURRENT ASSETS (Table 1; Line F.6)				\$	809,978
B. EXPECTED FUTURE ASSETS					
1. Present Value of Expected Future Statutory Supplemental Contributions				\$	370,136
2. Present Value of Future Normal Costs					199,896
3. Total Expected Future Assets					<u>570,032</u>
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS				\$	<u>1,380,010</u>
D. CURRENT BENEFIT OBLIGATIONS					
		Non-Vested	Vested		Total
1. Benefit Recipients					
a. Retirement Annuities			\$ 699,192	\$	699,192
b. Disability Benefits			5,552		5,552
c. Surviving Spouse and Child Benefits			35,596		35,596
2. Deferred Retirements			18,455		18,455
3. Former Members Without Vested Rights			14		14
4. Active Members					
a. Retirement Annuities *	\$	1,845	419,791		421,636
b. Disability Benefits		19,564	-		19,564
c. Surviving Spouse and Child Benefits		4,494	-		4,494
d. Deferred Retirements		209	10,299		10,508
e. Refund Liability Due to Death or Withdrawal		-	2,117		2,117
5. Total Current Benefit Obligations	\$	26,112	\$ 1,191,016	\$	<u>1,217,128</u>
E. EXPECTED FUTURE BENEFIT OBLIGATIONS				\$	<u>250,192</u>
F. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS				\$	<u>1,467,320</u>
G. CURRENT UNFUNDED ACTUARIAL LIABILITY (D.5 - A)				\$	407,150
H. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F - C)				\$	87,310

* Includes members on leave of absence.

Minneapolis Teachers' Retirement Fund
Determination of Unfunded Actuarial Accrued Liability (UAAL) and
Supplemental Contribution Rate
(dollars in thousands)

July 1, 1998

	Actuarial Present Value of Projected Benefits	Actuarial Present Value of Future Normal Costs	Actuarial Accrued Liability
A. DETERMINATION OF ACTUARIAL ACCRUED LIABILITY (AAL)			
1. Active Members			
a. Retirement Benefits	\$ 642,644	\$ 158,550	\$ 484,094
b. Disability Benefits	35,303	16,905	18,398
c. Surviving Spouse and Child Benefits	8,060	3,587	4,473
d. Deferred Retirements	17,546	14,962	2,584
e. Refund Liability Due to Death or Withdrawal	4,958	5,892	(934)
f. Total	<u>\$ 708,511</u>	<u>\$ 199,896</u>	<u>\$ 508,615</u>
2. Deferred Retirements	\$ 18,455		\$ 18,455
3. Former Members Without Vested Rights	14		14
4. Annuitants in MPRIF	-		-
5. Annuitants Not in MPRIF	740,340		740,340
6. Total	<u>\$ 1,467,320</u>	<u>\$ 199,896</u>	<u>\$ 1,267,424</u>
B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)			
1. Actuarial Accrued Liability (A.6)			\$ 1,267,424
2. Current Assets (Table 1; Line F.6)			809,978
3. Unfunded Actuarial Accrued Liability (B.1 - B.2)			<u>\$ 457,446</u>
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE			
1. Present Value of Future Payrolls Through the Amortization Date of June 30, 2020			3,193,467
2. Supplemental Contribution Rate (B.3 / C.1)			<u>14.32%</u>

Minneapolis Teachers' Retirement Fund
Changes in Unfunded Actuarial Accrued Liability (UAAL)
(dollars in thousands)

June 30, 1998

A. UAAL AT BEGINNING OF YEAR	\$ 500,203
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
1. Normal Cost and Expenses	\$ 22,841
2. Contributions	(57,492)
3. Interest	42,015
4. Total	<u>\$ 7,364</u>
C. EXPECTED UAAL AT END OF YEAR (A + B.4)	\$ 507,567
D. INCREASE / (DECREASE) DUE TO ACTUARIAL LOSSES / (GAINS) BECAUSE OF EXPERIENCE DEVIATIONS FROM EXPECTED	
1. Age and Service Retirements (a)	\$ -
2. Disability Retirements (a)	-
3. Death-in-Service Benefits (a)	-
4. Withdrawal (b)	-
5. Salary Increases	(591)
6. Contribution Income (b)	-
7. Investment Income (c)	(53,220)
8. Mortality of Annuitants	(281)
9. Other Items	3,971
10. Total	<u>\$ (50,121)</u>
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTIONS (C + D.5)	\$ 457,446
F. CHANGE IN UAAL DUE TO PLAN AMENDMENTS	-
G. CHANGE IN UAAL DUE TO CHANGES IN ACTUARIAL ASSUMPTIONS	<u>-</u>
H. UAAL AT END OF YEAR (E + F + G)	<u>\$ 457,446</u>

(a) Included in Item D.8.

(b) Included in Item D.9.

(c) Includes a gross investment gain of \$90,450 offset by \$37,225 used to provide next year's cost of living adjustment to annuitants.

Minneapolis Teachers' Retirement Fund
Determination of Contribution Sufficiency
(dollars in thousands)

July 1, 1998

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 354A		
1. Employee Contributions	6.40%	\$ 13,462
2. Employer Contributions	9.34%	19,646
3. Supplemental Contribution *		
a. 1993 Legislation	2.38%	5,000
b. 1996 Legislation	1.07%	2,240
c. 1997 Legislation	6.16%	12,954
4. Administrative Expense Assessment	0.04%	84
5. Total	25.39%	\$ 53,386
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	8.92%	\$ 18,757
b. Disability Benefits	0.91%	1,906
c. Surviving Spouse and Child Benefits	0.19%	390
d. Deferred Retirements	0.87%	1,833
e. Refund Liability Due to Death or Withdrawal	0.33%	690
f. Total	11.22%	\$ 23,576
2. Supplemental Contribution Amortization	14.32%	30,128
3. Allowance for Administrative Expenses	0.26%	553
5. Total	25.80%	\$ 54,257
C. CONTRIBUTION SUFFICIENCY / (DEFICIENCY) (A.3 - B.5)	(0.41%)	(871)

Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date: \$ 210,326

* Includes contributions from School District #1, the City of Minneapolis, and matching State contributions.

Minneapolis Teachers' Retirement Fund
Summary of Actuarial Assumptions and Methods

<i>Interest:</i>	Pre-Retirement: 8.50% per annum Post-Retirement: 8.50% per annum
<i>Salary Increases:</i>	Total reported pay for prior fiscal year increased through the salary increase assumption to current fiscal year. Graded rates are shown in the rate table.
<i>Mortality:</i>	<p><u>Pre-Retirement:</u></p> <p>Male: 1983 Group Annuity Mortality Table male rates set back 6 years.</p> <p>Female: 1983 Group Annuity Mortality Table female rates set back 4 years.</p> <p><u>Post-Retirement:</u></p> <p>Male: 1983 Group Annuity Mortality Table male rates set back 4 years.</p> <p>Female: 1983 Group Annuity Mortality Table female rates set back 2 years.</p> <p><u>Post-Disability:</u></p> <p>Male: 1977 Railroad Retirement Board Mortality for Disabled Annuitants</p> <p>Female: 1977 Railroad Retirement Board Mortality for Disabled Annuitants</p>
<i>Retirement Age:</i>	<p><u>Active Members:</u></p> <p>Active Members are assumed to retire according to the graded rates shown in the rate table. Rates are applied beginning at the participant's first early retirement age.</p> <p><u>Deferred Members:</u></p> <p>Basic Members are assumed to retire at age 60. Coordinated Members are assumed to retire at age 63. If over the assumed retirement age, one year from valuation date.</p> <p><u>Other Non-Vested Members:</u></p> <p>Return of contributions is assumed to occur immediately.</p>
<i>Separation:</i>	Graded rates shown in the rate table.
<i>Disability:</i>	Graded rates shown in the rate table.

TABLE 12
(cont)

<i>Administrative Expenses:</i>	Prior year administrative expenses (excluding investment expenses) expressed as a percentage of prior year payroll.
<i>Return of Contributions:</i>	All employees withdrawing after becoming eligible for a deferred benefit were assumed to take the larger of their contributions accumulated with interest or the value of their deferred benefit.
<i>Family Composition:</i>	80% of male Members and 60% of female Members are assumed to be married. Female is assumed to be three years younger than male.
<i>Social Security:</i>	N/A
<i>Benefit Increases After Retirement:</i>	2.0% per annum
<i>Special Consideration:</i>	Additional post retirement benefit increase is accounted for by increasing the reserve value for all service retirements, disability retirements and survivors eligible for the increase by an amount that equals the excess of the five year time weighted total rate of return over the assumed interest rate of 8.50% multiplied by the quantity of one minus the rate of contribution deficiency.
<i>Optional Benefit Forms:</i>	<p>Married Members are assumed to elect the following forms of benefit:</p> <p>Males: 25% elect life annuity option 15% elect 50% J&S option 20% elect 75% J&S option 40% elect 100% J&S option</p> <p>Females: 70% elect life annuity option 15% elect 50% J&S option 5% elect 75% J&S option 10% elect 100% J&S option</p>
<i>Actuarial Cost Method:</i>	Entry Age Normal Actuarial Cost Method with normal costs expressed as a level percentage of earnings. Under this method Actuarial Gains (Losses) reduce (increase) the Unfunded Actuarial Accrued Liability.
<i>Asset Valuation Method:</i>	Cost Value plus one-third of Unrealized Gains or Losses.

*Payment on the
Unfunded Actuarial
Accrued Liability:*

The Unfunded Actuarial Accrued Liability is amortized as level percentage of payroll each year to the statutory amortization date assuming payroll increases of 5.00% per annum.

Missing Data:

The submitted participant data has been reviewed for reasonableness and constancy with data submitted for prior valuations. We have not audited this data, and the results of this valuation may change based on the accuracy of the underlying data. In cases where submitted data was missing or incomplete, the following assumptions were applied:

Date of Birth:	Average age of participant group based on prior years valuation report.
Date of Hire:	Current valuation date minus years of service.
Years of Service:	Years of service on last year's valuation plus one year.
Sex:	Male.
Deferred Benefit:	Calculated. Service at termination is calculated assuming termination on the valuation date in which the participant is first reported in vested status. Salary at termination is estimated based on assumed termination date. Estimated salary begins at \$15,000 for 1993 termination date and increases according to the salary assumption thereafter. Current level is \$20,262.

TABLE 12
(cont)

Supplemental Contributions: The City of Minneapolis, the Minneapolis School District, and the State of Minnesota are scheduled to make the following supplemental contributions to the plan:

1993 Legislation:

Supplemental contributions of \$5,000,000 annually are assumed to be made until the amortization date of June 30, 2020.

1996 Legislation:

Supplemental contributions of \$1,590,000 annually are assumed to be made until the amortization date of June 30, 2020 plus additional supplemental contributions according to the following schedule:

<u>Year</u>	<u>Amount</u>
1998	650,000
1999	950,000
2000	1,260,000
2001	1,550,000
2002	1,850,000
2003-2020	2,000,000

1997 Legislation:

Supplemental contributions of \$12,954,000 annually are assumed to be made beginning July 1, 1998 and continuing until the amortization date of June 30, 2020.

TABLE 12
(cont)

Minneapolis Teachers' Retirement Fund
Summary of Actuarial Assumptions and Methods

Separations Expressed as the Number of Occurrences per 10,000:

<u>Age</u>	<u>Withdrawal</u>		<u>Disability</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	1,200	1,200	3	4
21	1,150	1,150	3	4
22	1,100	1,100	3	4
23	1,050	1,050	3	5
24	1,000	1,000	3	5
25	950	950	3	5
26	900	900	4	5
27	850	850	4	5
28	800	800	4	6
29	750	750	4	6
30	700	700	4	6
31	650	650	4	6
32	600	600	4	7
33	550	550	5	7
34	500	500	5	8
35	450	450	5	8
36	400	400	6	8
37	350	350	6	9
38	300	300	6	9
39	250	250	6	10
40	200	200	7	10
41	190	190	7	11
42	180	180	8	12
43	170	170	8	13
44	160	160	9	14
45	150	150	10	15
46	140	140	11	16
47	130	130	12	18
48	120	120	14	20
49	110	110	16	23
50	100	100	18	26
51	90	90	20	29
52	80	80	23	33
53	70	70	26	37
54	60	60	30	42

TABLE 12
(cont)

Minneapolis Teachers' Retirement Fund
Summary of Actuarial Assumptions and Methods

Separations Expressed as the Number of Occurrences per 10,000:

<u>Age</u>	<u>Withdrawal</u>		<u>Disability</u>	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
55	50	50	36	49
56	40	40	42	58
57	30	30	50	68
58	20	20	59	80
59	10	10	69	94
60	0	0	90	121
61	0	0	116	154
62	0	0	146	193
63	0	0	0	0
64	0	0	0	0
65	0	0	0	0
66	0	0	0	0
67	0	0	0	0
68	0	0	0	0
69	0	0	0	0
70	0	0	0	0

TABLE 12
(cont)

Minneapolis Teachers' Retirement Fund
Summary of Actuarial Assumptions and Methods

Deaths Expressed as the Number of Occurrences per 10,000:

<u>Age</u>	Pre-Retirement Mortality		Post-Retirement Mortality		Post-Disability Mortality	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
20	3	1	3	2	271	271
21	3	2	3	2	271	271
22	3	2	4	2	271	271
23	3	2	4	2	272	272
24	4	2	4	2	272	272
25	4	2	4	2	272	272
26	4	2	4	2	272	272
27	4	2	4	3	272	272
28	4	2	4	3	272	272
29	4	3	5	3	272	272
30	4	3	5	3	272	272
31	5	3	5	3	272	272
32	5	3	5	3	272	272
33	5	3	6	4	272	272
34	5	3	6	4	273	273
35	6	4	6	4	273	273
36	6	4	7	4	273	273
37	6	4	7	5	273	273
38	7	4	8	5	273	273
39	7	5	9	5	273	273
40	8	5	9	6	273	273
41	9	5	10	6	273	273
42	9	6	10	7	273	273
43	10	6	11	7	274	274
44	10	7	12	8	274	274
45	11	7	14	8	274	274
46	12	8	15	9	275	275
47	14	8	17	10	276	276
48	15	9	19	11	279	279
49	17	10	22	12	283	283
50	19	11	25	14	289	289
51	22	12	28	15	297	297
52	25	14	31	16	310	310
53	28	15	35	18	327	327
54	31	16	39	19	348	348

TABLE 12
(cont)

Minneapolis Teachers' Retirement Fund
Summary of Actuarial Assumptions and Methods

Separations Expressed as the Number of Occurrences per 10,000:

<u>Age</u>	Pre-Retirement Mortality		Post-Retirement Mortality		Post-Disability Mortality	
	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>
55	35	18	43	21	371	371
56	39	19	48	23	395	395
57	43	21	52	25	417	417
58	48	23	57	28	437	437
59	52	25	61	31	455	455
60	57	28	66	34	473	473
61	61	31	71	38	494	494
62	66	34	77	42	516	516
63	71	38	84	47	541	541
64	77	42	92	52	569	569
65	84	47	101	58	598	598
66	92	52	111	64	628	628
67	101	58	124	71	658	658
68	111	64	139	78	687	687
69	124	71	156	87	716	716
70	139	78	176	97	746	746

TABLE 12
(cont)

Minneapolis Teachers' Retirement Fund
Summary of Actuarial Assumptions and Methods

Retirements Expressed as the Number of Occurrences per 10,000:

Age	Basic Members Eligible for 30 and out Provision	Basic Members Not Eligible for 30 and out Provision	Coordinated Members Eligible for Rule of 90 Provision	Coordinated Members Not Eligible for Rule of 90 Provision
55 or less	3,000	300	3,000	200
56	3,000	300	3,000	200
57	3,000	300	3,000	200
58	3,000	300	3,000	200
59	3,000	300	3,000	200
60	5,000	5,000	3,000	800
61	5,000	5,000	3,000	800
62	5,000	5,000	3,000	800
63	5,000	5,000	3,000	2,000
64	5,000	5,000	3,000	2,000
65	7,500	7,500	5,000	5,000
66	7,500	7,500	5,000	5,000
67	7,500	7,500	5,000	5,000
68	7,500	7,500	5,000	5,000
69	7,500	7,500	5,000	5,000
70	7,500	7,500	7,500	7,500
71	7,500	7,500	7,500	7,500
72	7,500	7,500	7,500	7,500
73	7,500	7,500	7,500	7,500
74	7,500	7,500	7,500	7,500
75	7,500	7,500	7,500	7,500
76	7,500	7,500	7,500	7,500
77	7,500	7,500	7,500	7,500
78	7,500	7,500	7,500	7,500
79	7,500	7,500	7,500	7,500
80 or more	10,000	10,000	10,000	10,000

TABLE 12
(cont)

Minneapolis Teachers' Retirement Fund
Summary of Actuarial Assumptions and Methods

Annual Salary Increases

<u>Age</u>	<u>Male</u>	<u>Female</u>
<22	7.50%	7.50%
23	7.40%	7.40%
24	7.30%	7.30%
25	7.20%	7.20%
26	7.10%	7.10%
27	7.00%	7.00%
28	6.90%	6.90%
29	6.80%	6.80%
30	6.70%	6.70%
31	6.60%	6.60%
32	6.50%	6.50%
33	6.40%	6.40%
34	6.30%	6.30%
35	6.20%	6.20%
36	6.10%	6.10%
37	6.00%	6.00%
38	5.90%	5.90%
39	5.80%	5.80%
40	5.70%	5.70%
41	5.60%	5.60%
42	5.50%	5.50%
43	5.45%	5.45%
44	5.40%	5.40%
45	5.35%	5.35%
46	5.30%	5.30%
47	5.25%	5.25%
48	5.20%	5.20%
49	5.15%	5.15%
50	5.10%	5.10%
51	5.05%	5.05%
52	5.00%	5.00%
53	5.00%	5.00%
54	5.00%	5.00%
55	5.00%	5.00%

TABLE 3A
Basic Plan

Minneapolis Teachers' Retirement Fund
Active Members as of June 30, 1998

	Participant Count								
	YEARS OF SERVICE								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<20	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-
40-44	-	-	2	2	4	7	-	-	15
45-49	-	-	7	16	19	66	39	-	147
50-54	-	1	5	17	46	77	252	77	475
55-59	-	-	5	16	26	40	99	82	268
60-64	-	-	4	5	6	20	31	21	87
65+	-	-	1	1	3	6	11	12	34
All	-	1	24	57	104	216	432	192	1,026

	Average Annual Earnings								
	YEARS OF SERVICE								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<20	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-
40-44	-	-	48,428	48,245	45,430	52,907	-	-	49,694
45-49	-	-	56,667	51,504	56,665	60,373	62,751	-	59,383
50-54	-	29,482	50,749	53,890	55,310	54,767	60,726	61,660	58,971
55-59	-	-	48,815	54,197	53,544	56,232	62,387	61,761	59,677
60-64	-	-	54,822	42,426	63,405	56,200	59,387	56,842	57,132
65+	-	-	1,950	49,485	56,611	48,821	55,150	42,836	48,085
All	-	29,482	50,524	52,025	55,241	56,659	61,051	59,999	58,562

Total Annual Earnings (in Thousands)									
YEARS OF SERVICE									
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>	
-	29	1,213	2,965	5,745	12,238	26,374	11,520	60,085	

TABLE 3A
Basic Plan

Minneapolis Employees Retirement Fund
Active Members as of June 30, 1998

	Participant Count								
	YEARS OF SERVICE								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<20	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-
40-44	-	-	2	2	4	7	-	-	15
45-49	-	-	7	16	19	66	39	-	147
50-54	-	1	5	17	46	77	252	77	475
55-59	-	-	5	16	26	40	99	82	268
60-64	-	-	4	5	6	20	31	21	87
65+	-	-	1	1	3	6	11	12	34
All	-	1	24	57	104	216	432	192	1,026

	Average Annual Earnings								
	YEARS OF SERVICE								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<20	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	-	-	-	-	-	-	-	-	-
35-39	-	-	-	-	-	-	-	-	-
40-44	-	-	48,428	48,245	45,430	52,907	-	-	49,694
45-49	-	-	56,667	51,504	56,665	60,373	62,751	-	59,383
50-54	-	29,482	50,749	53,890	55,310	54,767	60,726	61,660	58,971
55-59	-	-	48,815	54,197	53,544	56,232	62,387	61,761	59,677
60-64	-	-	54,822	42,426	63,405	56,200	59,387	56,842	57,132
65+	-	-	1,950	49,485	56,611	48,821	55,150	42,836	48,085
All	-	29,482	50,524	52,025	55,241	56,659	61,051	59,999	58,562

Total Annual Earnings (in Thousands)								
YEARS OF SERVICE								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
-	29	1,213	2,965	5,745	12,238	26,374	11,520	60,085

TABLE 4A
Basic Plan

Minneapolis Teachers' Retirement Fund
Retired Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	1	-	-	-	-	-	-	-	1
50-54	32	24	-	-	-	-	-	-	56
55-59	90	139	40	-	-	-	-	-	269
60-64	51	223	111	16	-	-	-	-	401
65-69	21	153	223	84	20	-	-	-	501
70-74	3	26	154	139	114	8	1	-	445
75-79	1	3	36	94	198	29	4	-	365
80-84	-	-	3	27	122	104	11	4	271
85+	-	-	-	1	4	165	134	64	368
All	199	568	567	361	458	306	150	68	2,677

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	1,994	-	-	-	-	-	-	-	1,994
50-54	28,103	19,483	-	-	-	-	-	-	24,409
55-59	31,574	30,930	18,009	-	-	-	-	-	29,224
60-64	21,742	27,204	33,549	11,795	-	-	-	-	27,651
65-69	25,595	23,396	27,729	27,041	16,977	-	-	-	25,772
70-74	2,555	27,808	28,561	22,706	29,639	8,057	11,624	-	26,382
75-79	8,594	28,038	25,935	20,769	22,801	13,809	13,058	-	21,770
80-84	-	-	17,801	26,350	20,310	16,173	14,445	8,963	18,891
85+	-	-	-	5,283	14,331	15,820	13,828	13,853	14,708
All	27,164	26,796	28,242	22,951	23,511	15,547	13,838	13,565	23,701

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	TOTAL
5,406	15,220	16,013	8,285	10,768	4,757	2,076	922	63,448

TABLE 4A

Basic Plan

Minneapolis Employees Retirement Fund
Retired Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	1	-	-	-	-	-	-	-	1
50-54	32	24	-	-	-	-	-	-	56
55-59	90	139	40	-	-	-	-	-	269
60-64	51	223	111	16	-	-	-	-	401
65-69	21	153	223	84	20	-	-	-	501
70-74	3	26	154	139	114	8	1	-	445
75-79	1	3	36	94	198	29	4	-	365
80-84	-	-	3	27	122	104	11	4	271
85+	-	-	-	1	4	165	134	64	368
All	199	568	567	361	458	306	150	68	2,677

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	1,994	-	-	-	-	-	-	-	1,994
50-54	28,103	19,483	-	-	-	-	-	-	24,409
55-59	31,574	30,930	18,009	-	-	-	-	-	29,224
60-64	21,742	27,204	33,549	11,795	-	-	-	-	27,651
65-69	25,595	23,396	27,729	27,041	16,977	-	-	-	25,772
70-74	2,555	27,808	28,561	22,706	29,639	8,057	11,624	-	26,382
75-79	8,594	28,038	25,935	20,769	22,801	13,809	13,058	-	21,770
80-84	-	-	17,801	26,350	20,310	16,173	14,445	8,963	18,891
85+	-	-	-	5,283	14,331	15,820	13,828	13,853	14,708
All	27,164	26,796	28,242	22,951	23,511	15,547	13,838	13,565	23,701

Total Annual Annuity (in Thousands)

YEARS OF RETIREMENT								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
5,406	15,220	16,013	8,285	10,768	4,757	2,076	922	63,448

TABLE 5A
Basic Plan

Minneapolis Teachers' Retirement Fund
Disabled Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	1	-	1	-	-	-	-	-	2
50-54	-	4	-	1	-	-	-	-	5
55-59	-	2	2	1	-	-	-	-	5
60-64	-	-	2	3	-	1	-	-	6
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	1	6	5	5	-	1	-	-	18

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	39,525	-	30,566	-	-	-	-	-	35,045
50-54	-	30,710	-	27,364	-	-	-	-	30,041
55-59	-	51,927	33,104	24,200	-	-	-	-	38,852
60-64	-	-	26,366	28,512	-	10,910	-	-	24,863
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	39,525	37,782	29,901	27,420	-	10,910	-	-	31,319

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
40	227	150	137	-	11	-	-	564

TABLE 5A
Basic Plan

Minneapolis Employees Retirement Fund
Disabled Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	1	-	1	-	-	-	-	-	2
50-54	-	4	-	1	-	-	-	-	5
55-59	-	2	2	1	-	-	-	-	5
60-64	-	-	2	3	-	1	-	-	6
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	1	6	5	5	-	1	-	-	18

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	39,525	-	30,566	-	-	-	-	-	35,045
50-54	-	30,710	-	27,364	-	-	-	-	30,041
55-59	-	51,927	33,104	24,200	-	-	-	-	38,852
60-64	-	-	26,366	28,512	-	10,910	-	-	24,863
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	39,525	37,782	29,901	27,420	-	10,910	-	-	31,319

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
40	227	150	137	-	11	-	-	564

TABLE 6A
Basic Plan

Minneapolis Teachers' Retirement Fund
Survivor Members as of June 30, 1998

Participant Count									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	17	18	22	4	-	-	-	61
50-54	-	2	2	2	-	-	-	-	6
55-59	-	6	-	1	1	-	1	-	9
60-64	-	4	10	6	1	1	-	-	22
65-69	-	3	12	14	7	2	1	-	39
70-74	-	1	3	15	14	3	1	-	37
75-79	-	1	1	8	9	7	1	-	27
80-84	-	1	1	-	4	11	2	2	21
85+	-	3	2	2	-	10	10	11	38
All	-	38	49	70	40	34	16	13	260

Average Annual Annuity									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	12,519	13,275	8,438	10,287	-	-	-	11,124
50-54	-	18,023	26,288	8,178	-	-	-	-	17,496
55-59	-	15,935	-	20,080	1,798	-	9,292	-	14,086
60-64	-	30,459	30,050	20,758	16,939	13,148	-	-	26,226
65-69	-	14,114	32,150	25,607	20,491	10,526	11,882	-	24,692
70-74	-	33,519	28,684	25,080	19,491	12,437	9,596	-	22,042
75-79	-	26,754	26,423	12,929	19,575	17,309	7,312	-	17,084
80-84	-	15,798	17,716	-	19,779	12,659	12,981	9,825	14,166
85+	-	35,665	13,603	5,294	-	13,962	16,072	10,256	14,683
All	-	18,203	23,168	17,076	18,287	13,869	14,048	10,190	17,625

Total Annual Annuity (in Thousands)									
YEARS OF RETIREMENT									
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
	-	692	1,135	1,195	731	472	225	132	4,583

TABLE 6A
Basic Plan

Minneapolis Employees Retirement Fund
Survivor Members as of June 30, 1998

Participant Count									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	17	18	22	4	-	-	-	61
50-54	-	2	2	2	-	-	-	-	6
55-59	-	6	-	1	1	-	1	-	9
60-64	-	4	10	6	1	1	-	-	22
65-69	-	3	12	14	7	2	1	-	39
70-74	-	1	3	15	14	3	1	-	37
75-79	-	1	1	8	9	7	1	-	27
80-84	-	1	1	-	4	11	2	2	21
85+	-	3	2	2	-	10	10	11	38
All	-	38	49	70	40	34	16	13	260

Average Annual Annuity									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	12,519	13,275	8,438	10,287	-	-	-	11,124
50-54	-	18,023	26,288	8,178	-	-	-	-	17,496
55-59	-	15,935	-	20,080	1,798	-	9,292	-	14,086
60-64	-	30,459	30,050	20,758	16,939	13,148	-	-	26,226
65-69	-	14,114	32,150	25,607	20,491	10,526	11,882	-	24,692
70-74	-	33,519	28,684	25,080	19,491	12,437	9,596	-	22,042
75-79	-	26,754	26,423	12,929	19,575	17,309	7,312	-	17,084
80-84	-	15,798	17,716	-	19,779	12,659	12,981	9,825	14,166
85+	-	35,665	13,603	5,294	-	13,962	16,072	10,256	14,683
All	-	18,203	23,168	17,076	18,287	13,869	14,048	10,190	17,625

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<1	1-4	5-9	10-14	15-19	20-24	25-29	30+	TOTAL
-	692	1,135	1,195	731	472	225	132	4,583

July 1, 1998

Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date: \$ 63,132

- 30 -

**Minneapolis Teachers' Retirement Fund
Summary of Plan Provisions**

GENERAL

<i>Eligibility:</i>	A teacher who is employed by the Board of Education of Special School District No. 1 and who is not covered by the Social Security Act. Certain part-time licensed employees are covered as well as employees of the Minneapolis Teachers Retirement Fund.
<i>Contributions:</i>	Member: 8.50% of Salary. Employer: 12.14% of Salary.
<i>Teaching Service:</i>	A year is earned during a calendar year if the Member is employed in a covered position and employee contributions are deducted. Certain part-time service and military service is also included.
<i>Salary:</i>	Total compensation. Excludes lump sum payments for unused vacation leave or unused sick leave at separation.
<i>Average Salary:</i>	Average of the 5 highest consecutive years of Salary.

RETIREMENT***Normal Retirement Benefit:***

<i>Eligibility:</i>	Age 60. Any age with 30 years of Teaching Service.
<i>Amount:</i>	2.50% of Average Salary for each year of Teaching Service.

Early Retirement Benefit:

<i>Eligibility:</i>	Age 55 with less than 30 years of Teaching Service.
<i>Amount:</i>	The greater of: 2.25% of Average Salary for each year of Teaching Service with reduction of 0.25% for each month the Member is under age first eligible for a normal retirement benefit. or 2.50% of Average Salary for each year of Teaching Service assuming augmentation to the age first eligible for a normal retirement benefit at 3.00% per year and actuarial reduction for

TABLE 13A
(cont)
BASIC

each month the Member is under the age first eligible for a normal retirement benefit.

An alternative benefit is available to Members who are at least age 50 and have 7 years of Teaching Service. The benefit is based on the accumulation of the 6.5% "city deposits" to the Retirement Fund. Other benefits are also provided under this alternative depending on the Member's age and Teaching Service.

Form of Payment:

Life annuity.

Actuarially equivalent options are:

- 10 or 15 year certain and life
- 50%, 75% or 100% joint and Survivor with bounce back feature without additional reduction (option is canceled if Member is predeceased by beneficiary.

Benefit Increases:

Benefits are increased 2.0% annually beginning on the January 1 or July 1 if the Member has been receiving benefits for at least 12 months. Beneficiaries are entitled to the same increase the Member would have received.

In addition, if the time weighted rate of return over the last 5 years exceeds 8.5%, the Board of Trustees will increase benefits by the excess rate of return multiplied by the quantity of one minus the rate of contribution deficiency.

Members retired under laws in effect before May 1, 1974 and before any adjustment under Laws 1987, Chapter 372, receive an additional lump sum payment each year. In 1989, this lump sum payment is the greater of \$25 times each full year of Teaching Service and the sum of the benefits paid from any Minnesota public pension plan plus cash payments from the Social Security Administration for the preceding fiscal year July 1, 1988 through June 30, 1989. In each following year the lump sum will increase by the same increase that is applied to regular annuities.

DISABILITY

Disability Benefit:

Eligibility:

Total and permanent disability with 3 years of Teaching Service.

Amount:

An annuity based on the continued accumulation of Member and city contributions at the current rate for a period of 15 years (but

TABLE 13A**(cont)****BASIC**

not beyond age 65) plus an additional benefit equal to the smaller of 100% of the annuity provided by city contributions only or \$150 per month. A Member with 20 years of Teaching Service also receives an additional \$7.50 per month.

Payments stop if disability ceases or death occurs. Benefits may be reduced on resumption of partial employment.

Form of Payment:

Same as for retirement.

Benefit Increases:

Same as for retirement.

DEATH

A choice of Benefit A, Benefit B, or Benefit C.

Benefit A:

Eligibility:

Death before retirement.

Amount:

The accumulation of Member and city contributions plus 5% interest if death occurred before May 16, 1989, or 6% interest if death occurred on or after May 16, 1989. Paid as a life annuity, 15 year certain and life, or lump sum. If an annuity is chosen the beneficiary also receives additional benefits.

Benefit B:

Eligibility:

An active Member with 7 years of Teaching Service. A former Member age 60 with 7 years of Teaching Service who dies before retirement or disability benefits begin.

Amount:

The actuarial equivalent of any benefits the Member could have received if he had resigned on the date of death. Paid to the beneficiary in the form of a life annuity or a 15 year certain and life annuity.

Benefit C:

Eligibility:

An active Member who dies and leaves surviving children.

Amount:

A monthly benefit of \$248.30 to the surviving widow while caring for a child and an additional \$248.30 per month for each surviving dependent child. The maximum family benefit is \$579.30 per month. These benefits may be increased by the Board of Trustees.

Benefits to the widow cease upon death or when no longer caring for an eligible child. Benefits for dependent children cease upon marriage or age 18 (age 22 if a full time student).

Benefit Increases:

Same as retirement.

TERMINATION

Deferred Annuity:

Eligibility:

7 years of Teaching Service.

Amount:

Benefit computed under law in effect at termination and increased by the following annual percentage:

3.00% until January 1 of the year following the attainment of 55, and,

5.00% thereafter until the annuity begins.

In addition, the interest earned on the Member and city contributions between termination and age 60 can be applied to provide an additional annuity.

Refund of Contributions:

Eligibility:

Termination of teaching service.

Amount:

Member's contributions with 6.00% interest. A deferred annuity may be elected in lieu of a refund.

TABLE 3B
Coordinated Plan

Minneapolis Teachers' Retirement Fund
Active Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF SERVICE								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<20	1	-	-	-	-	-	-	-	1
20-24	83	20	-	-	-	-	-	-	103
25-29	186	320	37	-	-	-	-	-	543
30-34	87	271	210	7	-	-	-	-	575
35-39	60	160	246	131	15	-	-	-	612
40-44	117	202	223	132	38	-	-	-	712
45-49	47	138	245	134	54	3	-	-	621
50-54	33	90	167	96	46	4	-	-	436
55-59	14	44	86	64	33	-	2	-	243
60-64	13	13	36	20	12	1	-	-	95
65+	3	6	13	5	2	-	-	-	29
All	644	1,264	1,263	589	200	8	2	-	3,970

Age	Average Annual Earnings								TOTAL
	YEARS OF SERVICE								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<20	22,409	-	-	-	-	-	-	-	22,409
20-24	9,833	23,568	-	-	-	-	-	-	12,500
25-29	14,303	26,174	32,705	-	-	-	-	-	22,553
30-34	17,032	30,185	34,945	45,517	-	-	-	-	30,120
35-39	15,256	32,696	40,667	46,781	55,633	-	-	-	37,767
40-44	14,853	30,191	42,181	48,658	51,842	-	-	-	36,005
45-49	21,093	32,361	42,239	53,489	53,692	53,501	-	-	41,921
50-54	17,144	37,746	42,654	54,378	55,926	63,108	-	-	43,879
55-59	22,047	36,073	38,160	52,216	56,694	-	65,044	-	43,294
60-64	15,550	30,271	33,102	43,729	50,709	51,274	-	-	34,965
65+	2,261	5,545	25,106	38,318	51,885	-	-	-	22,820
All	15,075	30,248	39,771	50,366	54,298	58,026	65,044	-	35,086

Total Annual Earnings (in Thousands)								
YEARS OF SERVICE								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
9,709	38,234	50,231	29,665	10,860	464	130	-	139,293

TABLE 3B
Coordinated Plan

Minneapolis Employees Retirement Fund
Active Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF SERVICE								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<20	1	-	-	-	-	-	-	-	1
20-24	83	20	-	-	-	-	-	-	103
25-29	186	320	37	-	-	-	-	-	543
30-34	87	271	210	7	-	-	-	-	575
35-39	60	160	246	131	15	-	-	-	612
40-44	117	202	223	132	38	-	-	-	712
45-49	47	138	245	134	54	3	-	-	621
50-54	33	90	167	96	46	4	-	-	436
55-59	14	44	86	64	33	-	2	-	243
60-64	13	13	36	20	12	1	-	-	95
65+	3	6	13	5	2	-	-	-	29
All	644	1,264	1,263	589	200	8	2	-	3,970

Age	Average Annual Earnings								TOTAL
	YEARS OF SERVICE								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<20	22,409	-	-	-	-	-	-	-	22,409
20-24	9,833	23,568	-	-	-	-	-	-	12,500
25-29	14,303	26,174	32,705	-	-	-	-	-	22,553
30-34	17,032	30,185	34,945	45,517	-	-	-	-	30,120
35-39	15,256	32,696	40,667	46,781	55,633	-	-	-	37,767
40-44	14,853	30,191	42,181	48,658	51,842	-	-	-	36,005
45-49	21,093	32,361	42,239	53,489	53,692	53,501	-	-	41,921
50-54	17,144	37,746	42,654	54,378	55,926	63,108	-	-	43,879
55-59	22,047	36,073	38,160	52,216	56,694	-	65,044	-	43,294
60-64	15,550	30,271	33,102	43,729	50,709	51,274	-	-	34,965
65+	2,261	5,545	25,106	38,318	51,885	-	-	-	22,820
All	15,075	30,248	39,771	50,366	54,298	58,026	65,044	-	35,086

Total Annual Earnings (in Thousands)								
YEARS OF SERVICE								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
9,709	38,234	50,231	29,665	10,860	464	130	-	139,293

TABLE 4B
Coordinated Plan

Minneapolis Teachers' Retirement Fund
Retired Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	-	-	-	-	-	-	-	-	-
50-54	-	6	-	-	-	-	-	-	6
55-59	2	8	-	-	-	-	-	-	10
60-64	5	16	1	-	-	-	-	-	22
65-69	5	11	6	-	-	-	-	-	22
70-74	-	3	4	-	-	-	-	-	7
75-79	-	1	-	-	-	-	-	-	1
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	12	45	11	-	-	-	-	-	68

Age	Average Annual Annuity								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	-	-	-	-	-	-	-	-	-
50-54	-	5,716	-	-	-	-	-	-	5,716
55-59	5,378	7,292	-	-	-	-	-	-	6,909
60-64	5,701	8,162	3,663	-	-	-	-	-	7,398
65-69	8,785	6,988	3,436	-	-	-	-	-	6,428
70-74	-	4,692	7,218	-	-	-	-	-	6,136
75-79	-	2,179	-	-	-	-	-	-	2,179
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	6,932	7,030	4,832	-	-	-	-	-	6,657

Total Annual Annuity (in Thousands)									
YEARS OF RETIREMENT									
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
	83	316	53	-	-	-	-	-	453

TABLE 4B
Coordinated Plan

Minneapolis Employees Retirement Fund
Retired Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	-	-	-	-	-	-	-	-	-
50-54	-	6	-	-	-	-	-	-	6
55-59	2	8	-	-	-	-	-	-	10
60-64	5	16	1	-	-	-	-	-	22
65-69	5	11	6	-	-	-	-	-	22
70-74	-	3	4	-	-	-	-	-	7
75-79	-	1	-	-	-	-	-	-	1
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	12	45	11	-	-	-	-	-	68

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	-	-	-	-	-	-	-	-
50-54	-	5,716	-	-	-	-	-	-	5,716
55-59	5,378	7,292	-	-	-	-	-	-	6,909
60-64	5,701	8,162	3,663	-	-	-	-	-	7,398
65-69	8,785	6,988	3,436	-	-	-	-	-	6,428
70-74	-	4,692	7,218	-	-	-	-	-	6,136
75-79	-	2,179	-	-	-	-	-	-	2,179
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	6,932	7,030	4,832	-	-	-	-	-	6,657

Total Annual Annuity (in Thousands)									
YEARS OF RETIREMENT									
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
	83	316	53	-	-	-	-	-	453

TABLE 5B
Coordinated Plan

Minneapolis Teachers' Retirement Fund
Disabled Members as of June 30, 1998

Participant Count									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	1	-	-	-	-	-	-	1
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	1	-	-	-	-	-	-	1

Average Annual Annuity									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	6,929	-	-	-	-	-	-	6,929
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	6,929	-	-	-	-	-	-	6,929

Total Annual Annuity (in Thousands)									
YEARS OF RETIREMENT									
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
	-	7	-	-	-	-	-	-	7

TABLE 5B
Coordinated Plan

Minneapolis Employees Retirement Fund
Disabled Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	1	-	-	-	-	-	-	1
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	1	-	-	-	-	-	-	1

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	6,929	-	-	-	-	-	-	6,929
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	6,929	-	-	-	-	-	-	6,929

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
-	7	-	-	-	-	-	-	7

TABLE 6B
Coordinated Plan

Minneapolis Teachers' Retirement Fund
Survivor Members as of June 30, 1998

Participant Count									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	-	-	-	-	-	-	-	-

Average Annual Annuity									
YEARS OF RETIREMENT									
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	-	-	-	-	-	-	-	-

Total Annual Annuity (in Thousands)									
YEARS OF RETIREMENT									
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
	-	-	-	-	-	-	-	-	-

TABLE 6B
Coordinated Plan

Minneapolis Employees Retirement Fund
Survivor Members as of June 30, 1998

Age	Participant Count								TOTAL
	YEARS OF RETIREMENT								
	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	
<50	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	-	-	-	-	-	-	-	-

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
<50	-	-	-	-	-	-	-	-	-
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	-	-	-	-	-	-	-	-
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	-	-	-	-	-	-	-	-

Total Annual Annuity (in Thousands)								
YEARS OF RETIREMENT								
<u><1</u>	<u>1-4</u>	<u>5-9</u>	<u>10-14</u>	<u>15-19</u>	<u>20-24</u>	<u>25-29</u>	<u>30+</u>	<u>TOTAL</u>
-	-	-	-	-	-	-	-	-

Minneapolis Teachers' Retirement Fund
Determination of Contribution Sufficiency
(dollars in thousands)

July 1, 1998

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 354A		
1. Employee Contributions	5.50%	\$ 8,096
2. Employer Contributions	8.14%	11,982
3. Supplemental Contribution *		
a. 1993 Legislation	2.38%	3,497
b. 1996 Legislation	1.07%	1,564
c. 1997 Legislation	6.16%	9,065
4. Administrative Expense Assessment	0.04%	59
5. Total	23.29%	\$ 34,263
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	7.77%	\$ 11,439
b. Disability Benefits	0.79%	1,167
c. Surviving Spouse and Child Benefits	0.18%	260
d. Deferred Retirements	0.57%	837
e. Refund Liability Due to Death or Withdrawal	0.23%	336
f. Total	9.54%	\$ 14,039

Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date: \$ 147,194

* Includes contributions from School District #1, the City of Minneapolis, and matching State contributions.

**Minneapolis Teachers' Retirement Fund
Summary of Plan Provisions**

GENERAL

<i>Eligibility:</i>	A teacher who is employed by the Board of Education of Special School District No. 1 and who is covered by the Social Security Act. Certain part-time licensed employees are covered as well as employees of the Minneapolis Teachers Retirement Fund (unless they belong to the Minneapolis Employees Retirement Fund).
<i>Contributions:</i>	Member: 5.50% of Salary. Employer: 8.14% of Salary.
<i>Allowable Service:</i>	A year is earned during a school year if the Member is employed in a covered position and employee contributions are deducted. May also include certain part-time service, extended leaves of absence, sabbatical leaves, and military service.
<i>Salary:</i>	Total compensation. Excludes lump sum payments for unused vacation leave or unused sick leave at separation.
<i>Average Salary:</i>	Average of the 5 highest consecutive years of Salary. Average Salary is based on all Allowable Service if less than 5 years.

RETIREMENT

Normal Retirement Benefit:

<i>Eligibility:</i>	
First hired before July 1, 1989:	Age 65 and 3 years of Allowable Service. Proportionate Retirement Annuity is available at age 65 and 1 year of Allowable Service.
First hired after July 1, 1989:	The greater of age 65 or the age eligible for full Social Security retirement benefits (but not later than age 66) and 3 years of Allowable Service. Proportionate Retirement Annuity is available at normal retirement age and 1 year of Allowable Service.

Amount: 1.70% of Average Salary for each year of Allowable Service.

Early Retirement Benefit:

Eligibility: Age 55 and 3 years of Allowable Service. Any age with 30 years of Allowable Service. Rule of 90: Age plus Allowable Service totals 90.

Amount:

**First hired before
July 1, 1989:**

The greater of:

1.20% of Average Salary for each of the first 10 years of Allowable Service plus 1.70% of Average Salary for each subsequent year of Allowable Service with reduction of 0.25% for each month the Member is under age 65 (age 62 if 30 years of Allowable Service). No reduction if age plus years of Allowable Service totals 90.

or

1.70% of Average Salary for each year of Allowable Service assuming augmentation to age 65 at 3.00% per year and actuarial reduction for each month the Member is under age 65.

**First hired after
July 1, 1989:**

1.70% of Average Salary for each year of Allowable Service assuming augmentation to the age eligible for Normal Retirement benefits at 3.00% per year and actuarial reduction for each month the Member is under the Normal Retirement Age.

Form of Payment:

Life annuity. Actuarial equivalent options are:

- Guaranteed refund
- 10 or 15 year certain and life
- 50%, 75%, or 100% joint and survivor with bounce back feature without additional reduction (option is canceled if Member is predeceased by beneficiary).

Benefit Increases:

Benefits are increased 2.0% annually beginning on the

January 1 or July 1 if the Member has been receiving benefits for at least 12 months. Beneficiaries are entitled to the increase the Member would have received.

In addition, if the time weighted rate of return over the last 5 years exceeds 8.5%, the Board of Trustees will increase benefits by the excess rate of return multiplied by the quantity of one minus the rate of contribution deficiency.

DISABILITY

Disability Benefit:

Eligibility:

Total and permanent disability before the normal retirement age with 3 years of Allowable Service. Also, at least 2 of the years of Allowable Service must have been uninterrupted.

Amount:

Normal Retirement Benefit based on Allowable Service and Average Salary at disability without reduction for commencement before the normal retirement age. Benefit is reduced by Workers' Compensation.

Payments are recomputed as a retirement at the normal retirement age. Payments stop if disability ceases or death occurs. Benefits may be reduced on resumption of partial employment.

Form of Payment:

Same as for retirement.

Benefit Increases:

Same as for retirement.

Retirement After Disability:

Eligibility:

Normal retirement age with continued disability.

Amount:

Any optional annuity continues. Otherwise the larger of the disability benefit paid before normal retirement age or the normal retirement benefit available at the normal retirement age, or an actuarially equivalent optional annuity.

Benefit Increases:

Same as for retirement.

DEATH

Surviving Spouse Annuity:

Eligibility: Any active Member who dies with 3 years of Allowable Service prior to retirement or disability benefits commence.

Any former Member who dies before retirement or disability benefits commence, if age 50 with 3 years of Allowable Service or any age with 30 years of Allowable Service. If the former Member dies prior to age 55 benefits are deferred to age 55.

Amount: Survivor's payment of the 100% joint and survivor benefit the Member could have elected if terminated.

Upon the death of any vested active member, the benefit is calculated using 50% of otherwise applicable early retirement reduction from the Member's age 55 to the Member's benefit commencement age.

Benefit Increases: Same as for retirement.

Refund of Contributions:

Eligibility: Member or former Member dies before receiving any retirement benefits and survivor's benefits are not payable.

Amount: Member's contributions with 6.00% interest.

TERMINATION

Deferred Annuity:

Eligibility: 3 years of Allowable Service.

Amount: Benefit computed under law in effect at termination and increased by the following annual percentage:

3.00% until January 1 of the year following the attainment of 55, and

5.00% thereafter until the annuity begins.

TABLE 13B
(cont)
COORDINATED

Refund of Contributions:

Amount is payable as a normal or early retirement benefit.

Eligibility:

Termination of teaching service.

Amount:

Member's contributions with 6.00% interest. A deferred annuity may be elected in lieu of a refund.

Minneapolis Teachers' Retirement Fund
Schedule of Funding Progress
(dollars in thousands)

July 1, 1998

Actuarial Valuation Date	Actuarial Value of Assets (A)	Actuarial Accrued Liability (B)	Unfunded AAL (UAAL) (B)-(A)	Funded Ratio (A)/(B)	Actual Covered Payroll (Previous FY) (C)	UAAL as % of Covered Payroll ((B)-(A))/(C)
07/01/91	\$ 424,677	\$ 826,574	\$ 401,897	51.38%	\$ 119,065	337.54%
07/01/92	457,978	840,840	382,862	54.47%	136,870	279.73%
07/01/93	501,741	878,693	376,952	57.10%	135,505	278.18%
07/01/94	514,138	920,470	406,332	55.86%	155,671	261.02%
07/01/95	554,960	983,249	428,289	56.44%	163,824	261.43%
07/01/96	612,852	1,055,063	442,211	58.09%	171,060	258.51%
07/01/97	673,209	1,173,412	500,203	57.37%	185,229	270.05%
07/01/98	809,978	1,267,424	457,446	63.91%	199,376	229.44%

Minneapolis Teachers' Retirement Fund
Schedule of Employer Contributions
(dollars in thousands)

July 1, 1998

Year Ended June 30	Actuarially Required Contribution Rate (A)	Actual Covered Payroll (B)	Actual Member Contributions (C)	Annual Required Contributions [(A)*(B)]-(C)	Actual Employer Contributions*	Percentage Contributed
1991	30.40%	\$ 119,065	\$ 9,337	\$ 26,859	\$ 12,358	46.01%
1992	30.55%	136,870	10,307	31,507	13,638	43.29%
1993	27.43%	135,505	10,713	26,456	13,711	51.83%
1994	25.83%	155,671	11,507	28,703	16,355	56.98%
1995	25.03%	163,824	10,470	30,535	21,194	69.41%
1996	25.18%	171,060	11,294	31,779	23,085	72.64%
1997	25.15%	185,229	11,697	34,888	24,021	68.85%
1998	28.23%	199,376	13,852	42,432	43,640	102.85%

*Includes contributions from other sources (if applicable)