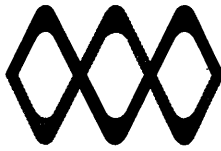


Minneapolis Teachers' Retirement Fund
ACTUARIAL VALUATION REPORT

July 1, 1999



MILLIMAN & ROBERTSON, INC.

Actuaries & Consultants

Internationally WOODROW MILLIMAN

Suite 1850, 8500 Normandale Lake Boulevard, Minneapolis, Minnesota 55437-3830

Telephone: 612/897-5300

Fax: 612/897-5301

November 5, 1999

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

Re: *Minneapolis Teachers' Retirement Fund*
July 1, 1999 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, 1999.

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.
Consulting Actuary

Enclosure

Minneapolis Teachers' Retirement Fund
Table of Contents

REPORT HIGHLIGHTS	1
COMMENTARY	
Purpose.....	2
Report Highlights.....	2
Asset Information.....	2
Actuarial Balance Sheet.....	2
Actuarial Cost Method.....	3
Sources of Actuarial Gains and Losses	3
Contribution Sufficiency.....	3
Changes in Actuarial Assumptions.....	4
Changes in Plan Provisions.....	4
 ASSET INFORMATION	
Table 1 - Accounting Balance Sheet.....	5
Table 2 - Changes in Assets Available for Benefits	6
 MEMBERSHIP DATA	
Table 3 - Active Members	7
Table 4 - Service Retirements.....	8
Table 5 - Disability Retirements.....	9
Table 6 - Survivors.....	10
Table 7 - Reconciliation of Members	11
 FUNDING STATUS	
Table 8 - Actuarial Balance Sheet	12
Table 9 - Determination of Unfunded Actuarial Accrued Liability (UAAL) and Supplemental Contribution Rate	13
Table 10 - Changes in Unfunded Actuarial Accrued Liability (UAAL)	14
Table 11 - Determination of Contribution Sufficiency	15
 ACTUARIAL ASSUMPTIONS	
Table 12 - Summary of Actuarial Assumptions and Methods	16

R E C E I V E D

NOV 17 1999

LEGISLATIVE REFERENCE LIBRARY
STATE OFFICE BUILDING
ST. PAUL, MN 55155

BASIC PLAN

MEMBERSHIP DATA

Table 3A -	Active Members	26
Table 4A -	Service Retirements.....	27
Table 5A -	Disability Retirements.....	28
Table 6A -	Survivors.....	29

FUNDING STATUS

Table 11A -	Determination of Contribution Sufficiency	30
-------------	---	----

PLAN PROVISIONS

Table 13A -	Summary of Plan Provisions.....	31
-------------	---------------------------------	----

COORDINATED PLAN

MEMBERSHIP DATA

Table 3B -	Active Members	35
Table 4B -	Service Retirements.....	36
Table 5B -	Disability Retirements.....	37
Table 6B -	Survivors Retirements.....	38

FUNDING STATUS

Table 11B -	Determination of Contribution Sufficiency	39
-------------	---	----

PLAN PROVISIONS

Table 13B -	Summary of Plan Provisions.....	40
-------------	---------------------------------	----

TOTAL PLAN

GASB DISCLOSURE

Table 14 -	Schedule of Funding Progress.....	44
Table 15 -	Schedule of Employer Contributions.....	45

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

	July 1, 1998 Valuation	July 1, 1999 Valuation
A. CONTRIBUTIONS % OF PAYROLL (Table 11)		
1. Statutory Contributions - Chapter 422A	25.39%	23.79%
2. Required Contributions - Chapter 356	25.80%	23.88%
3. Sufficiency / (Deficiency)	(0.41%)	(0.09%)
B. FUNDING RATIOS		
1. Accrued Benefit Funding Ratio		
a. Current Assets (Table 1)	\$ 809,978	\$ 939,459
b. Current Benefit Obligations (Table 8)	1,217,128	1,342,714
c. Funding Ratio	66.55%	69.97%
2. Accrued Liability Funding Ratio		
a. Current Assets (Table 1)	\$ 809,978	\$ 939,459
b. Actuarial Accrued Liability (Table 9)	1,267,424	1,394,357
c. Funding Ratio	63.91%	67.38%
3. Projected Benefit Funding Ratio (Table 8)		
a. Current and Expected Future Assets	\$ 1,380,010	\$ 1,542,537
b. Current and Expected Future Benefit Obligations	1,467,320	1,632,995
c. Funding Ratio	94.05%	94.46%
C. PLAN PARTICIPANTS		
1. Active Members		
a. Number (Table 3)	4,996	5,308
b. Projected Annual Earnings	\$ 210,326	\$ 242,288
c. Average Annual Earnings (Actual dollars)	\$ 42,099	\$ 45,646
d. Average Age	43.4	43.1
e. Average Service	9.5	9.0
f. Additional Members on Leave of Absence *	72	74
2. Others		
a. Service Retirements (Table 4)	2,745	2,881
b. Disability Retirements (Table 5)	19	21
c. Survivors (Table 6)	260	243
d. Deferred Retirements (Table 7)	711	715
e. Terminated Other Non-Vested (Table 7)	1,443	1,628
f. Total	5,178	5,488

* 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 69.97%. The corresponding ratio for the prior year was 66.55%.

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 1999 the ratio is 67.38%, which is an increase from the 1998 value of 63.91%.

The *Projected Benefit Funding Ratio* is a measure of the adequacy or deficiency in the contribution level. This year's ratio of 94.46% shows that the current statutory contributions are insufficient in the long run.

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 23.79% compared to the Required Contribution Rate of 23.88%.

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, 1999

	Market Value	Cost Value
A. ASSETS		
1. Cash, Equivalents, Short-Term Securities	\$ 128,360	\$ 128,360
2. Investments		
a. Fixed Income	379,478	392,027
b. Equity	510,866	407,142
c. Real Estate	19,640	19,640
3. Equity in Minnesota Post-Retirement Investment Fund	-	-
4. Other Assets	14,948	14,948
B. TOTAL ASSETS	<u>\$ 1,053,292</u>	<u>\$ 962,117</u>
C. AMOUNTS CURRENTLY PAYABLE	\$ 53,050	\$ 53,050
D. ASSETS AVAILABLE FOR BENEFITS		
1. Member Reserves	\$ 271,112	\$ 271,112
2. Employer Reserves	729,130	637,955
3. MPRIF Reserves	-	-
4. Non-MPRIF Reserves	-	-
5. Total Assets Available for Benefits	<u>\$ 1,000,242</u>	<u>\$ 909,067</u>
E. TOTAL AMOUNTS CURRENTLY PAYABLE AND ASSETS AVAILABLE FOR BENEFITS	<u>\$ 1,053,292</u>	<u>\$ 962,117</u>
F. DETERMINATION OF ACTUARIAL VALUE OF ASSETS		
1. Cost Value of Assets Available for Benefits (D.5)		\$ 909,067
2. Market Value of Assets Available for Benefits (D.5)	\$ 1,000,242	
3. Cost Value of Assets Available for Benefits (D.5)	909,067	
4. Market over Cost (F.2 - F.3)	<u>\$ 91,175</u>	
5. 1/3 of Market over Cost (F.4 / 3)		<u>30,392</u>
6. Actuarial Value of Assets (F.1 + F.5)		<u>\$ 939,459</u>

TABLE 2

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

June 30, 1999

	Market Value	Cost Value
A. ASSETS AVAILABLE AT BEGINNING OF PERIOD	\$ 907,332	\$ 761,301
B. OPERATING REVENUES		
1. Member Contributions	\$ 14,935	\$ 14,935
2. Employer Contributions	20,215	20,215
3. Supplemental Contributions *	20,261	20,261
4. Investment Income	32,755	32,755
5. MPRIF Income	-	-
6. Net Realized Gain / (Loss)	141,106	141,106
7. Other	-	-
8. Net Change in Unrealized Gain / (Loss)	(54,856)	-
9. Total Operating Revenue	\$ 174,416	\$ 229,272
C. OPERATING EXPENSES		
1. Service Retirements	\$ 70,071	\$ 70,071
2. Disability Benefits	694	694
3. Survivor Benefits	5,048	5,048
4. Refunds	624	624
5. Administrative Expenses	532	532
6. Investment Expenses	4,537	4,537
7. Total Operating Expenses	\$ 81,506	\$ 81,506
D. CHANGE IN ACCOUNTING METHOD	\$ -	\$ -
E. ASSETS AVAILABLE AT END OF PERIOD	\$ 1,000,242	\$ 909,067

* 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, 1999

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	-	-	-	-	-	-	-	-	-
20-24	108	24	-	-	-	-	-	-	132
25-29	188	353	31	-	-	-	-	-	572
30-34	146	285	262	6	-	-	-	-	699
35-39	75	182	252	144	23	-	-	-	676
40-44	114	150	213	123	49	5	-	-	654
45-49	55	200	254	167	73	68	28	-	845
50-54	57	111	189	138	99	79	194	87	954
55-59	23	36	103	91	59	37	85	83	517
60-64	8	21	42	32	23	17	25	30	198
65+	2	8	17	7	5	5	9	8	61
All	776	1,370	1,363	708	331	211	341	208	5,308

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	-	-	-	-	-	-	-	-	-
20-24	13,871	23,264	-	-	-	-	-	-	15,579
25-29	15,893	27,647	34,650	-	-	-	-	-	24,163
30-34	18,702	31,600	38,000	46,699	-	-	-	-	31,435
35-39	21,608	32,802	43,601	49,322	52,279	-	-	-	39,768
40-44	18,481	32,013	44,507	49,749	57,866	57,171	-	-	39,188
45-49	20,079	31,552	44,210	56,981	55,960	61,823	69,733	-	45,446
50-54	23,306	36,356	45,438	55,124	59,072	59,018	62,729	64,451	52,250
55-59	22,153	37,808	41,616	54,128	60,260	63,130	64,929	63,258	53,662
60-64	6,576	26,302	42,521	45,629	58,904	62,449	61,367	61,993	48,795
65+	7,770	12,546	18,093	37,140	65,599	52,317	59,952	45,882	35,732
All	17,982	30,989	42,329	52,642	58,034	60,717	63,680	62,906	41,107

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>	
13,954	42,455	57,695	37,271	19,209	12,811	21,715	13,084	218,195	

TABLE 4
Total Plan

Minneapolis Teachers' Retirement Fund
Retired Members as of June 30, 1999

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	20	57	-	-	-	-	-	-	77
55-59	31	252	42	-	-	-	-	-	325
60-64	20	246	175	32	-	-	-	-	473
65-69	6	146	240	131	26	-	-	-	549
70-74	2	19	123	205	114	10	1	-	474
75-79	-	1	16	105	194	46	4	1	367
80-84	-	1	-	30	113	92	13	6	255
85+	-	-	-	2	15	139	129	76	361
All	79	722	596	505	462	287	147	83	2,881

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	29,945	26,644	-	-	-	-	-	-	27,501
55-59	18,111	33,110	20,424	-	-	-	-	-	30,040
60-64	18,411	24,453	33,293	21,914	-	-	-	-	27,296
65-69	16,157	19,992	29,968	31,732	24,034	-	-	-	27,304
70-74	12,216	23,664	25,385	27,565	30,471	13,910	12,491	-	27,157
75-79	-	42,342	26,511	26,508	25,287	21,296	11,516	15,465	25,059
80-84	-	8,768	-	27,772	21,965	20,395	12,011	12,288	21,295
85+	-	-	-	7,379	19,927	17,366	15,010	14,176	15,904
All	20,885	26,727	29,233	28,000	25,509	18,846	14,633	14,055	25,346

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>	
1,650	19,297	17,423	14,140	11,785	5,409	2,151	1,167	73,022	

TABLE 5
Total Plan

Minneapolis Teachers' Retirement Fund
Disabled Members as of June 30, 1999

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	2	1	-	-	-	-	7
55-59	-	1	3	1	-	-	-	-	5
60-64	-	2	1	3	-	1	-	-	7
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	1	7	7	5	-	1	-	-	21

	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	8,592	-	32,845	-	-	-	-	-	20,719
50-54	-	44,061	16,423	29,241	-	-	-	-	34,047
55-59	-	78,505	40,694	26,005	-	-	-	-	45,319
60-64	-	20,270	43,291	30,639	-	11,724	-	-	26,782
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	8,592	42,184	33,009	29,433	-	11,724	-	-	33,040

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>
9	295	231	147	-	12	-	-	694

TABLE 6
Total Plan

Minneapolis Teachers' Retirement Fund
Survivor Members as of June 30, 1999

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	2	11	20	10	4	-	-	-	47
50-54	1	2	4	3	-	-	-	-	10
55-59	-	4	-	-	-	-	1	-	5
60-64	2	4	6	3	-	1	-	-	16
65-69	3	2	9	14	7	3	1	-	39
70-74	2	1	2	10	23	2	1	-	41
75-79	4	1	1	7	9	10	-	1	33
80-84	1	1	1	-	1	7	3	1	15
85+	-	2	3	-	1	9	8	14	37
All	15	28	46	47	45	32	14	16	243

	Average Annual Annuity								
	YEARS OF RETIREMENT								
Age	<1	1-4	5-9	10-14	15-19	20-24	25-29	30+	TOTAL
<50	7,808	10,782	11,415	15,217	11,054	-	-	-	11,892
50-54	57,412	19,367	34,812	9,193	-	-	-	-	26,297
55-59	-	8,994	-	-	-	-	9,985	-	9,192
60-64	4,704	25,909	31,749	30,187	-	14,129	-	-	25,514
65-69	10,048	20,379	30,097	28,214	26,782	16,820	12,768	-	25,320
70-74	15,911	36,019	42,366	33,089	21,793	11,206	10,312	-	24,815
75-79	15,703	28,750	28,394	16,118	22,932	19,052	-	7,857	19,320
80-84	31,943	16,976	19,037	-	34,239	13,506	10,287	12,276	15,992
85+	-	33,444	25,708	-	19,563	15,007	16,167	12,044	16,124
All	15,944	17,369	22,570	23,596	22,069	15,848	13,804	11,797	19,568

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>
239	486	1,038	1,109	993	507	193	189	4,755

TABLE 7
TOTAL PLAN

Minneapolis Teachers' Retirement Fund
Reconciliation of Members

	<u>Actives</u>	<u>Terminated</u>		
		<u>Leave of Absence</u>	<u>Deferred Retirement</u>	<u>Other Non-Vested</u>
A. ON JUNE 30, 1998	4,996	72	711	1,443
B. ADDITIONS	816	10	78	283
C. DELETIONS				
1 Service Retirement	(169)	(7)	(36)	(18)
2 Disability	(9)		(1)	
3 Death – Survivor	(2)			
4 Death – Other				
5 Terminated – Deferred	(69)		—	
6 Terminated – Refund	(41)	(1)	(15)	(37)
7 Terminated - Other Non-Vested	(279)			
8 Returned as Active	65		(22)	(43)
D. DATA ADJUSTMENTS				1
1 Vested	3,162			
2 Non-Vested	2,146			
E. TOTAL ON JUNE 30, 1999	5,308	74	715	1,629

	<u>Recipients</u>		
	<u>Retirement Annuitants</u>	<u>Disabled</u>	<u>Survivors</u>
A. ON JUNE 30, 1998	2,745	19	260
B. ADDITIONS	246	3	16
C. DELETIONS			
1 Service Retirement		(1)	
2 Death	(110)		(14)
3 Annuity Expired			(19)
4 Returned as Active			
D. DATA ADJUSTMENTS			
E. TOTAL ON JUNE 30, 1999	2,881	21	243

TABLE 8

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

July 1, 1999

A. CURRENT ASSETS (Table 1; Line F.6)				\$	939,459
B. EXPECTED FUTURE ASSETS					
1. Present Value of Expected Future Statutory Supplemental Contributions				\$	364,440
2. Present Value of Future Normal Costs					238,638
3. Total Expected Future Assets					<u>603,078</u>
C. TOTAL CURRENT AND EXPECTED FUTURE ASSETS				\$	<u>1,542,537</u>
D. CURRENT BENEFIT OBLIGATIONS					
1. Benefit Recipients		Non-Vested	Vested		Total
a. Retirement Annuities			\$ 825,928	\$	825,928
b. Disability Benefits			6,776		6,776
c. Surviving Spouse and Child Benefits			38,621		38,621
2. Deferred Retirements			18,261		18,261
3. Former Members Without Vested Rights			28		28
4. Active Members					
a. Retirement Annuities *	\$	2,011	413,241		415,252
b. Disability Benefits		20,155	-		20,155
c. Surviving Spouse and Child Benefits		4,546	-		4,546
d. Deferred Retirements		216	10,462		10,678
e. Refund Liability Due to Death or Withdrawal		-	2,469		2,469
5. Total Current Benefit Obligations	\$	26,928	\$ 1,315,786	\$	<u>1,342,714</u>
E. EXPECTED FUTURE BENEFIT OBLIGATIONS				\$	<u>290,281</u>
F. TOTAL CURRENT AND EXPECTED FUTURE BENEFIT OBLIGATIONS				\$	<u>1,632,995</u>
G. CURRENT UNFUNDED ACTUARIAL LIABILITY (D.5 - A)				\$	403,255
H. CURRENT AND FUTURE UNFUNDED ACTUARIAL LIABILITY (F - C)				\$	90,458

* Includes members on leave of absence.

TABLE 9

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

(dollars in thousands)

July 1, 1999

	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	\$ 669,995	\$ 190,871	\$ 479,124
b. Disability Benefits	39,026	19,897	19,129
c. Surviving Spouse and Child Benefits	9,279	4,725	4,554
d. Deferred Retirements	19,060	16,427	2,633
e. Refund Liability Due to Death or Withdrawal	6,021	6,718	(697)
f. Total	<u>\$ 743,381</u>	<u>\$ 238,638</u>	<u>\$ 504,743</u>
2. Deferred Retirements	\$ 18,261		\$ 18,261
3. Former Members Without Vested Rights	28		28
4. Annuitants in MPRIF	-		-
5. Annuitants Not in MPRIF	871,325		871,325
6. Total	<u><u>\$ 1,632,995</u></u>	<u><u>\$ 238,638</u></u>	<u><u>\$ 1,394,357</u></u>
B. DETERMINATION OF UNFUNDED ACTUARIAL ACCRUED LIABILITY (UAAL)			
1. Actuarial Accrued Liability (A.6)			\$ 1,394,357
2. Current Assets (Table 1; Line F.6)			<u>939,459</u>
3. Unfunded Actuarial Accrued Liability (B.1 - B.2)			<u><u>\$ 454,898</u></u>
C. DETERMINATION OF SUPPLEMENTAL CONTRIBUTION RATE			
1. Present Value of Future Payrolls Through the Amortization Date of June 30, 2020			3,569,043
2. Supplemental Contribution Rate (B.3 / C.1)			<u><u>12.75%</u></u>

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

June 30, 1999

A. UAAL AT BEGINNING OF YEAR	\$ 457,446
B. CHANGE DUE TO INTEREST REQUIREMENTS AND CURRENT RATE OF FUNDING	
1. Normal Cost and Expenses	\$ 24,129
2. Contributions	(55,411)
3. Interest	38,579
4. Total	<u>\$ 7,297</u>
C. EXPECTED UAAL AT END OF YEAR (A + B.4)	<u>\$ 464,743</u>
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	14,753
6. Contribution Income (b)	-
7. Investment Income (c)	(22,485)
8. Mortality of Annuitants	1,809
9. Other Items	(3,922)
10. Total	<u>\$ (9,845)</u>
E. UAAL AT END OF YEAR BEFORE PLAN AMENDMENTS AND CHANGES IN ACTUARIAL ASSUMPTIONS (C + D.5)	\$ 454,898
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><u>\$ 454,898</u></u>

(a) Included in Item D.8.

(b) Included in Item D.9.

(c) Includes a gross investment gain of \$83,107 offset by \$60,622 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, 1999

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 354A		
1. Employee Contributions	6.21%	\$ 15,035
2. Employer Contributions	9.08%	22,001
3. Supplemental Contribution *		
a. 1993 Legislation	2.06%	5,000
b. 1996 Legislation	-1.09%	2,640
c. 1997 Legislation	5.35%	12,954
4. Administrative Expense Assessment	0.00%	-
5. Total	23.79%	\$ 57,630
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	8.74%	\$ 21,164
b. Disability Benefits	0.88%	2,132
c. Surviving Spouse and Child Benefits	0.19%	470
d. Deferred Retirements	0.79%	1,908
e. Refund Liability Due to Death or Withdrawal	0.30%	737
f. Total	10.90%	\$ 26,411
2. Supplemental Contribution Amortization	12.75%	30,881
3. Allowance for Administrative Expenses	0.23%	559
5. Total	23.88%	\$ 57,851
C. CONTRIBUTION SUFFICIENCY / (DEFICIENCY) (A.3 - B.5)	(0.09%)	(221)
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 242,288

* 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>	<u>Pre-Retirement:</u>	
	Male:	1983 Group Annuity Mortality Table male rates set back 6 years.
	Female:	1983 Group Annuity <u>Mortality</u> Table female rates set back 4 years.
	<u>Post-Retirement:</u>	
	Male:	1983 Group Annuity Mortality Table male rates set back 4 years.
	Female:	1983 Group Annuity Mortality Table female rates set back 2 years.
	<u>Post-Disability:</u>	
	Male:	1977 Railroad Retirement Board Mortality for Disabled Annuitants
	Female:	1977 Railroad Retirement Board Mortality for Disabled Annuitants
<i>Retirement Age:</i>	<u>Active Members:</u>	
	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.	
	<u>Deferred Members:</u>	
	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.	
	<u>Other Non-Vested Members:</u>	
	Return of contributions is assumed to occur immediately.	
<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>	Married Members are assumed to elect the following forms of benefit: Males: 25% elect life annuity option 15% elect 50% J&S option 20% elect 75% J&S option 40% elect 100% J&S option Females: 70% elect life annuity option 15% elect 50% J&S option 5% elect 75% J&S option 10% elect 100% J&S option
<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. Assumed date is for 07/01/99 is July 1, 1956.
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 if not available. Estimated salary begins at \$15,000 for 1993 termination date and increases according to the salary assumption thereafter. Current level is \$22,339.

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 \$1,690,000 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>
June 30, 2000	950,000
June 30, 2001	1,250,000
June 30, 2002	1,550,000
June 30, 2003	1,850,000
June 30, 2004 - 2020	2,000,000

1997 Legislation:

Supplemental contributions of \$12,954,000 annually are assumed to be made beginning July 1, 1999 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

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

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, 1999

	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	-	-	-	1	1	2	-	-	4
45-49	-	-	6	8	12	55	28	-	109
50-54	-	1	5	21	41	68	194	87	417
55-59	-	1	1	13	28	35	83	83	244
60-64	-	-	2	5	6	14	25	30	82
65+	-	-	-	2	2	5	9	8	26
All	-	2	14	50	90	179	339	208	882

	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	-	-	-	44,873	59,804	54,551	-	-	53,445
45-49	-	-	57,968	59,886	59,912	62,496	69,733	-	63,630
50-54	-	64,747	50,488	52,656	56,649	59,194	62,729	64,451	61,265
55-59	-	53,062	54,027	48,017	60,374	62,493	64,885	63,258	62,479
60-64	-	-	41,747	44,937	59,613	61,014	61,367	61,993	59,927
65+	-	-	-	31,372	79,224	52,317	59,952	45,882	53,438
All	-	58,905	52,698	50,828	58,977	60,752	63,661	62,906	61,503

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>
-	118	738	2,541	5,308	10,875	21,581	13,084	54,245

TABLE 4A
Basic Plan

Minneapolis Teachers' Retirement Fund
Retired Members as of June 30, 1999

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	20	51	-	-	-	-	-	-	71
55-59	28	243	42	-	-	-	-	-	313
60-64	12	228	172	32	-	-	-	-	444
65-69	4	130	234	131	26	-	-	-	525
70-74	1	15	116	205	114	10	1	-	462
75-79	-	1	15	105	194	46	4	1	366
80-84	-	1	-	30	113	92	13	6	255
85+	-	-	-	2	15	139	129	76	361
All	65	669	579	505	462	287	147	83	2,797

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	29,945	29,056	-	-	-	-	-	-	29,306
55-59	19,323	34,015	20,424	-	-	-	-	-	30,877
60-64	25,715	25,767	33,744	21,914	-	-	-	-	28,578
65-69	18,841	21,536	30,619	31,732	24,034	-	-	-	28,232
70-74	19,330	27,733	26,608	27,565	30,471	13,910	12,491	-	27,701
75-79	-	42,342	28,122	26,508	25,287	21,296	11,516	15,465	25,121
80-84	-	8,768	-	27,772	21,965	20,395	12,011	12,288	21,295
85+	-	-	-	7,379	19,927	17,366	15,010	14,176	15,904
All	23,741	28,235	29,940	28,000	25,509	18,846	14,633	14,055	25,892

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>
1,543	18,889	17,335	14,140	11,785	5,409	2,151	1,167	72,419

TABLE 5A
Basic Plan

Minneapolis Teachers' Retirement Fund
Disabled Members as of June 30, 1999

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	-	4	2	1	-	-	-	-	7
55-59	-	1	3	1	-	-	-	-	5
60-64	-	1	1	3	-	1	-	-	6
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	6	7	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	-	-	32,845	-	-	-	-	-	32,845
50-54	-	44,061	16,423	29,241	-	-	-	-	34,047
55-59	-	78,505	40,694	26,005	-	-	-	-	45,319
60-64	-	33,094	43,291	30,639	-	11,724	-	-	30,004
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	-	47,974	33,009	29,433	-	11,724	-	-	35,673

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>
-	288	231	147	-	12	-	-	678

TABLE 6A
Basic Plan

Minneapolis Teachers' Retirement Fund
Survivor Members as of June 30, 1999

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	2	11	20	10	4	-	-	-	47
50-54	1	2	4	3	-	-	-	-	10
55-59	-	4	-	-	-	-	1	-	5
60-64	2	4	6	3	-	1	-	-	16
65-69	3	2	9	14	7	3	1	-	39
70-74	2	1	2	10	23	2	1	-	41
75-79	4	1	1	7	9	10	-	1	33
80-84	1	1	1	-	1	7	3	1	15
85+	-	2	3	-	1	9	8	14	37
All	15	28	46	47	45	32	14	16	243

	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	7,808	10,782	11,415	15,217	11,054	-	-	-	11,892
50-54	57,412	19,367	34,812	9,193	-	-	-	-	26,297
55-59	-	8,994	-	-	-	-	9,985	-	9,192
60-64	4,704	25,909	31,749	30,187	-	14,129	-	-	25,514
65-69	10,048	20,379	30,097	28,214	26,782	16,820	12,768	-	25,320
70-74	15,911	36,019	42,366	33,089	21,793	11,206	10,312	-	24,815
75-79	15,703	28,750	28,394	16,118	22,932	19,052	-	7,857	19,320
80-84	31,943	16,976	19,037	-	34,239	13,506	10,287	12,276	15,992
85+	-	33,444	25,708	-	19,563	15,007	16,167	12,044	16,124
All	15,944	17,369	22,570	23,596	22,069	15,848	13,804	11,797	19,568

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>
239	486	1,038	1,109	993	507	193	189	4,755

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

July 1, 1999

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 354A		
1. Employee Contributions	8.50%	\$ 4,844
2. Employer Contributions	12.14%	6,918
3. Supplemental Contribution *		
a. 1993 Legislation	2.06%	1,174
b. 1996 Legislation	-1.09%	621
c. 1997 Legislation	5.35%	3,049
4. Administrative Expense Assessment	0.00%	-
5. Total	29.14%	\$ 16,606
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	11.62%	\$ 6,622
b. Disability Benefits	1.19%	679
c. Surviving Spouse and Child Benefits	0.20%	114
d. Deferred Retirements	1.58%	899
e. Refund Liability Due to Death or Withdrawal	0.55%	316
f. Total	15.14%	\$ 8,630
Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date:		\$ 56,989

* 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 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

TABLE 13A
(cont)
BASIC

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 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 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, 1999

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	-	-	-	-	-	-	-	-	-
20-24	108	24	-	-	-	-	-	-	132
25-29	188	353	31	-	-	-	-	-	572
30-34	146	285	262	6	-	-	-	-	699
35-39	75	182	252	144	23	-	-	-	676
40-44	114	150	213	122	48	3	-	-	650
45-49	55	200	248	159	61	13	-	-	736
50-54	57	110	184	117	58	11	-	-	537
55-59	23	35	102	78	31	2	2	-	273
60-64	8	21	40	27	17	3	-	-	116
65+	2	8	17	5	3	-	-	-	35
All	776	1,368	1,349	658	241	32	2	-	4,426

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	-	-	-	-	-	-	-	-	-
20-24	13,871	23,264	-	-	-	-	-	-	15,579
25-29	15,893	27,647	34,650	-	-	-	-	-	24,163
30-34	18,702	31,600	38,000	46,699	-	-	-	-	31,435
35-39	21,608	32,802	43,601	49,322	52,279	-	-	-	39,768
40-44	18,481	32,013	44,507	49,789	57,825	58,917	-	-	39,101
45-49	20,079	31,552	43,877	56,835	55,183	58,976	-	-	42,753
50-54	23,306	36,098	45,300	55,567	60,785	57,930	-	-	45,249
55-59	22,153	37,372	41,494	55,147	60,157	74,276	66,752	-	45,781
60-64	6,576	26,302	42,559	45,758	58,654	69,143	-	-	40,925
65+	7,770	12,546	18,093	39,448	56,516	-	-	-	22,579
All	17,982	30,949	42,221	52,780	57,682	60,520	66,752	-	37,042

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>	
13,954	42,338	56,957	34,729	13,901	1,937	134	-	163,949	

TABLE 4B
Coordinated Plan

Minneapolis Teachers' Retirement Fund
Retired Members as of June 30, 1999

	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	-	6	-	-	-	-	-	-	6
55-59	3	9	-	-	-	-	-	-	12
60-64	8	18	3	-	-	-	-	-	29
65-69	2	16	6	-	-	-	-	-	24
70-74	1	4	7	-	-	-	-	-	12
75-79	-	-	1	-	-	-	-	-	1
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	14	53	17	-	-	-	-	-	84

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	-	6,142	-	-	-	-	-	-	6,142
55-59	6,803	8,679	-	-	-	-	-	-	8,210
60-64	7,455	7,798	7,429	-	-	-	-	-	7,665
65-69	10,789	7,449	4,544	-	-	-	-	-	7,001
70-74	5,103	8,406	5,134	-	-	-	-	-	6,222
75-79	-	-	2,341	-	-	-	-	-	2,341
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	7,624	7,700	5,166	-	-	-	-	-	7,175

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>	
107	408	88	-	-	-	-	-	603	

TABLE 5B
Coordinated Plan

Minneapolis Teachers' Retirement Fund
Disabled Members as of June 30, 1999

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	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	1	-	-	-	-	-	-	1
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	1	1	-	-	-	-	-	-	2

	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	8,592	-	-	-	-	-	-	-	8,592
50-54	-	-	-	-	-	-	-	-	-
55-59	-	-	-	-	-	-	-	-	-
60-64	-	7,446	-	-	-	-	-	-	7,446
65-69	-	-	-	-	-	-	-	-	-
70-74	-	-	-	-	-	-	-	-	-
75-79	-	-	-	-	-	-	-	-	-
80-84	-	-	-	-	-	-	-	-	-
85+	-	-	-	-	-	-	-	-	-
All	8,592	7,446	-	-	-	-	-	-	8,019

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>
9	7	-	-	-	-	-	-	16

Minneapolis Teachers' Retirement Fund
Survivor Members as of June 30, 1999

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>
-	-	-	-	-	-	-	-	-

TABLE 11B
COORDINATED PLAN

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

July 1, 1999

	Percent of Payroll	Dollar Amount
A. STATUTORY CONTRIBUTIONS - CHAPTER 354A		
1. Employee Contributions	5.50%	\$ 10,191
2. Employer Contributions	8.14%	15,083
3. Supplemental Contribution *		
a. 1993 Legislation	2.06%	3,826
b. 1996 Legislation	-1.09%	2,019
c. 1997 Legislation	5.35%	9,905
4. Administrative Expense Assessment	0.00%	-
5. Total	22.14%	\$ 41,024
B. REQUIRED CONTRIBUTIONS - CHAPTER 356		
1. Normal Cost		
a. Retirement Benefits	7.85%	\$ 14,542
b. Disability Benefits	0.78%	1,453
c. Surviving Spouse and Child Benefits	0.19%	356
d. Deferred Retirements	0.54%	1,009
e. Refund Liability Due to Death or Withdrawal	0.23%	421
f. Total	9.59%	\$ 17,781

Projected Annual Payroll for Fiscal Year Beginning on the Valuation Date: \$ 185,299

* 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.
<i>Amount:</i>	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.

TABLE 13B
(cont)
COORDINATED

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.

Amount is payable as a normal or early retirement benefit.

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.

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

July 1, 1999

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%
07/01/99	939,459	1,394,357	454,898	67.38%	230,189	197.62%

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

July 1, 1999

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%
1999	25.80%	230,189	14,935	44,464	40,476	91.03%

*Includes contributions from other sources (if applicable)