



75TH

ANNUAL REPORT
of the
BOARD OF TRUSTEES

Duluth Teachers Retirement Fund Association

June 30, 1984

LB
2842.2
.D84cx
1984

Pursuant to Mn. Stat 356.20

TABLE OF CONTENTS

	Page
Notice of Annual Meeting	1
Annual Report of Executive Secretary	2
Communication from Capital Supervisors - Investment Counsel	3
Comparative Balance Sheet June 30, 1983 and 1984 Duluth Teachers' Retirement Fund	4
Statement of Revenues and Expenditures of the Fiscal Years Ended June 30, 1983 and 1984	5
Actuarial Statements of Assets and Required Reserves	6-7
Investments on Hand June 30, 1984	8-12
Tax Shelter Funds Balance Sheets and Income Statements	
Money Market Fund	13
Fixed Shelter Fund	14-15
Variable Fund	16-17
Minutes of the 74th Annual Membership Meeting	18-19
Membership Notes	20
Plan Benefits Information	
New Coordinated Plan Summary - Date of Hire After 7-1-81	21
Improved Old Plan Summary - Date of Hire Prior to 7-1-81	22-23
Benefit Estimation Worksheet - Coordinated Plan	24
Benefit Estimation Worksheet - Old Plan	25
Social Security Leveling Adjustment Worksheet (applicable to both Old Plan and Coordinated Plan for members retiring prior to age 62)	26
Survivor Benefit Reduction Factors (applicable to both Old Plan and Coordinated Plan)	27
Chart of Maximum Contract Salaries by Lane to Aid in Computation of High 5 Average Salary	28
Active and Retired Membership Distributions and Historical Data	29-33

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION

22 EAST FIRST STREET / DULUTH, MINNESOTA 55802 / Phone (218) 722-2894

E. K. BLANCK, JR.
Executive Secretary

OFFICIAL NOTICE OF THE REGULAR ANNUAL MEMBERSHIP MEETING

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION

MONDAY - OCTOBER 29, 1984 - 4:15 p.m.
ORDEAN JUNIOR HIGH SCHOOL AUDITORIUM

SOCIAL HOUR - 3:15 - 4:15 p.m.
REFRESHMENTS WILL BE SERVED

Dear Member:

The 75th Annual Meeting of the Membership will be held at Ordean Junior High School Auditorium at 4:15 p.m. on October 29, 1984 for the following purposes:

- 1) To approve the Acts and Proceedings of the Board of Trustees for the period of October 31, 1983 through October 29, 1984.
- 2) To elect (3) Trustees for the expiring or unfilled terms of active members Robert Childs, Roy Meyer and Maxine Stromme. NOMINATIONS ARE FROM THE FLOOR.
- 3) We will discuss current Minnesota law and future Article and ByLaw changes. Members are encouraged to attend and express their goals for our Association, and to give the Board guidance in areas of concern or interest. Our plan is a totally member oriented organization administered for the exclusive benefit of our membership. Your participation and guidance is vital, especially when we pursue improvements through the Legislature.
- 4) Transact any other business which may legally come before the meeting.

BOARD OF TRUSTEES

June 30, 1984

Active Members

Robert J. Childs, President
Roy Meyer, Treasurer
George Kovich
Maxine Stromme, Vice President -
(retired June 1984)
Margaret Morrison

Retired Members

George A. Beck
Agnes Hansen

School Board Members

Richard Braun
David Kruell

Ex Officio

Richard B. Pearson

Executive Secretary

Edward K. Blanck, Jr.

The Board of Trustees hopes you will take an hour or two on Monday, October 29 to meet with us at Ordean to express your goals for our retirement plan and our Tax Shelter programs.

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION

ANNUAL REPORT OF THE EXECUTIVE SECRETARY

Year ending June 30, 1984

Dear Member,

The 1984 Legislature enacted laws of both direct and indirect benefit to our members.

Of direct benefit was the Rule of "85", which eliminated the early retirement reduction for any member retiring between enactment and December 31, 1986. The Rule of 85 requires that a persons age and years of Minnesota public service total 85 or more. In interpreting the law, we found one of our members who qualified by just one day, and one who missed by two days. The Legislature is studying the total cost and savings of the Rule of 85. If you are in favor of extending the period of time the rule will be in effect, write or contact our State Representatives and Senators.

The 2% refund check active members received on October 1, 1984 represents the additional pension contributions they made during the period of January 1, 1983 to June 30, 1983. As you remember, the State helped to balance its budget by decreasing employer pension contributions by 4% for that period. Fortunately, the State's finances improved and employer contributions were restored on June 30, 1983.

The pension funds have not been reimbursed for the refunds to members or the employer contribution omitted. The net result is their unfunded liabilities increased by 2% of 1983 payroll. The Rule of 85 also carried no financing with it which means our unfunded liabilities will increase. Dipping into employees pension funds and passing benefit increases without adequate financing provisions are poor precedents which we hope the legislature will not repeat.

All major public funds in Minnesota now pay 5% interest on contributions if a member resigns and takes a refund. Historically our association has paid 4%. This is a great improvement for State TRA, MSRS and PERA members who previously received 0%.

Legislation of an indirect nature but of long term significance was enacted to review pension fund financing periodically and make changes in State and member contributions to reflect current experience. If future legislatures follow through with adequate adjustments and accurate cost estimates, Minnesota public fund members will benefit from proper funding and reasonable benefit levels.

I am looking forward to the 1985 Legislative session where we will again have the opportunity to improve and strengthen our Association's benefits, especially in the post retirement area.

I wish to thank our many members who have offered suggestions and help during this past year, our Board of Trustees for their dedicated service and the office staff for their friendly and efficient handling of our funds inner-workings. We also thank our consultants: Robert Eikill, Eikill and Schilling CPA's; William D. Watters, Attorney; Hewitt Associates, Actuarial and Lee Thurow, Capital Supervisors, investment managers for their efforts on our behalf.

Sincerely,

Edward K. Blanck, Jr.
Executive Secretary



Capital Supervisors, Inc. / 20 North Clark Street, Suite 700, Chicago, Illinois 60602 / Phone (312) 236-8271

A. Lee Thurow
President

July 18, 1984

Mr. Edward K. Blanck, Jr.
Executive Secretary
Duluth Teachers' Retirement Fund
Association
22 East First Street
Duluth, Minnesota 55802

Dear Trustees:

Fiscal 1984 turned out to be a year of pause or regrouping after a spectacular fiscal 1983. As discussed at this time last year, we anticipated lower results this year but did not look for flat to negative returns. The Fixed Fund experienced a 1% net return as interest rates moved back to two year highs. The adverse effect of these high rates depressed stocks leading to a -4% decline in the Basic portfolio and a -5.4% reduction in the Variable Fund. Comparative numbers show the S&P 500 -4.8%, the Dow Jones -3.1%, and Salomon Bond Index -6.2% for the same 12 months ended 6/30/84.

Last year's dullness laid the ground work for this year's recovery. We expect to return to our long term pattern of 10% plus annual returns. Political decisions early in 1985 will have a substantial effect on the next few years' returns. However, the present conservative valuations suggest above average gains in the next few years.

One of the key elements will be the resolution of the inflation/deflation controversy. In spite of the experience of the '70s we look for very modest inflation and a generally better investment environment in the next few years. The multiple concerns of investors today seem to be generally overdone resulting in today's relatively attractive prices and opportunities.

We look forward to reporting better numbers next year and again want to thank you for the opportunity to work with you. Capital Supervisors is proud of our relationship and will continue to make every effort to justify and maintain your support.

Sincerely,

Lee Thurow

LT:cmn

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
DULUTH, MINNESOTA

COMPARATIVE BALANCE SHEET
JUNE 30, 1983 and 1984

<u>ASSETS</u>	<u>1984</u>	<u>1983</u>
Cash - checking and savings accounts	\$ 204,600	\$ 185,791
Accounts receivable		
State of Minnesota	375,789	314,197
Duluth, Board of Education	187,842	179,512
Federally funded programs	37,474	34,917
Other		21,898
Accrued interest and dividends declared	476,455	483,447
Investments		
Short-term securities	964,171	5,390,846
Marketable corporate stock (at cost) (market value \$30,014,178 and \$26,660,523, respectively)	25,628,465	19,903,198
Bonds and notes, par value	17,461,863	16,077,268
Mortgage loans secured by real estate	1,716,601	1,895,325
Land and Building	14,039	14,042
Office Furniture and Equipment	4,897	6,783
Deferred Insurance Premiums	1,200	1,073
Total Assets	\$47,073,396	\$44,508,297

LIABILITIES AND FUND BALANCES

Liabilities		
Accounts payable	\$ 915	\$ 1,930
Accounts payable - security dealers		1,596,282
Accumulated contributions - members	998	998
Mortgagees' tax escrow deposits	120	120
Accrued real estate taxes	800	878
Deposits - Active Members	12,569,235	11,840,415
Fund Balance	34,501,328	31,067,674
Total Liabilities and Fund Balances	\$47,073,396	\$44,508,297

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
DULUTH, MINNESOTA

STATEMENT OF REVENUES AND EXPENDITURES - STATUTORY BASIS
FOR THE FISCAL YEARS ENDED JUNE 30,

	<u>1984</u>	<u>1983</u>
Revenues		
State of Minnesota participation	\$1,646,974	\$ 979,771
Members' contributions	1,215,904	1,411,309
Federally funded participation	37,474	34,917
Interest on investments, plus discounts earned, less amortized premiums and de- ferred yield adjustment	2,172,800	2,570,730
Dividends received	1,311,217	1,029,603
Rents	1,200	1,200
Return of prior years' refunds	14,851	38,481
Net gains or (losses) on sales of common stocks	294,568	(168,068)
Total Revenues	<u>\$6,694,988</u>	<u>\$5,897,943</u>
 Expenditures		
Benefits		
Annuities paid members	\$2,098,719	\$1,969,301
Contingent beneficiaries	54,413	50,394
Disability	26,875	19,869
Contribution refunds		
Resignation	124,206	162,622
Death	19,200	12,827
Administrative Expenses	209,101	190,917
Total Expenditures	<u>\$2,532,514</u>	<u>\$2,405,930</u>
 Excess of revenues over expenditures	 <u><u>\$4,162,474</u></u>	 <u><u>\$3,492,013</u></u>

Duluth Teachers' Retirement Fund Association

FINANCIAL REPORT
June 30, 1984

A. <u>Assets</u>	
Cash in office	\$ 200
Deposits in banks	204,400
Short-term investments	964,171
Accounts receivable	601,105
Accrued members' contributions	0
Accrued employer contributions	0
Other	0
Accrued interest on investments	476,455
Dividends on stocks, declared but not yet received	0
Investment in bonds at amortized cost	17,461,863
Investment in stocks at cost	25,628,465
Investment in real estate	1,716,601
Equipment at cost, less depreciation	4,897
Land and building, less depreciation	14,039
Other	1,200
Total Assets	<u>\$47,073,396</u>
B. <u>Unfunded Accrued Liability</u>	\$25,315,100
C. <u>Accumulated Members' Contributions</u>	\$12,569,235
D. <u>Current Liabilities</u>	
Accounts payable	\$ 2,833
Annuity payments	0
Survivor benefit payments	0
Refund to members	0
Accrued expenses	0
Suspense items	0
Total Current Liability	<u>\$ 2,833</u>
E. <u>Total Reserves Required as per attached schedule</u>	<u>\$98,949,181</u>

Duluth Teachers' Retirement Fund Association

FINANCIAL REPORT
June 30, 1984

Schedule of Total Required Reserves

	<u>Basic Program</u>	<u>Coordinated Program</u>	<u>Total</u>
1. For active members			
a. Retirement benefits	\$62,977,236	\$6,206,932	\$69,184,168
b. Disability benefits	3,667,092	59,654	3,726,746
c. Refundable liability due to death or withdrawal	2,984,800	140,216	3,125,016
d. Survivor benefits	1,874,616	8,755	1,883,371
2. For deferred annuitants	346,360	12,838	359,198
3. For former members without vested rights	0	0	0
4. For annuitants			
a. Retirement benefits	18,013,816	1,809,993	19,823,809
b. Disability benefits	276,330	0	276,330
c. Survivor benefits	570,543	0	570,543
Total Required Reserves	\$90,710,793	\$8,238,388	<u>\$98,949,181</u>

Certification

The above exhibit has been prepared in accordance with the Entry Age Normal Cost (Level Normal Cost) method, other provisions of Minnesota Statutes Section 356.215 as amended in 1984 by Section 42 of Chapter 564, and our understanding of temporary rules adopted by the Legislative Commission on Pensions and Retirement (LCPR). Compliance with the amended Statutes and temporary rules will be reviewed with LCPR prior to publication of the full actuarial report. The Financial Report information regarding assets and employee contributions are those submitted to us by the Association.

Respectfully Submitted,
HEWITT ASSOCIATES

Richard L. Moody

Richard L. Moody
Fellow, Society of Actuaries

DULUTH TEACHERS RETIREMENT FUND ASSOCIATION-BASIC FUND

EQUITY HOLDINGS RANKED BY MARKET VALUE

<u>NO OF UNITS</u>	<u>DESCRIPTION</u>	<u>UNIT COST</u>	<u>MARKET PRICE</u>	<u>MARKET VALUE</u>	<u>% OF PORT.</u>	<u>CURR. YIELD</u>	<u>UNREALIZED GAIN-(LOSS)</u>
22,400	International Business Machines	57.70	105 3/4	2,368,800.00	5.21	3.59	1,076,269.00
26,000	General Electric Co	21.85	52 1/2	1,365,000.00	3.00	3.81	797,018.00
25,000	Bristol Myers Co	24.19	47	1,175,000.00	2.59	3.40	570,127.00
22,000	Procter & Gamble Co	43.24	52 3/8	1,152,250.00	2.54	.50	200,997.00
50,000	Commonwealth Edison Co	21.28	22 3/4	1,137,500.00	2.50	13.19	73,431.00
32,000	Capital Holding Corp	19.21	33	1,056,000.00	2.32	4.48	441,131.00
35,000	Consolidated Foods Corp	19.70	28 3/4	1,006,250.00	2.21	4.52	316,755.00
54,000	Southwestern Public Service Co	11.92	18 5/8	1,005,750.00	2.21	9.34	362,191.00
18,000	Norfolk Southern Corp	55.85	51	918,000.00	2.02	6.27	-87,298.00
18,000	J C Penney Co	51.96	50 3/4	913,500.00	2.01	4.65	-21,805.00
15,000	Coca Cola Co	53.83	57 5/8	864,375.00	1.90	4.79	56,990.00
15,000	Standard Oil Co of Indiana	14.31	57 1/8	856,875.00	1.89	5.25	642,165.00
25,000	State Street Boston Corp	36.10	34	850,000.00	1.87	2.94	-52,375.00
20,000	Hospital Corp of America	41.52	39 7/8	797,500.00	1.75	1.25	-32,941.00
12,000	Emerson Electric Co	38.43	63 5/8	763,500.00	1.68	3.61	302,331.00
25,000	Intel Corp	39.13	30 1/4	756,250.00	1.66	.00	-221,875.00
40,000	Houston Industries Inc	19.45	18 1/2	740,000.00	1.63	13.41	-38,062.00
20,000	Rainier Bancorporation	28	36 5/8	732,500.00	1.61	4.81	172,500.00
48,000	Southern Co	12.80	14 7/8	714,000.00	1.57	12.10	99,600.00
10,000	McDonalds Corp	66.91	68 5/8	686,250.00	1.51	1.69	17,122.00
15,000	Boeing Co	39.63	43 3/4	656,250.00	1.44	3.20	61,734.00
20,000	Interpublic Group of Cos Inc	28.03	32 3/4	655,000.00	1.44	3.05	94,410.00
15,000	Syntex Corp	53.36	43	645,000.00	1.42	3.72	-155,341.00
30,000	Southwest Airlines Co	23.71	21 1/4	637,500.00	1.40	.61	-73,720.00
14,400	Exxon Corp	33.98	40 3/4	586,800.00	1.29	8.34	97,487.00
27,167	Worthington Industries Inc	19.23	20 5/8	560,319.00	1.23	2.72	37,969.00
12,000	Schlumberger LTD	36.61	45 1/4	543,000.00	1.19	2.30	103,680.00
20,000	Temple Inland Inc	32.77	26 3/8	527,500.00	1.16	1.90	-127,950.00
20,000	NCR Corp	29.21	24 1/2	490,000.00	1.08	3.27	-94,100.00
13,500	International Minerals and Chemical	32.73	36	486,000.00	1.07	7.22	44,120.00
7,000	Eastman Kodak Co	86.78	69 1/4	484,750.00	1.07	5.13	-122,683.00
12,000	Schering-Plough Corp	46.51	38 3/4	465,000.00	1.02	4.34	-93,113.00
10,000	IC Industries Inc	39	45 5/8	456,250.00	1.00	5.70	66,237.00

DULUTH TEACHERS RETIREMENT FUND ASSOCIATION-BASIC FUND
EQUITY HOLDINGS RANKED BY MARKET VALUE

<u>NO OF UNITS</u>	<u>DESCRIPTION</u>	<u>UNIT COST</u>	<u>MARKET PRICE</u>	<u>MARKET VALUE</u>	<u>% OF PORT.</u>	<u>CURR. YIELD</u>	<u>UNREALIZED GAIN-(LOSS)</u>
204	Capital Supervisors Helios Fund Inc	2446.23	2131.04	435,576.00	.96	.00	-64,424.00
15,000	Deere & Co	37.93	27 3/8	410,625.00	.90	3.65	-158,257.00
21,056	Borg-Warner Corp	19	18 3/4	394,800.00	.87	4.48	-5,200.00
15,000	Jostens Inc	23.43	25 1/8	376,875.00	.83	4.46	25,391.00
30,000	Jeffries Group Inc	12.43	12 1/2	375,000.00	.83	.00	2,130.00
21,000	Archer Daniels Midland Co	19.51	17 5/8	370,125.00	.81	.79	-39,574.00
	Total			29,415,670.00	64.73	4.53	4,273,067.00

DULUTH TEACHERS RETIREMENT FUND ASSOCIATION-BASIC FUND

BONDS - PORTFOLIO HOLDINGS

QUANTITY	DESCRIPTION	UNIT COST	MARKET PRICE	TOTAL COST	MARKET VALUE	% OF TOTAL	MOODY RATE	ANNUAL INCOME	CURR. YIELD YTM
<u>CORPORATE BONDS</u>									
200,000	Spiegel Inc 5% 4-1-87	94.05	80.75	188,104	161,500	.4	BA-3	10,000	13.6
300,000	Household Finance Corp 6.375% 1-1-88	76.86	82.38	230,578	247,125	.5	AA-3	19,125	12.7
500,000	National Pwr Corp Gtd Bonds 8.25% 12-31-91	76.35	82.50	381,743	412,500	.9	NR	41,250	11.8
250,000	Standard Brands Inc. 6.75% 6-1-93	65.83	66.50	164,564	166,250	.4	AA-2	16,875	13.2
100,000	Gulf Oil Corp S/F Deb 6.625% 6-15-93	73.89	66.25	73,889	66,250	.2	AA-3	6,625	13.1
500,000	General Motors Acceptance Corp 7.75% 10-1-94	62.70	68.50	313,500	342,500	.8	AA-2	38,750	13.5
450,124	Trailer Train Co. 11.875% 7-15-96	100	86.51	450,124	389,406	.9		53,452	14.2
250,000	ACF Inds Inc 14.50% 12-1-96	98.08	96.12	245,201	240,312	.5	BA-2	36,250	15.1
200,000	Consolidated Edison Co 5.90% 12-15-96	98.31	52.75	196,622	105,500	.2	AA-2	11,800	14.0
200,000	Northern Pacific Ry Co 4% 1-1-97	81.50	49.75	163,000	99,500	.2	A-2	8,000	11.7
700,000	Norwest Mtg Conventional 12% 2-1-97	99.75	92.88	698,250	650,160	1.2		72,000	13.1
685,000	Alaska Housing Financial Corp 16.250% 6/1/99	113.43	106	776,968	726,100	1.6	NR	111,312	15.2
491,526	Olympic Pipeline 8.85% 9-1-2001	77.12	61.68	379,089	303,178	.7		43,500	15.1
250,000	Illinois Power Co 1st Mtg 7.625% 6-1-2003	73.17	54.12	182,922	135,312	.3	A-2	19,062	14.9
600,000	Pembroke Cap Co 11.50% 8-1-2005	96.50	76.77	579,000	460,596	1.0		69,000	15.1
480,393	Sowil Corp 12.50% 12-1-2008	100	90	480,393	432,354	1.0		60,049	13.9
500,000	General Tel of Southwest 1st Mtg 14% 11-1-2010	112.25	93.13	561,250	465,625	1.0	A-3	70,000	15.0

10

DULUTH TEACHERS RETIREMENT FUND ASSOCIATION-BASIC FUND

BONDS - PORTFOLIO HOLDINGS

<u>QUANTITY</u>	<u>DESCRIPTION</u>	<u>UNIT COST</u>	<u>MARKET PRICE</u>	<u>TOTAL COST</u>	<u>MARKET VALUE</u>	<u>% OF TOTAL</u>	<u>MOODY RATE</u>	<u>ANNUAL INCOME</u>	<u>CURR. YIELD YTM</u>
<u>CORPORATE BONDS</u>									
400,000	New England Tel & Tel Deb Reg 15.25% 6-15-2018	117.75	102.25	471,000	409,000	.9	A-1	61,000	14.9
	Total Corporate Bonds			6,536,197	5,813,168	12.6		748,050	
<u>U.S. GOVERNMENT AND AGENCY BONDS</u>									
500,000	Federal Home Loan Bank 7.65% 5-26-87	100	86.16	500,000	430,780	1.0	AAA	38,250	13.6
1,000,000	U S Treasury Note 9.875% 5-15-88	89.89	88.91	898,856	889,060	2.0	AAA	98,750	13.6
1,000,875	U S Treasury Bond CP 0% 5-15-89	43.87	52.16	439,104	522,016	1.2	AAA		13.9
600,000	Federal Farm Credit Banks 12.50% 9-4-90	100.63	93.94	603,804	563,622	1.2	AAA	75,000	13.9
1,023,750	U S Treasury Bond 0% 11-15-91	32.76	37.23	335,381	381,162	.8	AAA		13.9
1,575,000	U S Treasury Bond 0% 5-15-92	30.83	34.95	485,620	550,446	1.2	AAA		13.8
500,000	U S Treasury Note 10.50 11-15-92	100	83.63	500,000	418,125	.9	AAA	52,500	13.8
500,000	U S Treasury Bonds 7.50% 8-15-93/88	85.56	68.19	427,819	340,935	.8	AAA	37,500	13.7
712,500	Treasury Bond Receipts 14.25% 0% 8-15-93	32.56	29.58	231,976	210,757	.5	AAA		13.8
945,000	U S Treasury Bond 0% 11-15-95	21.24	21.79	200,756	205,924	.5	AAA		13.9
663,700	GNMA Pass Pool 13.750% 5-15-96	98.37	98.37	652,983	652,983	1.4	AAA	91,268	14.0
549,900	FHLMC Gtd CTF B 8.375% 9-15-99	78.83	82.12	433,485	451,605	1.0	AAA	46,054	10.7
1,049,000	Federal Home Loan Mtg Corp 8.85% 3-15-2008	78.82	78.50	826,783	823,465	1.8	AAA	92,836	11.5

DULUTH TEACHERS RETIREMENT FUND ASSOCIATION-BASIC FUND

BONDS - PORTFOLIO HOLDINGS

QUANTITY	DESCRIPTION	UNIT COST	MARKET PRICE	TOTAL COST	MARKET VALUE	% OF TOTAL	MOODY RATE	ANNUAL INCOME	CURR. YIELD YTM
456,000	Federal Home Ln Mtg Corp Gtd Mtn 9.40% 9-15-2008	85.99	82.75	392,137	377,340	.8	AAA	42,864	11.5
518,000	Federal Home Loan Mtg Corp 10.25% 3-15-2009	87.91	87	455,381	450,660	1.0	AAA	53,095	11.8
524,000	Federal Home Loan GMC 10% 9-15-2009	89.75	85.75	470,290	449,330	1.0	AAA	53,300	11.7
786,000	Federal Home Loan Mtg Corp Gtd 12.45% 9-15-2009	101.21	93.87	795,511	737,818	1.6	AAA	96,736	13.2
Total U.S. Government and Agency Bonds				8,649,886	8,456,028	18.7		778,153	
Total Bonds				15,186,083	14,269,196	31.3		1,526,203	

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
DULUTH, MINNESOTA

MONEY MARKET FUND

COMPARATIVE STATEMENT OF NET ASSETS
JUNE 30,

	<u>1984</u>	<u>1983</u>
<u>ASSETS</u>		
Cash - checking	\$ 98	\$ 97
- Merrill Lynch Ready Asset Trust	<u>343,466</u>	<u>277,286</u>
Total assets	<u>\$343,564</u>	<u>\$277,383</u>
Units outstanding	\$343,564	\$277,383
Asset value per unit	\$1	\$1

STATEMENTS OF CHANGES IN UNITS
FOR THE SIX AND TWELVE MONTHS ENDED JUNE 30,

Units at beginning of year	277,383	259,059
Units issued during period	84,462	144,233
Units refunded	<u>(18,281)</u>	<u>(125,909)</u>
Balance June 30	<u>343,564</u>	<u>277,383</u>

STATEMENTS OF OPERATIONS
FOR THE SIX AND TWELVE MONTHS ENDED JUNE 30,

Revenue		
Members' contributions	\$ 57,303	\$121,263
Interest earned	<u>27,191</u>	<u>23,406</u>
Total Income	\$ 84,494	\$144,669
Expense		
Members withdrawals	18,280	126,322
Bank charges	<u>33</u>	<u>23</u>
Excess of revenue over expenses	\$ 66,181	\$ 18,324
Net assets - beginning of year	<u>277,383</u>	<u>259,059</u>
Net assets - end of year	<u>\$343,564</u>	<u>\$277,383</u>

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
DULUTH, MINNESOTA
FIXED SHELTER FUND
COMPARATIVE STATEMENTS OF NET ASSETS JUNE 30,

	<u>1984</u>	<u>1983</u>
<u>ASSETS</u>		
Cash	\$ 2,651	\$ 41,152
Interest and dividends receivable	56,224	42,641
Investments		
Short term securities, at market	137,000	107,000
Bonds and notes at market (cost \$2,188,481 and \$1,960,318 respectively)	<u>1,882,828</u>	<u>1,926,858</u>
Total Assets at Market Value	\$2,078,703	\$2,117,651
Liabilities		
Estimated additional premium due Canada Life	<u>5,000</u>	<u>5,000</u>
Net Assets at Market Value	<u>\$2,073,703</u>	<u>\$2,112,651</u>
Units outstanding	1,454,838.1641	1,489,720.3363
Asset value per unit	\$1.4254	\$1.4182
COMPARATIVE STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS FOR THE FISCAL YEARS ENDED JUNE 30,		
Revenues		
Members' deposits	\$ 228,458	\$ 250,263
Interest earned	304,418	285,757
Net gains on sale	<u>(17,709)</u>	<u>2,991</u>
Total	\$ 515,167	\$ 539,011
Expenditures		
Members' refunds and transfers between funds	\$ 277,762	\$ 400,928
Administrative	<u>4,336</u>	<u>3,584</u>
Total	\$ 282,098	\$ 404,512
Excess (deficit) of revenues over expenditures	\$ 233,069	\$ 134,499
Refund - Purchase single premium annuities - Canada Life	-0-	33,752
Market value adjustment - during fiscal year	(272,017)	146,345
Net assets		
Beginning of period	<u>2,112,651</u>	<u>1,798,055</u>
Net assets, ending	\$2,073,703	\$2,112,651

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
DULUTH, MINNESOTA
FIXED SHELTER FUND
SCHEDULE OF CORPORATE BONDS
JUNE 30, 1984

<u>Bonds</u>	<u>Yield to Maturity</u>	<u>Due Date</u>	<u>Par Value</u>	<u>Cost</u>	<u>Market Value</u>
United Telecommunications	13.1	4/15/88	100,000	99,750	93,000
Texas Federal Savings	14.7	7/22/88	100,000	50,000	56,625
Continental Illinois Corp	19.0	11/01/89	200,000	83,000	75,888
Pacific Gas & Electric	14.9	9/01/92	200,000	202,500	204,000
Texas Federal Savings	13.9	3/21/94	200,000	50,000	54,250
Trailer Train Co	14.2	7/15/96	90,024	90,924	77,880
Norwest Mortgage	13.1	2/01/97	100,000	99,750	92,875
General Motors Acceptance	14.4	6/01/99	100,000	97,375	66,125
Union Carbide Corp	14.3	1/15/05	100,000	100,000	61,625
Sowil Corp	13.9	12/01/08	96,079	96,079	86,471
New York Telephone	14.9	7/15/21	200,000	209,875	209,000
U S Treasury Bond	13.9	2/15/89	106,875	47,681	57,633
U S Treasury Bond	13.9	11/15/91	551,250	180,589	205,241
Government Nat'l Mortgage	14.0	5/15/96	73,886	72,685	72,685
Guaranteed Mortgage Corp	13.5	7/01/96	100,000	97,937	90,125
Guaranteed Mortgage Corp	13.8	8/01/02	100,000	99,562	88,500
Federal Home Loan Mortgage	11.5	3/15/08	124,000	104,407	97,340
Federal Home Loan Mortgage	11.5	9/15/08	114,000	98,034	94,335
Federal Home Loan Mortgage	11.8	3/15/09	114,000	98,403	99,180
			2,770,114	1,978,551	1,882,778

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
DULUTH, MINNESOTA
VARIABLE FUND

STATEMENTS OF OPERATIONS AND CHANGES IN NET ASSETS
FOR THE FISCAL YEARS ENDED JUNE 30,

	<u>1984</u>	<u>1983</u>
Net assets, beginning of period	<u>\$854,441</u>	<u>\$555,470</u>
Revenue		
Members' deposits	\$192,869	\$ 95,569
Interest	8,153	11,371
Dividends	33,729	28,788
Totals	<u>\$234,751</u>	<u>\$135,728</u>
Expenses		
Annuities - monthly	\$ 21,335	\$ 17,998
Members' refunds and transfers	28,125	49,949
Administrative	2,255	1,153
Totals	<u>\$ 51,715</u>	<u>\$ 69,100</u>
Excess of revenue over expenses or (expenses over revenue)	\$183,036	\$ 66,628
Net market value adjustment		
Sales during year	\$117,572	
Cost (on identified bases)	<u>85,255</u>	
Net gain	32,317	(5,846)
Unrealized gain or (loss)		
Market value loss - end of year	\$ 84,506	
Market value gain - beginning of year	<u>209,810</u>	
Increase or (decrease)	<u>(125,304)</u>	<u>238,189</u>
Net assets, end of period	<u>\$944,490</u>	<u>\$854,441</u>

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
DULUTH, MINNESOTA

VARIABLE FUND
STATEMENTS OF NET ASSETS
JUNE 30,

<u>ASSETS</u>		<u>1984</u>	<u>1983</u>
Cash and Receivables		\$ 14,380	\$ 31,422
Investments - short-term securities (at market value)		63,000	67,885
Investments - corporate stock	<u>Cost</u>	<u>Market Value</u>	
Allied Corp	\$ 23,133	\$ 21,000	
Boeing Corp	20,151	21,875	
Borg Warner	20,000	19,725	
Bristol Myers	27,322	47,000	
Capital Holding	18,654	33,000	
Commonwealth Edison	30,250	34,125	
Deere & Co.	19,256	13,687	
Exxon	23,178	28,525	
General Electric	19,959	42,000	
Hospital Corp	32,855	31,900	
Houston Ind. Inc.	19,808	18,500	
Huntington Research Ctr	19,444	12,750	
IC Industries	15,601	18,250	
IBM	63,942	84,600	
Intel Corp	38,919	30,250	
Interco	10,746	13,100	
J. C. Penney	28,564	30,450	
Jeffries & Co.	24,625	25,000	
Josten's, Inc.	22,955	25,125	
McDonalds	33,188	34,312	
Norfolk & Southern	34,846	30,600	
Proctor & Gamble	22,444	26,187	
Ranier Bancorporation	14,313	18,312	
Schering Plough	23,254	19,375	
Schlumberger	18,305	22,625	
Southern Co.	25,600	29,750	
Southwest Airlines	25,278	25,500	
Southwestern Public Service	14,170	22,350	
State Street Bank	20,325	20,400	
Syntex Corp.	20,005	21,500	
Temple Inland	27,849	21,100	
Walgreens	23,664	24,237	
Totals	<u>\$782,603</u>	<u>867,110</u>	<u>755,134</u>
Net Assets		\$944,490	\$854,441
Units outstanding		945,468.2792	767,202.5189
Asset values per unit		.9990	1.1137

MINUTES OF 74th ANNUAL MEMBERSHIP MEETING

Duluth, Minnesota
October 31, 1983

The seventy fourth Annual Meeting of the Membership of the Duluth Teachers' Retirement Fund Association was held in the auditorium of Ordean Junior High School on Monday October 31, 1984 at 4:15 p.m. There were 99 members present with 50 members needed for a quorum to transact business. President Robert Childs acted as chairman of the meeting with Edward K. Blanck, Jr., Executive Secretary, acting as Secretary.

Trustees and special guests were introduced by the Chairman.

READING OF THE MINUTES

A motion was made, seconded, and carried to approve and suspend the reading of the minutes of the 73rd Annual Meeting held October 25, 1982.

REPORT OF THE OFFICERS

Chairman Childs stated the Executive Secretary's report and Treasurer's report had been printed and delivered to each member of record, therefore, they would not be read at that time. Mr. Childs then introduced the Executive Secretary who then reviewed the operations of the Association for the prior 12 months, highlighting the 1983 Legislative Session.

Past Presidents of the Association were introduced; present were: William Simmons, Nordal Anderson, Hazel Hanson and Walter Garvue.

Mr. Childs read the names of members who became deceased during the year, and a moment of silence was given in their memory.

A motion was then made, seconded, and carried that the report of the Officers, Acts and Proceedings of the Board of Trustees be approved for the period of October 25, 1982 to October 31, 1983.

AMENDMENT OF ARTICLES AND BYLAWS

It was moved and seconded that the proposed administrative Article and ByLaw changes, as contained in the Annual Report distributed to all members, be adopted. The amendments would reduce the Board size from 11 to 9 by having one school board member rather than the present three; and make it clearer that the Executive Secretary can be Secretary of the Association when not actually a Trustee; conduct all meetings according to Robert's Rules of Order when state law and our Articles and ByLaws are mute; appoint a Treasurer other than the school board Treasurer and eliminate a no longer used provision requiring oaths of office for Trustees.

The motion to adopt was carried.

ELECTION OF THREE TRUSTEES

The President called for three separate elections for Trustee, two for active members and one for retired members.

Nominations for the 2 year unexpired term of Walter Garvue were Margaret Morrison

Election, (cont.)

and George Kovich. There being no further nominations, nominations were closed and ballots collected. George Kovich was declared the winner.

Nominations for the 3 year term of Curtis Miller were Margaret Morrison and George Larson. There being no further nominations, nominations were closed and ballots were collected. Margaret Morrison was declared the winner.

Nominations for the 3 year retired member term were called for. George Beck was nominated to succeed himself. There being no further nominations, nominations were closed and the President instructed the Secretary to cast an elected ballot for George Beck. A motion was made, seconded and carried to destroy the ballots.

REPORT OF COMMITTEES

Housing Committee Chairman, Ray Muskat, reported that all 3 proposals for housing in Duluth were rejected, and consequently, Port Plaza returned \$18,000 in escrow money to contributors. He stated that even though Port Plaza's application was not accepted, the group would continue to explore other possibilities such as a joint venture.

COMMUNICATIONS

A. Lee Thurow, President of Capital Supervisors, Chicago, spoke to the membership. He stated the Basic Fund increased 35% in value. For 1984, he cautioned us to watch inflation, large federal deficit and international debt problems. Although there are many negative influences, he felt the stock and bond markets should be favorable in 1984.

There being no further business, the meeting was adjourned.

Respectfully Submitted,

Edward K. Blanck, Jr.
Executive Secretary

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION

Membership Notes

NEW RETIREMENTS

Ruby Baker	3/28/84
Gordon Carlson	6/15/84
Arthur Engen	6/30/84
Margaret Flood	12/23/83
Beverly Gee	6/15/84
Elizabeth J. Goodsell	6/15/84
Dean Hagen	6/15/84
Irene Hamski	8/31/83
Harold Hansen	7/1/83
Richard Hill	8/31/83
Phyllis Hudler	6/15/84
William Lainen	6/29/84
Corrinne Lauterbach	6/15/84
Robert Lindberg	6/15/84
Joseph Mayasich	6/30/84
Cordelia Olmon	6/15/84
Jeane Olson	3/30/84
Eric Peterson	6/15/84
Shirley Slocumb	6/15/84
Graydon Stromme	6/30/84
Maxine Stromme	6/30/84
Helen Tangen	6/15/84
Katherine VanderHorck	1/11/84

DEATHS

	Retired
Marion Aid	1/10/84
Jack Baldwin	11/4/83
Harold Berg	5/30/84
Evangeline Bray	7/19/84
Victor Dunder	5/24/84
Ruth Engebretson	4/10/84
Anne Filiatrault	8/30/84
Avis Hollingsworth	8/16/84
Hildur Johnson	3/5/84
Angelyn Kochevar	6/9/84
Melhior Kumsha	2/23/84
Harriet Magnuson	12/9/83
Audrey McEwen	2/10/84
Madeline McGrath	8/20/84
Olga Ness	3/31/84
Helen Oakland	4/5/84
Mildred O'Donnell	2/19/84
Frances Ross	8/27/84
Wallace Sapp	6/20/84
Carl W. Schroer	11/4/83

MEMBERSHIP STATISTICS

Active

	1984	1983
Active members		
Beginning of Period	1,119	1,173
New Entrants	77	50
Resignations	(34)	(68)
Retirements	(20)	(33)
Deferred Annuities	(2)	(1)
Deaths	(3)	(1)
Disability	0	(1)
Total Active Membership	1,137	1,119
Retired membership		
Beginning of Period	526	503
New Retirees	24	42
Deaths	(19)	(19)
Total Retired Membership	531	526
Total Disability Benefits	8	8
Total Deferred	75	50
Total Beneficiaries	23	23

Florence Brown	5/5/84
William Fayling	8/16/84
Leroy Mesedahl	3/7/84

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
CITIES OF THE FIRST CLASS CO-ORDINATED PLAN SUMMARY

For Members Hired or Rehired after June 30, 1981 and Old Plan Members
Irrevocably Electing this Plan

1) AGE AND SERVICE REQUIREMENTS

Full Formula retirement benefits are earned at age 65 or with 30 + years of service over age 62, or if age plus service total 85 or more to 12/31/86.

Early Retirement - age 55 with 10 or more years service. An early retirement actuarial reduction of 1/2% per month between age 65 and 60 and 1/4% per month between age 60 and 55 is made. Retirement with 30 or more years of service, an actuarial reduction of 1/2% per month between age 62 and 60 and 1/4% per month between age 60 and age at retirement is made.

2) FORMULA

Annual benefit = 1% for years 1-10 and 1.5% for years 11+ times High 5 successive average salary times years of service.

3) VESTING

Retirement benefits vest after 10 years or age 65.

4) DISABILITY

10 years service or 5 years after age 50. Total and permanent definition is used.

5) SURVIVOR BENEFITS

A. Death before retirement - Refund of contributions plus 5% interest to surviving spouse.

B. Death while eligible to retire - If over age 55 with 20 years service, or any age with 30 years service, a surviving spouse joint and last survivor annuity is available.

C. Death after retirement - The optional annuity elected at retirement is payable - options are joint and last and life with term certain.

6) REFUNDS

30 days after ceasing to render teaching service, a member may receive a refund of their contributions with 5% interest.

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
PLAN SUMMARY INCLUDING AMENDMENTS

Effective July 1, 1981 for all Members Hired Before July 1, 1981
Including all State Law and Bylaw Changes Through June 30, 1984

- 1) The Duluth Fund was established in 1910, the Tax Shelter Fixed Fund in 1964, the Tax Shelter Variable Fund in 1973 and the Tax Shelter Money Market Fund in 1981.
- 2) MEMBERSHIP DATA
Membership in the Basic Plan is compulsory for all instructional staff of the Duluth Public School System. As of June 30, 1984, there were 1,137 active members, and 562 retired members. Participation in tax shelter plans is voluntary.
- 3) CREDITABLE SERVICE
Duluth service for which a state license is required. Time for which a member is granted a leave of absence may be credited if normal contributions are made within two years under our Bylaws, or one year under a state program. There are also provisions for reciprocity of service with other Minnesota public funds, effective July 1, 1975.
- 4) WITHDRAWALS AND REFUNDS
Members who have terminated their employment may withdraw their contributions with 5% interest if they do not wish to participate under the Minnesota Combined Service Annuity Law. Members may repay previous refunds plus 6% interest to reinstate Duluth service.
- 5) VESTING
Benefits vest after 10 year's service or age 60 or participation under the Minnesota Combined Service Annuity Law.
- 6) RETIREMENT REQUIREMENTS AND BENEFIT FORMULAS
Normal Retirement is age 60 with one or more years of credited service. The benefit formula is: highest five years average salary times years of service times 1.25% = annual benefit.
Early Retirement - immediate is available between age 55 and 60 with 10 or more years of service. Benefits are reduced by .5% per month if paid before age 60. The maximum reduction is 30% at age 55. (60 mos. X .5% = 30%)
Rule of "85" if a member's age and years of Minnesota Public service total 85 or more. There are no early retirement reductions for retirement under age 60.
Early Retirement - deferred if resignation occurs at any age with 10 or more years of service, an annuity will be payable upon the attainment of age 55 at a reduced rate or at age 60 at full formula. The 10 years required may be the total of service in any Minnesota Fund participating under the Minnesota Combined Service Annuity Law.
Disability Benefit full formula is payable at any age with five or more years of service. There is no reduction for age. Member must be totally and permanently disabled from teaching.
Post retirement adjustments are made as additional funds become available. Members retiring before 1966 have received increases of 52%; 1967 + 38.1%; 1969 + 29.1%; 1970 + 23.6%; 1971 + 18.2%; and 1974 + 10.7%. In addition, pre-1957 retirees received an average monthly increase of \$5.34 as a result of a statewide post retirement increase enacted and funded by the 1976 Legislature. Effective December 1, 1977, annuities are paid in advance. Therefore, thirteen checks were received in 1977. An 8.7% increase became effective August 1, 1981.

Plan Summary -

Tax Shelter Fund 403 (b) and IRA contributions have been administered internally since 1964. Currently, the Association manages a Bond Fund, an Equity Fund and a Money Market Fund. The funds are designed to maximize investment return within carefully monitored risk limits at the lowest possible cost to the member. There are no early withdrawal penalties imposed by the Association. Total administrative costs were .0012% of assets. Average performance for 2 years ending June 30, 1984 - Bonds +15%, Stocks +20% and Money Market +10%. Tax free roll-overs are permitted to and from other carriers and between our funds.

7) LUMP SUM DEATH BENEFIT

Active member - Two times member's accumulated contributions with interest paid to named beneficiary; members are covered from first day of service.

Retired Member - Refund of remainder of member's deposits after deduction of total checks received to date of death if no survivor election was made at retirement.

8) SURVIVOR BENEFITS

Active Member - If more than ten years service and beneficiary is spouse of three years, a survivor benefit is two times contributions as a refund; 2.4 X contributions as the cash value of either a deferred or immediate life annuity; or a spouse's benefit equal to the value of a retirement benefit earned by the member at death.

Retired Member - At retirement, a member may choose a survivor option. An actuarial reduction is made from the normal amount to provide one of the following: equal amount to survivor; onehalf amount to survivor; 5, 10, 15 or 20 year term certain to survivor; or any plan of actuarial equivalence to the above.

9) FINANCING

Basic Fund - Benefits are financed jointly. Members contribute 4.5% of their total earnings. The State of Minnesota contributes 5.79% of earnings.

Tax Shelter Funds - Benefits are financed entirely from member's deposits and investment income.

10) INVESTMENTS

Basic Fund - Equity investments are limited to 65% of Assets; Bonds are also limited to 65% of Assets, and no single holding of either stocks or bonds shall exceed 6% of total assets. Investments are limited to permissible holdings under the state law. Benefits are currently funded with assets of \$47.0 million, book value.

Tax Shelter Funds - Limited to permissible holdings under the state law. Benefits are currently funded with assets of \$3.8 million, book value.

11) ADMINISTRATION

The Fund is administered by a Board of Trustees of ten members; two members of the Board of Education of Duluth, the Superintendent of Schools ex-officio, five active members and two retired members. Active and retired members are elected by the entire active and retired membership.

12) SOCIAL SECURITY COVERAGE

Since 1957, all members are covered under Social Security. All benefits are in addition to Social Security.

Social Security Leveling Adjustment - Any member retiring before age 62 may elect to receive a higher benefit from the Duluth Fund until eligible to receive Social Security.

EDWARD K. BLANCK, JR., Executive Secretary
Duluth Teachers' Retirement Fund Association
22 East First Street
Duluth, Minnesota

Telephone: 722-2894

Office hours: 8:30-5:00 and by appointment
Parking is available behind our office

Duluth Teachers' Retirement Fund Association
 "1st Class Cities Coordinated Formula"

Applicable to all members hired or rehired after 7-1-81,
 or upon election by member hired before 7-1-81

Percent of High 5 Average Successive Salaries

Age at Retirement

Rule of 85
 Column

Service	55	56	57	58	59	60	61	62	63	64	65+
10	5.5	5.8	6.1	6.4	6.7	7.0	7.6	8.2	8.8	9.4	10.0
11	6.3	6.7	7.0	7.4	7.7	8.1	8.7	9.4	10.1	10.8	11.5
12	7.2	7.5	7.9	8.3	8.7	9.1	9.9	10.7	11.4	12.2	13.0
13	8.0	8.4	8.8	9.3	9.7	10.2	11.0	11.9	12.8	13.6	14.5
14	8.8	9.3	9.8	10.2	10.7	11.2	12.2	13.1	14.1	15.0	16.0
15	9.6	10.2	10.7	11.2	11.7	12.3	13.3	14.4	15.4	16.5	17.5
16	10.5	11.0	11.6	12.2	12.7	13.3	14.4	15.6	16.7	17.9	19.0
17	11.3	11.9	12.5	13.1	13.7	14.4	15.6	16.8	18.0	19.3	20.5
18	12.1	12.8	13.4	14.1	14.7	15.4	16.7	18.0	19.4	20.7	22.0
19	12.9	13.6	14.3	15.0	15.7	16.5	17.9	19.3	20.7	22.1	23.5
20	13.8	14.5	15.3	16.0	16.8	17.5	19.0	20.5	22.0	23.5	25.0
21	14.6	15.4	16.2	17.0	17.8	18.6	20.1	21.7	23.3	24.9	26.5
22	15.4	16.2	17.1	17.9	18.8	19.6	21.3	23.0	24.6	26.3	28.0
23	16.2	17.1	18.0	18.9	19.8	20.7	22.4	24.2	26.0	27.7	29.5
24	17.1	18.0	18.9	19.8	20.8	21.7	23.6	25.4	27.3	29.1	31.0
25	17.9	18.9	19.8	20.8	21.8	22.8	24.7	26.7	28.6	30.6	32.5
26	18.7	19.7	20.7	21.8	22.8	23.8	25.8	27.9	29.9	32.0	34.0
27	19.5	20.6	21.7	22.7	23.8	24.9	27.0	29.1	31.2	33.4	35.5
28	20.4	21.5	22.6	23.7	24.8	25.9	28.1	30.3	32.6	34.8	37.0
29	21.2	22.3	23.5	24.6	25.8	27.0	29.3	31.6	33.9	36.2	38.5
30	29.2	30.4	31.6	32.8	34.0	35.2	37.6	40.0	40.0	40.0	40.0
31	30.3	31.5	32.8	34.0	35.3	36.5	39.0	41.5	41.5	41.5	41.5
32	31.4	32.7	34.0	35.3	36.6	37.8	40.4	43.0	43.0	43.0	43.0
33	32.5	33.8	35.2	36.5	37.8	39.2	41.8	44.5	44.5	44.5	44.5
34	33.6	35.0	36.3	37.7	39.1	40.5	43.2	46.0	46.0	46.0	46.0
35	34.7	36.1	37.5	39.0	40.4	41.8	44.7	47.5	47.5	47.5	47.5
36		37.2	38.7	40.2	41.7	43.1	46.1	49.0	49.0	49.0	49.0
37			39.9	41.4	42.9	44.4	47.5	50.5	50.5	50.5	50.5
38				42.6	44.2	45.8	48.9	52.0	52.0	52.0	52.0
39					45.5	47.1	50.3	53.5	53.5	53.5	53.5
40						48.4	51.7	55.0	55.0	55.0	55.0
41							53.1	56.5	56.5	56.5	56.5
42								58.0	58.0	58.0	58.0
43									59.5	59.5	59.5
44										61.0	61.0
45											62.5

WORK SHEET

1. Highest 5 Successive Average Salary	\$ _____	\$ 24,000
2. Factor from Chart (Example-age 55, 25 yrs)	_____	.179%
3. Annual Annuity (line 1 times line 2)	\$ _____	\$ 4,296
(Skip to Line 6 if no survivor benefit is needed)		
4. Survivor Option Reduction from Table	_____	.92%
5. Annual Benefit with Survivor Benefit	\$ _____	\$ 3,952
6. Monthly Benefit - divide line 3 or 5 by 12	\$ _____	\$ 329

DULUTH TEACHERS' RETIREMENT FUND
 Improved Old Plan
 for Members Hired Before 7-1-81
 ANNUITY PER YEAR OF SERVICE BY AGE

HIGH 5 AVERAGE SALARY	Rule of 85 Column					
	55	56	57	58	59	60+
\$15,000	10.93	11.87	12.80	13.74	14.68	15.62
16,000	11.66	12.66	13.66	14.66	15.66	16.66
17,000	12.39	13.45	14.51	15.57	16.63	17.70
18,000	13.12	14.25	15.37	16.50	17.62	18.75
19,000	13.85	15.04	16.22	17.41	18.60	19.79
20,000	BA 14.58	15.83	17.08	18.33	19.58	20.83
21,000	BA 45 15.30	16.62	17.93	19.24	20.55	21.87
22,000	16.00	17.41	18.78	20.16	21.53	22.91
23,000	16.76	18.20	19.63	21.07	22.51	23.95
24,000	17.50	19.00	20.50	22.00	23.50	25.00
25,000	18.22	19.79	21.35	22.91	24.47	26.04
26,000	18.95	20.58	22.20	23.83	24.45	27.08
27,000	MA 19.68	21.37	23.05	24.74	26.43	28.12
28,000	MA 45 20.41	22.16	23.91	25.66	27.41	29.16
29,000	21.14	22.95	24.76	26.57	28.38	30.20
30,000	21.87	23.75	25.62	27.50	29.37	31.25
31,000	22.57	24.51	26.44	28.38	30.31	32.25
32,000	23.33	25.33	27.33	29.33	31.33	33.33
33,000	24.05	26.12	28.18	30.24	32.30	34.37
34,000	24.78	26.91	29.03	31.16	33.28	35.41
35,000	25.51	27.70	29.88	32.07	34.26	36.45
36,000	26.25	28.50	30.75	33.00	35.25	37.50
37,000	26.97	29.29	31.60	33.91	36.22	38.54
38,000	27.70	30.08	32.70	34.83	37.20	39.58
39,000	28.43	30.87	33.30	35.74	38.18	40.62
40,000	29.16	31.66	34.16	36.66	39.16	41.66

WORK SHEET

	Yrs	Example
1. Years of Duluth Service	_____	25 yrs
2. Annuity from Above Chart (Example: Age 55, 24,000 Average Salary)	\$ _____	\$17.50
3. Multiply #1 Times #2 = Monthly Benefit (Stop here if no survivor benefit is wanted)	\$ _____	\$437.00
4. Survivor Option Reduction From Table (Example: Survivor age 55, Option II)	_____ %	.92%
5. Multiply #3 Times #4 = Monthly Benefit	\$ _____ *	\$402.50

*Social Security Leveling Adjustment can increase this benefit for member age 55-62.
 Social Security is in addition to this amount for members over age 62.

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
SOCIAL SECURITY ADJUSTMENT OPTION
 (Applicable to Retirement Before Age 62 Only)

1. Enter date of commencement of benefits	_____	<u>6-30-84</u>
2. Enter nearest attained age as of commencement of benefits. Participant's age _____ yrs. _____ mos.		
3. Enter factor from table based on date on line 1 and age on line 2	_____	<u>.431</u>
4. Enter estimated Primary Social Security benefit at age 65 obtained from Social Security office.	\$ _____	\$ <u>500.00</u>
5. Multiply line 4 times .8 (80% Benefit at age 62)	\$ _____	\$ <u>400.00</u>
6. Multiply line 3 times line 5.	\$ _____	\$ <u>172.40</u>
7. Enter early retirement benefit from worksheet (Example: Member and Spouse Age 55, Op II)	\$ _____	\$ <u>402.50</u>
8. Subtract line 6 from line 7 - this is the monthly benefit payable on and after attainment of age 62.	\$ _____	\$ <u>230.10</u>
9. Add line 5 plus line 8 - this is the monthly benefit payable from early retirement date to attainment of age 62.	\$ _____	\$ <u>630.10</u>

Leveling Adjustment Table

Years Months	55	56	57	58	59	60	61	62
0	\$.431	\$.387	\$.337	\$.283	\$.223	\$.157	\$.083	
1	.428	.383	.333	.278	.218	.150	.076	
2	.424	.378	.328	.273	.212	.144	.069	
3	.420	.374	.324	.268	.207	.138	.062	
4	.416	.370	.319	.263	.201	.132	.055	
5	.413	.366	.315	.258	.195	.126	.048	
6	.409	.362	.310	.253	.190	.120	.041	
7	.405	.358	.306	.248	.184	.113	.034	
8	.402	.354	.301	.243	.179	.107	.028	
9	.398	.350	.297	.238	.173	.101	.021	
10	.394	.346	.292	.233	.168	.095	.014	
11	.390	.342	.288	.228	.162	.089	.007	

DULUTH TEACHERS' RETIREMENT FUND
APPROXIMATE SURVIVOR BENEFIT PERCENTAGES*

All annuities are lifetime to member with some remaining benefit to a named beneficiary.

OPTION I 100% CONTINUED TO BENEFICIARY

Beneficiary		55	56	57	58	59	60	61	62	63	64	65
Member	55	86%	87	87	88	88	89	89	90	91	91	92
	56	85	86	86	87	87	88	89	89	90	90	91
	57	84	85	85	86	86	87	88	88	89	90	90
	58	83	84	84	85	85	86	87	87	88	89	89
	59	81	83	83	83	84	85	86	86	87	88	88
	60	80	81	81	82	83	84	84	85	85	87	87
	61	79	80	80	81	82	83	83	84	85	86	86
	62	77	79	79	80	80	81	82	83	84	84	85
	63	76	77	77	78	79	80	81	82	82	83	84
	64	74	76	76	77	78	78	79	80	81	82	83
	65	73	74	74	75	76	77	78	79	80	81	81

OPTION II 50% CONTINUED TO BENEFICIARY

Beneficiary		55	56	57	58	59	60	61	62	63	64	65
Member	55	92%	93	93	93	94	94	94	95	95	95	95
	56	92	92	92	93	93	93	94	94	94	95	95
	57	91	91	92	92	93	93	93	94	94	94	95
	58	90	91	91	91	92	92	93	93	93	94	94
	59	90	90	90	91	92	92	92	92	92	93	94
	60	89	89	90	90	91	91	91	92	92	93	93
	61	88	88	89	89	90	90	91	91	91	92	92
	62	87	87	88	88	89	89	90	90	90	91	92
	63	86	87	87	88	89	89	89	90	89	90	91
	64	85	86	86	87	88	88	88	89	88	89	90
	65	84	85	85	86	87	87	87	88	88	88	90

OPTION III TERM CERTAIN REMAINDER OF TERM TO BENEFICIARY

Member		55	56	57	58	59	60	61	62	63	64	65
5 Yr		99%	99	99	99	99	98	98	98	98	98	98
10 Yr		97	97	96	96	96	95	95	94	94	93	92
15 Yr		94	94	93	92	92	91	90	89	88	87	85
20 Yr		90	90	89	88	87	85	84	83	81	80	78

*Percentages shown are only carried to two places because of space limitations. Benefits computed will be a maximum of 1% understated.

MAXIMUM CONTRACT SALARIES BY LANE*

1972-73 to 1984-85

	BA or BS	Plus 15	Plus 30	Plus 45	MA or MS, Equ.	Plus 15	Plus 30	Plus 45	PhD.
72-73	12,200	12,375	12,550	-	15,100	15,275	15,450	15,625	15,800
73-74	12,450	12,675	12,900	-	15,450	15,675	15,900	16,125	16,350
74-75	13,700	14,000	14,300	-	17,200	17,500	17,800	18,100	18,400
75-76	14,590	14,890	15,190	-	18,315	18,615	18,915	19,215	19,515
76-77 ⁽¹⁾	15,400	15,700	16,000	-	19,325	19,625	19,925	20,225	20,525
77-78 ⁽¹⁾	15,970	16,270	16,570	-	20,020	20,320	20,620	20,920	21,220
78-79 ⁽¹⁾	16,720	17,020	17,320	-	20,970	21,270	21,570	21,870	22,170
79-80 ⁽²⁾	17,475	17,775	18,075	18,375	22,125	22,425	22,725	23,025	23,325
80-81 ⁽³⁾	18,025	18,325	18,625	18,925	23,275	23,575	23,875	24,175	24,475
81-82 ⁽³⁾	19,583	19,887	20,187	20,487	25,504	25,804	26,104	26,404	26,704
82-83 ⁽³⁾	20,862	21,162	21,462	21,767	27,752	28,052	28,352	28,652	28,952
83-84 ⁽³⁾	21,212	21,517	21,822	22,127	28,219	28,524	28,829	29,134	29,439
84-85 ⁽³⁾	22,869	23,198	23,527	23,855	30,422	30,751	31,081	31,409	31,738

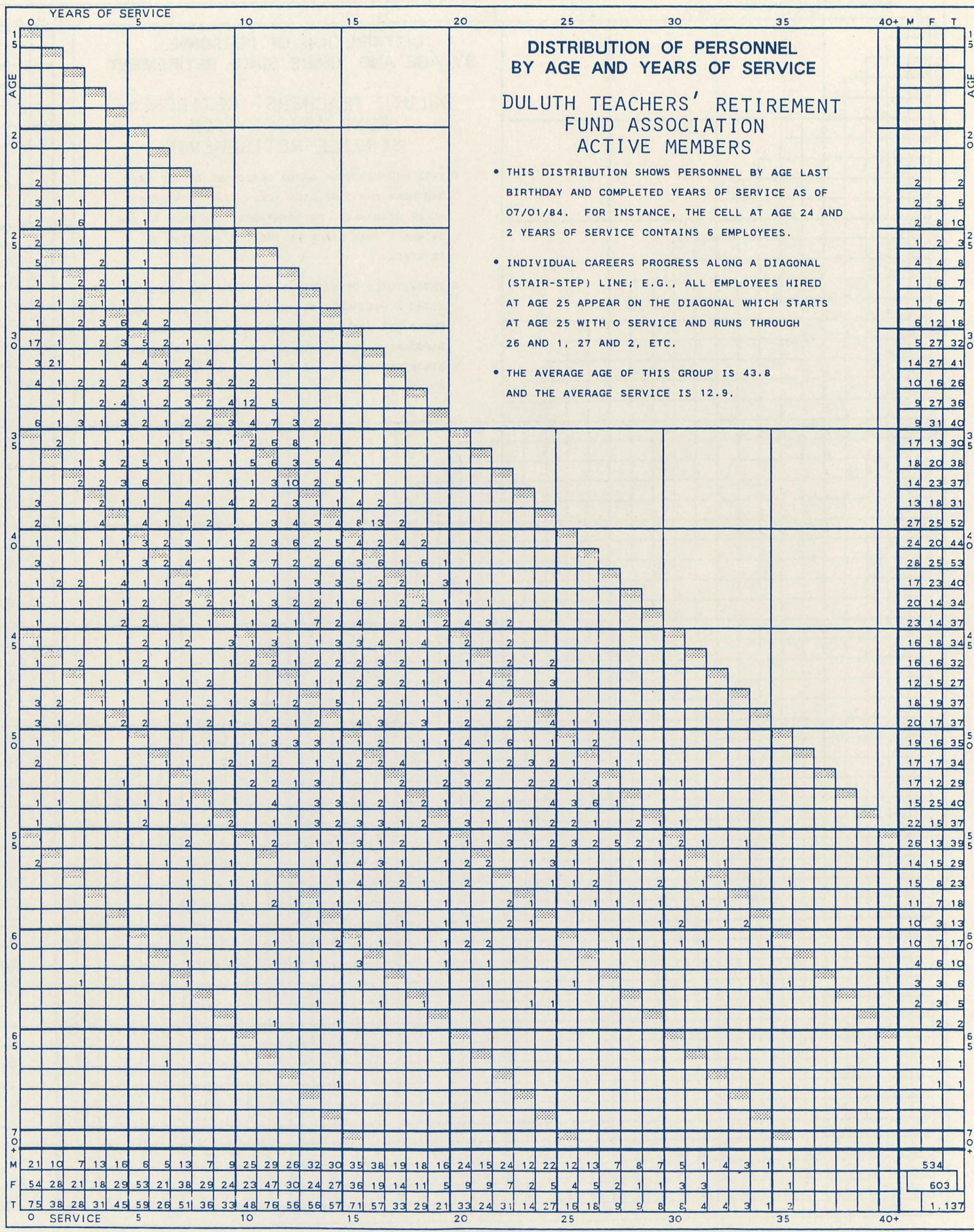
- (1) Career Increment + \$100 W/25 or more years
- (2) Career Increment + \$200 W/20 + \$400 W/25 years or more
- (3) Career Increment + \$400 W/20 + \$900 W/25 years or more

*Extra curricular is in addition to these amounts, severance pay is not used in the computation of Social Security or the Duluth Teachers' Retirement Plan.

Estimated Monthly Benefits Available with 25 years service on June 30, 1984 including use of Duluth Teachers' Retirement, Social Security Leveling Adjustment, Social Security and Spouse's Social Security where applicable:

	BA				MA			
	55	58	62*	65	55	58	62*	65
Single Member	585	781	1,015	1,120	691	817	1,133	1,275
Married Members - Spouse Same Age - Using Option II	557	739	1,195	1,368	656	774	1,308	1,537
Survivor Benefit if Members Death Occured 1 Day After Retirement	159	208	747	834	201	216	808	931

*Approximate Value of Rule of 85 Benefits

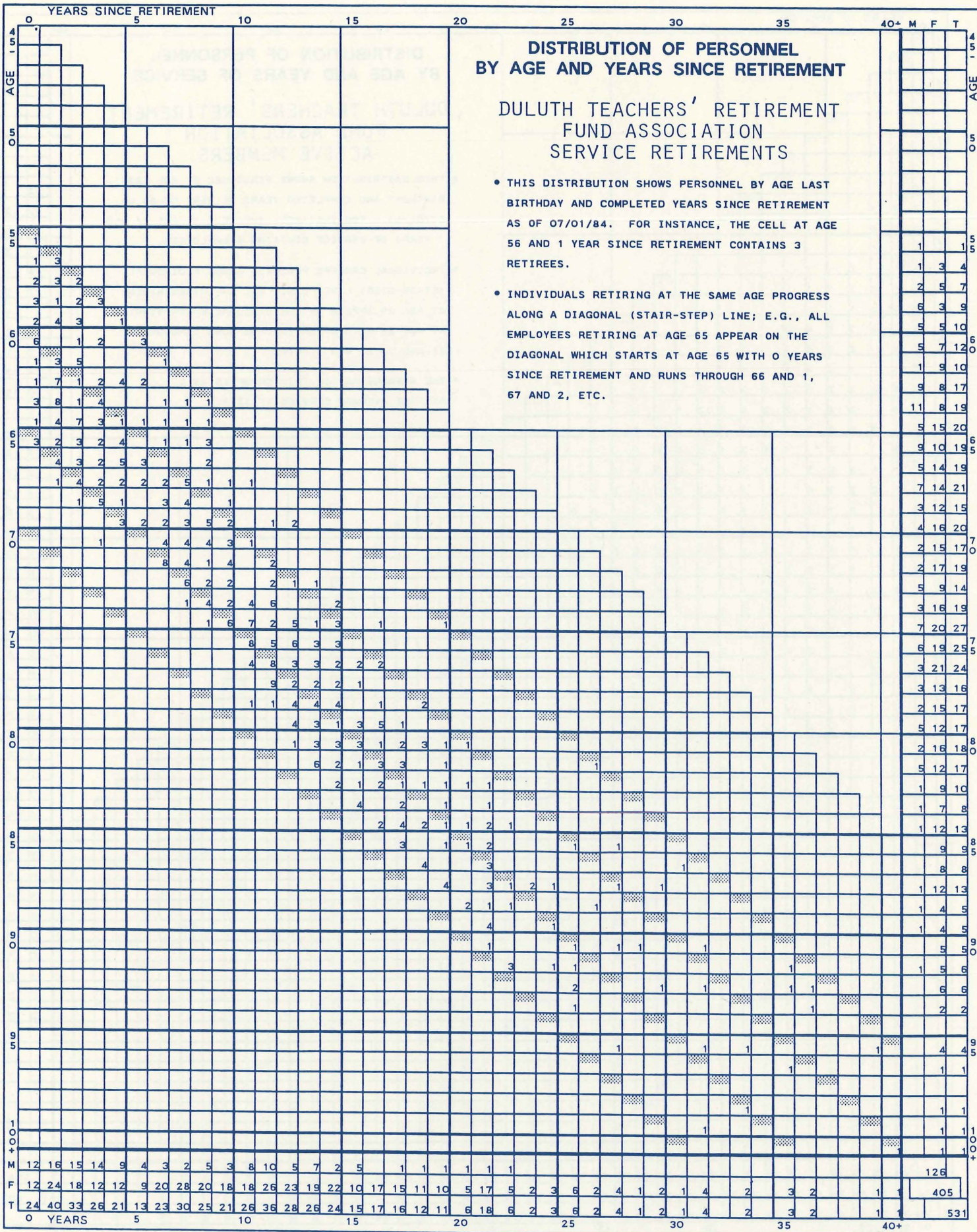


DISTRIBUTION OF PERSONNEL BY AGE AND YEARS OF SERVICE

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION ACTIVE MEMBERS

- THIS DISTRIBUTION SHOWS PERSONNEL BY AGE LAST BIRTHDAY AND COMPLETED YEARS OF SERVICE AS OF 07/01/84. FOR INSTANCE, THE CELL AT AGE 24 AND 2 YEARS OF SERVICE CONTAINS 6 EMPLOYEES.
- INDIVIDUAL CAREERS PROGRESS ALONG A DIAGONAL (STAIR-STEP) LINE; E.G., ALL EMPLOYEES HIRED AT AGE 25 APPEAR ON THE DIAGONAL WHICH STARTS AT AGE 25 WITH 0 SERVICE AND RUNS THROUGH 26 AND 1, 27 AND 2, ETC.
- THE AVERAGE AGE OF THIS GROUP IS 43.8 AND THE AVERAGE SERVICE IS 12.9.

AGE	M	F	T
15			
16			
17			
18			
19			
20			
21			
22			
23			
24	2	2	
25	2	3	5
26	2	8	10
27	1	2	3
28	4	4	8
29	1	6	7
30	1	6	7
31	6	12	18
32	5	27	32
33	14	27	41
34	10	16	26
35	9	27	36
36	9	31	40
37	17	13	30
38	18	20	38
39	14	23	37
40	13	18	31
41	27	25	52
42	24	20	44
43	28	25	53
44	17	23	40
45	20	14	34
46	23	14	37
47	16	18	34
48	16	16	32
49	12	15	27
50	18	19	37
51	20	17	37
52	19	16	35
53	17	17	34
54	17	12	29
55	15	25	40
56	22	15	37
57	26	13	39
58	14	15	29
59	15	8	23
60	11	7	18
61	10	3	13
62	10	7	17
63	4	6	10
64	3	3	6
65	2	3	5
66	2	2	
67		1	1
68		1	1
69			
70			
71			
72			
73			
74			
75			
76			
77			
78			
79			
80			
81			
82			
83			
84			
85			
86			
87			
88			
89			
90			
91			
92			
93			
94			
95			
96			
97			
98			
99			
100			
101			
102			
103			
104			
105			
106			
107			
108			
109			
110			
111			
112			
113			
114			
115			
116			
117			
118			
119			
120			
121			
122			
123			
124			
125			
126			
127			
128			
129			
130			
131			
132			
133			
134			
135			
136			
137			
138			
139			
140			
141			
142			
143			
144			
145			
146			
147			
148			
149			
150			
151			
152			
153			
154			
155			
156			
157			
158			
159			
160			
161			
162			
163			
164			
165			
166			
167			
168			
169			
170			
171			
172			
173			
174			
175			
176			
177			
178			
179			
180			
181			
182			
183			
184			
185			
186			
187			
188			
189			
190			
191			
192			
193			
194			
195			
196			
197			
198			
199			
200			
201			
202			
203			
204			
205			
206			
207			
208			
209			
210			
211			
212			
213			
214			
215			
216			
217			
218			
219			
220			
221			
222			
223			
224			
225			
226			
227			
228			
229			
230			
231			
232			
233			
234			
235			
236			
237			
238			
239			
240			
241			
242			
243			
244			
245			
246			
247			
248			
249			
250			
251			
252			
253			
254			
255			
256			
257			
258			
259			
260			
261			
262			
263			
264			
265			
266			
267			
268			
269			
270			
271			
272			
273			
274			
275			
276			
277			
278			
279			
280			
281			
282			
283			
284			
285			
286			
287			
288			
289			
290			
291			
292			
293			
294			
295			
296			
297			
298			
299			
300			
301			
302			
303			
304			
305			
306			
307			
308			
309			
310			
311			
312			
313			
314			
315			
316			
317			
318			
319			
320			
321			
322			
323			
324			
325			
326			
327			
328			
329			
330			
331			
332			
333			
334			
335			
336			
337			
338			
339			
340			
341			
342			
343			
344			
345			
346			
347			
348			
349			
350			
351			
352			
353			
354			
355			
356			
357			
358			
359			
360			
361			
362			
363			
364			
365			
366			
367			
368			
369			
370			
371			
372			
373			
374			
375			
376			
377			
378			
379			
380			
381			
382			
383			
384			
385			
386			
387			
388			
389			
390			
391			
392			
393			
394			
395			
396			
397			
398			
399			
400			
401			
402			
403			
404			
405			
406			
407			
408			
409			
410			
411			
412			
413			
414			
415			
416			
417			
418			
419			
420			
421			
422			
423			
424			
425			
426			
427			
428			
429			
430			
431			
432			
433			
434			
435			
436			
437			
438			
439			
440			
441			
442			
443			
444			
445			
446			
447			
448			
449			
450			
451			
452			
453			
454			
455			
456			
457			
458			
459			
460			
461			
462			
463			
464			
465			
466			
467			
468			
469			
470			
471			
472			
473			
474			
475			



DISTRIBUTION OF PERSONNEL BY AGE AND YEARS SINCE RETIREMENT

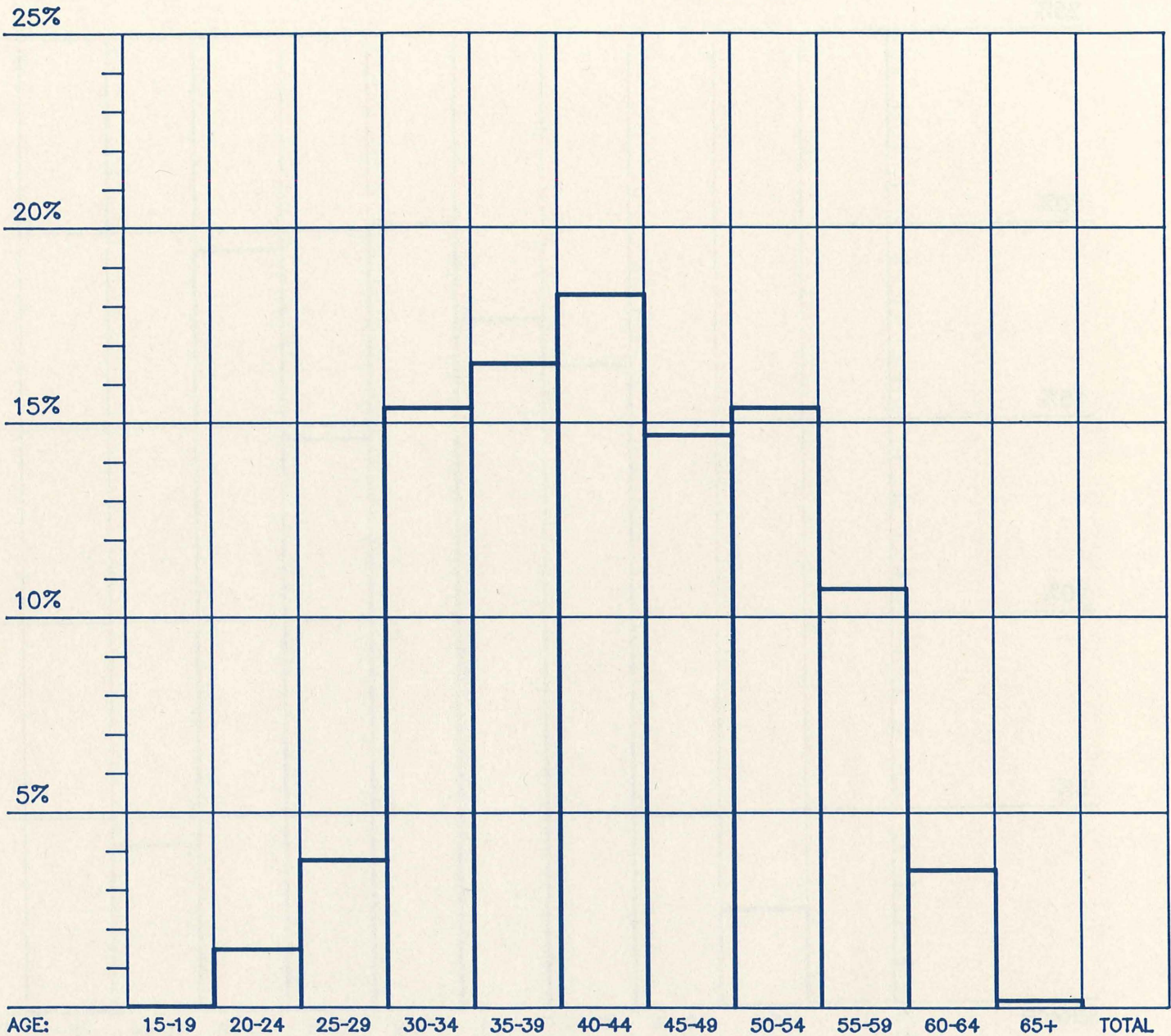
DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION SERVICE RETIREMENTS

- THIS DISTRIBUTION SHOWS PERSONNEL BY AGE LAST BIRTHDAY AND COMPLETED YEARS SINCE RETIREMENT AS OF 07/01/84. FOR INSTANCE, THE CELL AT AGE 56 AND 1 YEAR SINCE RETIREMENT CONTAINS 3 RETIREES.
- INDIVIDUALS RETIRING AT THE SAME AGE PROGRESS ALONG A DIAGONAL (STAIR-STEP) LINE; E.G., ALL EMPLOYEES RETIRING AT AGE 65 APPEAR ON THE DIAGONAL WHICH STARTS AT AGE 65 WITH 0 YEARS SINCE RETIREMENT AND RUNS THROUGH 66 AND 1, 67 AND 2, ETC.

AGE	M	F	T
45			
50			
55	1	1	
56	1	3	4
57	2	5	7
58	6	3	9
59	5	5	10
60	5	7	12
61	1	9	10
62	9	8	17
63	11	8	19
64	5	15	20
65	9	10	19
66	5	14	19
67	7	14	21
68	3	12	15
69	4	16	20
70	2	15	17
71	2	17	19
72	5	9	14
73	3	16	19
74	7	20	27
75	6	19	25
76	3	21	24
77	3	13	16
78	2	15	17
79	5	12	17
80	2	16	18
81	5	12	17
82	1	9	10
83	1	7	8
84	1	12	13
85	9	9	5
86	8	8	
87	1	12	13
88	1	4	5
89	1	4	5
90	5	5	0
91	1	5	6
92	6	6	
93	2	2	
94			
95	4	4	5
96	1	1	
97			
98	1	1	
99	1	1	
100+	1	1	
TOTAL	126	405	531

DISTRIBUTION OF PERSONNEL BY AGE

DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
ACTIVE MEMBERS



NUMBER	0	17	43	175	188	208	167	175	122	40	2	1,137
AVERAGE PAY	0	7,730	11,059	14,397	23,523	25,240	26,008	28,245	29,070	27,464	23,835	23,551
AVERAGE SERVICE	0.0	1.8	3.3	5.7	10.5	12.5	14.2	18.0	21.2	18.3	10.3	12.9

DETAIL OF EMPLOYEES 55 & OVER

AGE:	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70+
NUMBER	39	29	23	18	13	17	10	6	5	2	0	1	1	0	0	0
AVERAGE PAY	30,079	28,166	28,042	28,541	30,607	30,270	25,580	21,276	28,582	28,801	0	19,144	28,525	0	0	0
AVERAGE SERVICE	22.2	18.4	20.9	21.1	25.6	20.8	14.4	18.2	19.6	13.3	0.0	6.3	14.3	0.0	0.0	0.0

**DISTRIBUTION OF PERSONNEL BY EXPECTED SERVICE AT AGE 65
(BASED UPON PERSONNEL AGE 55 AND OVER)** DULUTH TEACHERS' RETIREMENT FUND ASSOCIATION
ACTIVE MEMBERS

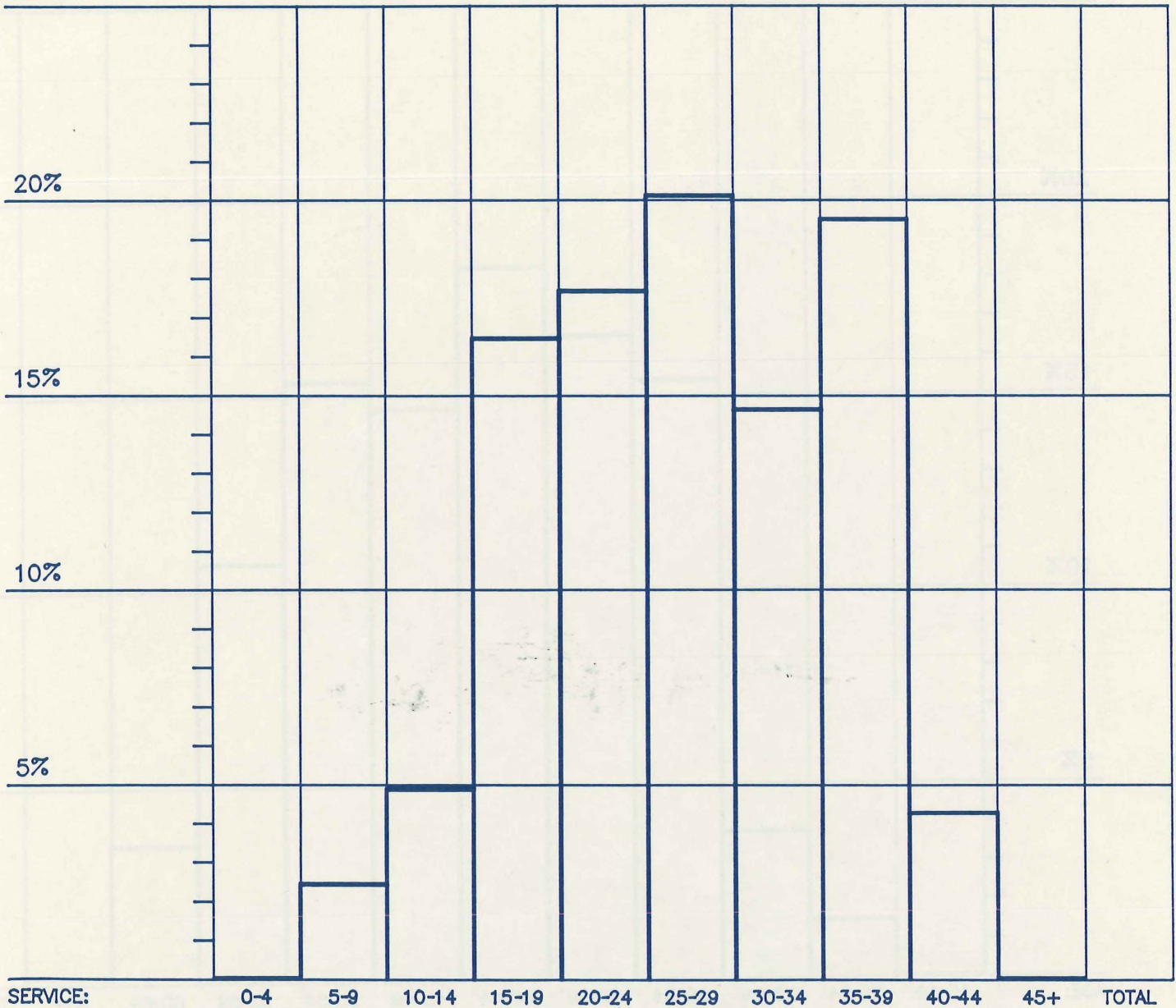
25%

20%

15%

10%

5%



SERVICE:	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45+	TOTAL
NUMBER	0	4	8	27	29	33	24	32	7	0	164
AVERAGE PAY	0	10,693	22,955	26,315	29,371	29,123	30,228	31,892	28,139	0	28,614
AVERAGE SERVICE AT AGE 65 *	0.0	7.4	12.9	17.9	23.2	27.2	32.9	37.4	41.5	0.0	27.2

* OR CURRENT AGE IF OLDER