TWIN CITY LINES

EMPLOYEES' RETIREMENT PLAN

ACTUARIAL VALUATION

AS OF JANUARY 1, 1975

Prepared and submitted by

George V. Stennes and Associates

Consulting Actuaries

FILE COPY

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August 4, 1975

Retirement Allowance Committee
Twin City Lines Employees' Retirement Plan
Minneapolis, Minnesota

Gentlemen:

At your request we have made an Actuarial Valuation of the Twin City Lines Employees' Retirement Plan as of January 1, 1975. The attached report summarizes the results of this valuation.

It is our opinion that if the current contribution rates of 4.9% for employees and 9.8% for the Company are continued and the total covered payroll remains at the current level, normal costs will be met and the accrued liability will be funded by September 1, 1989. Calculation of this funding period reflects the combined effect of plan changes and certain changes in the actuarial assumptions.

We certify that all calculations in respect to the valuation were performed on the basis of the assumptions outlined in the report and that the results are correct to the best of our knowledge.

Respectfully submitted,

James R. Bordewick

James R. Bordewick
Fellow, Society of Actuaries

JRB:ml

TWIN CITY LINES

EMPLOYEES' RETIREMENT PLAN

ACTUARIAL VALUATION

AS OF JANUARY 1, 1975

This report contains the results of the actuarial valuation of the Plan performed as of January 1, 1975. The costs shown in this report reflect the changes in plan benefits and provisions as outlined in Appendix IV and the revised actuarial assumptions outlined in Appendix III.

The actuarial assumptions as to mortality, morbidity and termination, which were adopted in 1961 were again used for the current valuation. (These assumptions reflect closely the Plan's own experience in the 1955 - 1960 period.) The assumed rate of interest was changed from 3 1/2% to 5%, and current salaries were assumed to increase at 3 1/2%, compounded annually, until retirement age.

The contribution rates for employees and the Company set forth later in the report are expressed in percentages of compensation so it is important to understand that the level of gross payroll of the Company is of great importance in determining the level of contributions required to support the pension benefits. The covered payroll as of January 1, 1975 is estimated at approximately $18,624,075 annually. This is a 24.4% increase from the January 1, 1974 covered payroll. The number of active employees covered increased by 201 from the previous valuation. The average prospective pension for active employees increased by 12.6% from the previous year which reflects benefit improvements.

The calculations underlying the results set forth below assume a continuation of the covered payroll at its current level. A drop in covered payroll will increase the percentage of pay necessary to fund the pension benefits over a fixed period of time, or will lengthen the period necessary for a fixed contribution rate to fully fund the benefits. An increase in covered payroll will have the opposite effect.

The Plan commenced July 1, 1944 and was amended as of January 1, 1950, as of January 1, 1965, as of January 1, 1972, and as of January 1, 1975. It is supported by joint contributions of employees and the Company. Company contributions according to the Plan are to be two-thirds of the total required contributions. Article Six of the Plan, prior to the 1965 amendments, provided that the contributions to be made in years following 1951 "shall be the annual amounts necessary (a) to fund the cost of current service credit for such year, and (b) to fund the accrued liability over a period of 40 years." The 1965 amendments froze the total contribution rate at 14.7% for a three year period, and lengthened the funding period to whatever period of years necessary, which as of January 1, 1965 was 35 1/2 years from that date. Minnesota Statute now provides that the accrued liabilities are to be amortized by the end of 1997.

This Valuation reflects the revised actuarial assumptions and increases in plan benefits due to plan revisions as of January 1, 1975. It also reflects a change in the unamortized portion of the $798,056 established last year. This amount was an increase in the unfunded liability due to actuarial refinements and was being amortized over a 5 year period commencing January 1, 1974. This unamortized portion has been released into the unfunded liability as of January 1, 1975.

STATEMENT OF INCOME AND DISBURSEMENTS

1-1-74 TO 12-31-74

Trust Assets, 1-1-74 (Includes Accrued Contributions of $181,799.55)		$ 9,356,334.37
Income		
Company and Employee Contributions	$2,435,837.07	
Company and Employee Contributions (Accrued)	227,343.69	
Interest and Dividends	612,708.18	
Gain on Sale of Warrants	625.00	
Loss on Sale and Redemption of Securities	(491,086.57)	
Total Income		2,785,427.37
Sum		$12,141,761.74
Disbursements		
Pensions and Refunds at Death on Retirees	$1,221,816.50	
Refunds of Contributions on Actives	197,694.92	
Trustee's Fees to 6-30-74	12,100.00	
Actuarial Fees	5,600.00	
Miscellaneous (Postage, Insurance, Printing, Administration, etc.)	3,067.60	
Total Disbursements		1,440,279.02
Trust Assets, 12-31-74 (Cost) (Includes Accrued Contributions of $227,343.69)		$10,701,482.72
Trust Assets 12-31-74 (Market)		$ 8,858,347.96

TRUST ASSETS

12-31-74

ESTABLISHMENT OF DEFERRED YIELD ADJUSTMENT ACCOUNT

Under the terms of Minnesota Statute 356.20, Subdivision 5, a public fund is permitted to establish a Deferred Yield Adjustment Account. This is a reserve fund which will minimize the fluctuation caused by losses or gains resulting from the sale of debt securities in a given year. The Twin City Lines Employees' Retirement Plan is a fund that qualifies under this statute for the treatment of gains and losses resulting from the sale of debt securities.

The total losses realized from the sale of bonds for the 1974 plan year were $23,553.82. These losses will be amortized over a four year period; therefore, only $5,888.46 of the loss has been recognized in the valuation assets for 1974 and a Deferred Yield Adjustment Account for the balance of $17,665.36 has been established. The valuation assets for the Trust Fund used in determining the plan costs are summarized below:

	Cost	Market
Trust Assets	$10,701,483	$8,858,348
Deferred Yield Adjustment Account	+ 17,665	+ 17,665
Valuation Assets, 12-31-74	$10,719,148	$8,876,013

RESULTS OF VALUATION

This valuation is the fourteenth which has been based on the actual past experience of the Plan, projected for future developments. Since the actuarial factors used in the valuation reflect closely the Plan's recent experience, fluctuations in the funding period due to actuarial gains and losses can be expected from year to year, which will not be cushioned by conservative actuarial assumptions. For example, 1974 again showed higher mortality among retirees than expected and fewer retirements than expected, both of which produce gains.

The outstanding changes in the history of this fund have been: (1) the decline in employment accompanied by a steady increase in retired participants, (now reversed by a sharp increase in covered payroll, an increase in employment, and a continued decrease in the number of retirees); (2) the more favorable rates of investment earnings which have been achieved in the last few years; (3) a trend toward earlier retirement, (this trend toward earlier retirement has slowed down and there is evidence that the cost of this feature may not be as high as calculated on a strictly theoretical basis since it appears to be elected by employees in less than average health; (4) a continued high level of disability costs; (5) from 1971 through 1974, a sharp increase in the growth rate of the fund - $1,345,000, $1,149,000, $1,046,000, and $904,000 for 1974, 1973, 1972 and 1971, respectively; and (6) large realized capital losses on the sale of securities during 1974.

The report submitted last year indicated that the combined contribution rate of 14.7% of covered payroll would pay the normal annual cost and amortize the unfunded liability over a period of approximately 17.75 years from January 1, 1974 (by October 1, 1991), assuming the covered payroll is unchanged and experience followed the actuarial assumptions. The January 1, 1975 valuation indicates that the unfunded liability will be amortized in approximately 14.67 years from January 1, 1975 (by September 1, 1989). Minnesota Statute 356.21, Subdivision 5, Paragraph (6) provides for amortizing the unfunded liability by the end of the plan's fiscal year in 1997. The current combined rate of 14.7% of covered payroll would meet full funding by September 1, 1989.

Valuation Date	Estimated "Full Funding" Date
January 1, 1965	July 1, 2000
January 1, 1966	March 1, 2002
January 1, 1967	January 1, 2002
January 1, 1968	July 1, 1998
January 1, 1969	July 1, 1999
January 1, 1970	October 1, 1994
January 1, 1971	July 1, 1992
January 1, 1972	November 1, 1990
January 1, 1973 (Before Change)	May 1, 1988
January 1, 1973 (After Change)	October 1, 1991
January 1, 1974	October 1, 1991
January 1, 1975 (Before Changes)	April 1, 1988
January 1, 1975 (After Changes)	September 1, 1989

The estimated full funding date on the basis of the various plan and assumption changes is shown below:

1)	Plan prior to benefit change; old actuarial assumptions	April 1, 1988
2)	Plan after benefit change; old actuarial assumptions	May 1, 1994
3)	Plan after benefit change; revised actuarial assumptions	September 1, 1989

These funding periods have been developed using an adjusted cost value for assets. If market value had been utilized, the full funding date would be January 1, 1992.

UNFUNDED LIABILITY

AS OF JANUARY 1, 1975

(1)	Present Value of Future Benefits:	
	For Active Participants -	
	Regular Retirement Allowances	$22,708,104
	Disability	2,184,156
	Death Benefits Before Retirement	588,963
	Withdrawal Benefits	787,803
	Total Active	$26,269,026
	For Participants Terminated with a Vested Interest	$ 162,321
	Present Value of Retirement Allowances Payable to Currently Retired Participants	
	Regular Retirements	8,779,859
	Disability Retirements	1,207,541
	Total Retired	$ 9,987,400
	Total Present Value of Benefits	$36,418,747
(2)	Present Value of Future Normal Costs	7,856,316
(3)	Accrued Liability (1) minus (2)	28,562,431
(4)	Valuation Assets	10,719,148
(5)	Unfunded Liability (3) minus (4)	$17,843,283

DEVELOPMENT OF UNFUNDED LIABILITY

The unfunded liability increased by $1,681,292 from January 1, 1974 to January 1, 1975. An analysis of this increase is shown below:

Unfunded Liability, 1-1-74	$ 16,161,991
plus	
Interest Requirements at 3 1/2%	+ 558,192
plus	
Actuarial Loss for Year Ended 12-31-74	+ 1,063,850
less	
Amount by which Contributions were Greater than Cost for 1974	- 1,658,921
Unfunded Liability, Before Changes, 1-1-75	$ 16,125,112
plus	
Increase in Unfunded Liability Due to Changes in Plan Benefits	+ 4,505,437
Unfunded Liability, after Changes, (Old Assumptions), 1-1-75	$ 20,630,549
less	
Decrease in Unfunded Liability Due to Change in Actuarial Assumptions	- 2,787,266
Unfunded Liability, New Plan Benefits, New Assumptions, 1-1-75	$ 17,843,283

The actuarial loss for the year reflects the full impact of all realized losses on the sale of securities. Recognition of only a portion of the realized losses on debt instruments is included in the decrease in unfunded liability due to change in actuarial assumptions. Major actuarial losses resulted from the realized losses on the sale of securities, new entrants, and salaries increasing more than expected. It is anticipated that the assumption of 3 1/2% increase in salaried will reduce future salary losses.

NORMAL COST

JANUARY 1, 1975

The normal cost for total estimated future benefits, expressed as a level amount for each year of service and assuming level salaries, is allocated as follows:

Regular Retirement Allowances	$ 627,128
Disability Retirement Allowances	54,808
Death Benefits Before Retirement	113,300
Withdrawal Benefits	275,829
Total Normal Cost	$1,071,065

The normal cost is 5.75% of current covered annual payroll.

The normal cost for 1975 based on the prior plan, prior assumptions was $1,238,926. The change in plan benefits increased this amount by $62,683 to $1,301,609. The decrease in normal cost due to the revised actuarial assumptions was $230,544, thus arriving at a normal cost of $1,071,065 for 1975.

The estimated total (Employees and Company) contributions to the Plan in 1975 are $2,737,739. After deducting the normal cost of $1,071,065, this leaves $1,666,674 as available as an amortization payment toward the unfunded accrued liability. (This compares with $1,197,056 available for the payment toward the unfunded liability in 1974.)

Amortization payments at this level would be required for approximately 14.67 years from January 1, 1975 to completely fund the accrued liability. Thus, the date on which the Plan could become fully funded is estimated to be approximately September 1, 1989.

In our opinion, the current contribution rate of 14.7% will support the Plan on the basis outlined above, assuming the covered payroll does not decrease. However, any changes which would materially increase the unfunded liability, decrease the income of the fund, or a substantial decrease in covered payroll, would require an increase in the contribution rate in order to remain within the prescribed amortization period.

The total number of retirees decreased by 45 from the previous year. There was a decrease of 31 in the total non-disability retirements, and 14 in the total number of disability retirements. During 1974, there was one out of thirteen non-disability retirees who elected an optional form of retirement income. This was the Ten Years Certain and Life Option.

APPENDIX I

MEMBERSHIP OF PLAN

The following tables show summaries of the active and retired participants in the plan in addition to a summary of annual payroll.

The total annual compensation shown is the approximate annual rate in effect on December 31, 1974 rather than the amount actually paid in 1974.

The total prospective annual pension is the pension which will be accrued by the group based on the assumption that compensation remains constant.

TABLE I

SUMMARY OF ANNUAL PAYROLL

	No.	Annual Payroll
Active Participants, 12-31-73	1,346	$14,974,941
Withdrawals due to Terminations, Deaths	102	944,185
Withdrawals with a Vested Interest	1	10,235
Retired during 1974	13	151,590
Active Participants, 12-31-73, Still remaining as of 12-31-74	1,230	$13,868,931
Increases in 1973 Payroll for 1,230 Participants to 12-31-74 Payroll		1,844,916
New Entrants	317	2,862,228
Total Active Participants, 12-31-74	1,547	$18,576,075 *
Employees over Age 65		48,000 **
Total Active Participants, 12-31-74		$18,624,075

* The annual payroll shown is for employees who have not reached their normal retirement dates.

** Additional annual payroll for employees who may continue to earn pension credits after age 65.

These figures represent the approximate annual rate in effect as of 12-31-74 rather than the amount actually paid in 1974.

TABLE II

SUMMARY OF EMPLOYEE PARTICIPANTS

	Male	Female	Total
Active Participants, 12-31-73	1,283	63	1,346
New Entrants	292	25	317
Withdrawals due to Terminations, Deaths	95	7	102
Withdrawals with a Vested Interest	1	0	1
Retired during 1974	13	0	13
Active Participants, 12-31-74	1,466	81	1,547
Terminated with a Vested Interest	8	0	8
Retired Participants			
Non-Disability	535	33	568
Disability	103	7	110
Total Participants, 12-31-74	2,112	121	2,233

Average Entry Age for 1,547 Actives is 29.84.

Average Entry Age for 317 New Entrants is 29.57.

TABLE III

SUMMARY OF RETIRED PARTICIPANTS

NON-DISABILITY RETIREDS

	Male	Female	Total
Total Retired, 12-31-73	564	35	599
New Retirees			
From Active Participants	12	0	12
From Terminated with a Vested Interest	1	0	1
Retired Deaths	42	2	44
Total Non-Disability Retireds, 12-31-74	535	33	568

DISABILITY RETIREDS

	Male	Female	Total
Total Retired, 12-31-73	117	7	124
New Retirees - From Active Participants	1	0	1
Retired Deaths	15	0	15
Total Disability Retireds, 12-31-74	103	7	110
Total Retirees, 12-31-74 (Non-Disability plus Disability)	638	40	678

Form of Annuity	Number of Retirees
Life Annuity Pensions	664
Five Years Certain & Life	6
Ten Years Certain & Life	4
Joint and 1/2 to Joint Annuitant	4
Total	678

Average age at retirement for regular retirees, excluding early retirements with actuarial reductions, is 65.0 according to the 1970-72 experience study.

Average age at retirement for 14 new retirees is 63.2.

TABLE IV

ACTIVE - OPERATING

Age Group	12-31-72 No.	12-31-72 Total Prospective Ann. Pension* (Thousands)	12-31-72 Total Annual Salary** (Thousands)	12-31-73 No.	12-31-73 Total Prospective Ann. Pension* (Thousands)	12-31-73 Total Annual Salary** (Thousands)	12-31-74 No.	12-31-74 Total Prospective Ann. Pension* (Thousands) Before Changes	12-31-74 Total Prospective Ann. Pension* (Thousands) After Changes	12-31-74 Total Annual Salary** (Thousands)
25 & Under	142	$ 811	$ 1,265	173	$1,075	$ 1,673	213	$1,385	$1,390	$ 2,147
26 - 28	112	667	1,108	121	776	1,285	173	1,165	1,165	1,926
29 - 31	91	524	927	105	642	1,135	125	840	840	1,475
32 - 34	85	473	892	89	533	1,000	100	646	646	1,224
35 - 37	79	420	835	79	461	915	84	535	535	1,070
38 - 40	46	223	494	63	342	742	79	438	438	973
41 - 43	56	234	582	56	263	657	54	282	282	698
44 - 46	40	162	426	44	185	506	59	288	289	777
47 - 49	71	309	786	62	281	745	60	264	266	772
50 - 52	74	298	824	79	334	949	81	377	389	1,096
53 - 55	86	306	916	74	293	886	73	313	340	959
56 - 58	88	308	926	95	347	1,109	97	354	422	1,254
59 - 61	87	280	916	89	308	1,025	87	310	405	1,103
62 - 64	45	145	459	40	126	453	52	173	226	656
65 & Over	11	37	100	3	9	33	7	20	28	74 ***
Total	1,113	$5,197	$11,456	1,172	$5,975	$13,113	1,344	$7,390	$7,661	$16,204
Average Annual Pension		$4,669			$5,098			$5,499	$5,700	

* This is the total prospective annual pension based on a continuation of the salary rates in effect as of 12-31.

** This is the approximate annual salary rate in effect as of 12-31 for employees who have not reached their normal retirement dates.

*** Includes seven employees over 65 eligible to continue accruing credits.

TABLE V

ACTIVE - OFFICE AND SUPERVISORY

Age Group	12-31-72 No.	12-31-72 Total Prospective Ann. Pension* (Thousands)	12-31-72 Total Annual Salary** (Thousands)	12-31-73 No.	12-31-73 Total Prospective Ann. Pension* (Thousands)	12-31-73 Total Annual Salary** (Thousands)	12-31-74 No.	12-31-74 Total Prospective Ann. Pension* (Thousands) Before Changes	12-31-74 Total Prospective Ann. Pension* (Thousands) After Changes	12-31-74 Total Annual Salary** (Thousands)
25 & Under	23	$108	$ 165	25	$134	$ 203	29	$ 175	$ 181	$ 264
26 - 28	12	59	98	10	56	92	14	94	94	153
29 - 31	9	52	90	12	75	130	14	94	94	164
32 - 34	8	46	85	9	48	88	14	95	95	182
35 - 37	9	45	91	9	52	104	10	61	61	123
38 - 40	8	39	83	8	45	94	15	90	91	190
41 - 43	6	23	56	6	27	65	10	46	47	112
44 - 46	10	47	109	12	56	133	9	45	47	110
47 - 49	17	63	172	13	48	142	14	66	67	179
50 - 52	13	50	136	22	85	251	21	88	92	267
53 - 55	15	53	167	14	48	155	14	53	58	180
56 - 58	13	44	141	15	54	190	17	62	69	227
59 - 61	6	22	67	12	42	153	14	49	65	190
62 - 64	8	22	90	4	10	40	6	19	25	70
65 & Over	5	17	27	3	8	22	2	4	6	9***
Total	162	$690	$1,577	174	$788	$1,862	203	$1,041	$1,092	$2,420
Average Annual Pension		$4,259			$4,529			$5,128	$5,379	

* This is the total prospective annual pension based on a continuation of the salary rates in effect as of 12-31.

** This is the approximate annual salary rate in effect as of 12-31 for employees who have not reached their normal retirement dates.

*** Includes one employee over 65 eligible to continue accruing credits.

TABLE VI

RETIRED

Non-Disability Retirements

Age Group	12-31-72 No.	12-31-72 Pension*	12-31-73 No.	12-31-73 Pension*	12-31-74 No. (Before Changes)	12-31-74 Pension* (Before Changes)	12-31-74 No.** (After Changes)	12-31-74 Pension* (After Changes)
Under 50	0	$ 0	0	$ 0	0	$ 0	1	$ 4,590
50 - 54	0	0	0	0	0	0	0	0
55 - 59	2	2,339	7	8,137	8	9,389	7	8,703
60 - 64	23	47,552	21	54,416	22	56,795	22	57,872
65 - 69	96	189,103	119	278,820	108	265,720	109	292,756
70 - 74	144	223,441	125	195,320	110	184,703	110	219,963
75 - 79	141	228,728	141	227,347	135	211,938	135	256,408
80 - 84	106	162,951	103	157,241	98	150,350	94	179,333
85 - 89	58	89,806	63	97,119	67	104,085	69	130,340
90 & Over	19	24,223	20	28,821	20	28,242	21	37,555
Total	589	$ 968,143	599	$ 1,047,221	568	$ 1,011,222	568	$ 1,187,520
Average Annual Pension		$ 1,644		$ 1,748		$ 1,780		$ 2,091

* All pensions shown are on an annual basis.

** Differences in age groupings due to new source data for After Changes Pensions.

TABLE VII

RETIRED

Disability Retirements

Age Group	12-31-72 No.	12-31-72 Pension*	12-31-73 No.	12-31-73 Pension*	12-31-74 No. (Before Changes)	12-31-74 Pension* (Before Changes)	12-31-74 No.** (After Changes)	12-31-74 Pension* (After Changes)
Under 50	3	$ 4,151	1	$ 1,284	0	$ 0	0	$ 0
50 - 54	5	7,373	10	18,617	8	15,250	11	22,735
55 - 59	11	20,803	11	22,024	11	21,881	10	23,031
60 - 64	22	34,919	20	33,259	15	25,429	19	38,581
65 - 69	19	31,241	17	30,455	22	38,294	17	36,061
70 - 74	22	30,521	18	24,948	12	15,703	13	22,465
75 - 79	27	36,567	20	27,000	13	18,049	17	29,706
80 - 84	15	20,889	20	27,606	21	29,275	17	28,865
85 - 89	5	7,109	7	9,509	8	10,709	6	10,589
90 & Over	0	0	0	0	0	0	0	0
Total	129	$193,573	124	$194,702	110	$174,590	110	$212,033
Average Annual Pension		$ 1,501		$ 1,570		$ 1,587		$ 1,928

ALL RETIREMENTS

December 31:	1972	1973	1974 (Before Changes)	1974 (After Changes)
Total Retired	718	723	678	678
Total Pensions	$1,161,716	$1,241,923	$1,185,812	$1,399,553

* All pensions shown are on an annual basis.

** Differences in age groupings due to new source data for After Changes Pensions.

TABLE VIII

TERMINATED WITH A VESTED INTEREST

Age Group	12-31-72		12-31-73		12-31-74		
	No.	Annual Pension at 65	No.	Annual Pension at 65	No.	Annual Pension at 65 (Before Changes)	Annual Pension at 65 (After Changes)
Under 50	3	$ 7,547	1	$ 3,311	0	$ 0	$ 0
50 - 54	5	12,082	3	7,330	3	8,585	9,437
55 - 59	6	13,766	3	6,544	4	9,525	12,817
60 - 64	0	0	0	0	0	0	0
65 & Over	1	2,120	1	2,120	1	2,120	2,688
Total	15	$ 35,515	8	$ 19,305	8	$ 20,230	$ 24,942
Average Annual Pension		$2,368		$2,413		$2,529	$3,118

APPENDIX II

Interest Earnings

The rate of earnings on the assets of the pension fund are of great importance in the ultimate determination of the cost of a pension plan.

The net yield (after subtraction of Trustee's fees) realized on approximate average assets each year is shown below on a cash basis, both including and excluding realized capital gains and losses.

Year	Total	Excluding Realized Capital Gains and Losses
1961	3.71%	3.77%
1962	4.59	3.83
1963	3.88	3.94
1964	4.05	4.05
1965	4.42	4.07
1966	4.27	4.24
1967	4.38	4.28
1968	5.08	4.33
1969	4.98	4.20
1970	3.20	4.91
1971	6.57	4.66
1972	6.61	4.87
1973	4.15	4.80
1974	1.10	6.18

In 1974, there was a realized loss of $491,087 on a cost basis and $473,422 on a valuation asset basis.

It should be noted that interest earnings in excess of the rate of 5.00% as of 1-1-75 assumed in the calculations will result in an actuarial gains to the trust fund, and help to reduce the unfunded liability. At the end of 1974, the market value of the valuation assets was approximately $1,843,140 less than the cost value of the valuation assets.

APPENDIX III

Actuarial Assumptions

Interest:	
Before Changes:	3 1/2% per annum, net after investment expenses.
After Changes:	5% per annum, net after investment expenses.
Death Rates:	
Non-Disabled Lives: Males:	A modification of the 1937 Standard Annuity Table set back one year for males and five years for females.
Disabled Lives:	A modification of the Society of Actuaries 1952 Study of Disability Benefits - Benefit 1, Total and Permanent Disability.
Withdrawal Rates:	A special table constructed from the Plan's experience from July 1, 1955 to June 30, 1960, with some margin added.
Disablement Rates:	140% of the UAW - 1955 Table.
Retirement Rates:	
Before Changes:	Average Retirement Age: 65
After Changes:	Average Retirement Age: 65 for employee under 65; employees 65 and over are assumed to retire in one year but not beyond age 70.
Future Salary Increases:	
Before Changes:	None.
After Changes:	3 1/2%.
Provision for Future Non-investment Expenses:	None.
Cost Method:	Entry Age Normal.

APPENDIX IV

TWIN CITY LINES EMPLOYEE RETIREMENT PLAN

PLAN OUTLINE

Effective Date of Plan	July 1, 1944, restated in its entirety on January 1, 1950.
Date of Last Amendment:	January 1, 1975.
Plan Year:	January 1 through December 31.

Major Plan Provisions

1. Employees Covered:	All regular full-time employees of Twin Cities Area Metropolitan Transit Commission, Transit Operating Division (MTC/TOD). In addition, officers of Local Division 1005, Amalgamated Transit Union, AFL-CIO, who are on leave-of-absence from MTC/TOD are covered employees.
2. Participation Requirements:	Covered employees are eligible to participate on their date of hire providing they make the required contributions.
3. Continuous Service:	Full-time service from employment date. Absences under certain circumstances are not considered a break-in-service providing they do not exceed three consecutive years. The time of absence in certain circumstances in excess of three consecutive years is deducted from Continuous Service.
4. Past Service:	Continuous service prior to January 1, 1950. If service prior to this date was broken and the period of the break did not exceed five years, post and pre-break service are aggregated.
5. Compensation:	Total earnings paid during a plan year with adjusted definitions applied to full-time and part-time officers of Local Division 1005, Amalgamated Transit Union, AFL-CIO. Past service compensation is defined as $3,120, $3,480, or total earnings paid in the best year out of the last five years of employment prior to January 1, 1950 depending on occupational group.

6. Timing for Benefit Payments: First day of the month following satisfaction of requirements for payment.

7. Retirement Dates:

Normal Retirement: Age 65.

Deferred Retirement: Allowed with approval of MTD/TOD but not beyond age 70.

Early Retirement: Age 55.

Disability Retirement: Totally and permanently disabled for any type of work or is unable to return to work after receiving 26 weeks of benefits under any MTC/TOD accident and sickness plan or under Workman's Compensation, with at least 10 years of continuous service. Only 5 years of continuous service is required if the disability resulted from a work-related accident.

8. Monthly Retirement Amounts:

Normal Retirement:

Past Service: 1% of past service compensation for each year of past service;

Future Service: 1.25% of compensation for service between January 1, 1950 and December 31, 1964;

Future Service: 1.5% of compensation for service January 1, 1965 and after;

or, if greater, the following dollar per year of service benefit:

Monthly Retirement Benefit per Year of Continuous Service

Continuous Service	Retiring 1-1-75 to 6-30-76	Retiring 7-1-76 to 12-31-77
1st 15 Years	$ 9.50	$ 10.00
Next 15 Years	11.50	12.00
Excess over 30 Years	12.50	13.00

8. Monthly Retirement Amounts:

Normal Retirement: (Continued)

In either case, the benefit is minimized at $150 per month for a participant with 20 years of continuous service proportionately reduced for less than 20 years of continuous service. The normal retirement benefit is maximized at $625 per month.

The accrued normal retirement benefit referred to hereafter is equal to the normal retirement benefit based on service and compensation to date of occurrence.

Deferred Retirement:

Same as normal retirement benefit with continued accrual of service and benefits after age 65 to date of retirement.

Early Retirement:

Age 55 with less than 35 years of continuous service: Greater of accrued normal retirement benefit or minimum normal retirement benefit reduced 5% for each year that payment date precedes age 65.

Age 55 with 35 or more years of continuous service: Greater of accrued normal retirement benefit or minimum normal retirement benefit reduced by 2 1/2% for each year that payment date precedes the following ages:

Retirement In:	Reduction from Age:
1975	65
1976	63
1977	62

Age 60 with 30 or more years of continuous service: Greater of accrued normal retirement benefit or minimum normal retirement benefit without percentage reduction.

Disability Retirement:

Greater of the accrued normal retirement benefit or the following minimums:

Retirement In:	Monthly Benefit
1975	$125
1976	130
1977	135

The disability benefit will be reduced by benefits payable from any sickness and accident plan of MTC/TOD.

8. Monthly Retirement Amounts:

Disability Retirement: (Continued)

The maximum disability benefit payable is such that the disability benefit plus any earnings from employment cannot be greater than 85% of the current 40 hours-per-week earnings (based on top rate in job class, participant held at time of disability).

9. Vesting:

Qualification:

10 years of continuous service and does not withdraw his own contributions.

Amount:

Equal to the accrued normal retirement benefit without regard to the minimum. This benefit is payable at age 65 or on a reduced basis if payments commence at age 55 or later.

In any event, the participant is vested in his accumulated contributions with interest at 2% to December 31, 1974 and 3 1/2% thereafter less any benefits received.

10. Death Benefits:

Before Retirement:

Return of participant's contributions with interest at 2% to December 31, 1974 and 3 1/2% thereafter less any benefits received.

If death occurs from a work-related accident, the spouse will receive a monthly benefit payable until death or remarriage based on the accrued normal retirement benefits, actuarially reduced for a joint and 50% to contingent option. This benefit is in lieu of the return of participant's contributions.

If death occurs after normal retirement age but before actual retirement age and the participant was actively at work, the spouse will receive a monthly benefit payable until death or remarriage based on the accrued normal retirement benefit actuarially reduced for a joint and 50% contingent option. This benefit is in lieu of return of participant's contributions.

10. Death Benefits:

After Retirement: Return of participant's contributions with interest to retirement less benefits received. Interest credits follow those for death and vesting.

11. Form of Retirement Payment: Retirement benefits are payable for the life of the participant unless option elected.

Options are available for normal, deferred, and early retirement and must be elected at least one year in advance of retirement. Options are:

1) Five, ten, or fifteen years certain and life annuity.

2) Joint and 50% contingent annuity.

The benefits under the options are determined on an actuarial equivalent basis.

12. Retired Participants: Monthly benefits for participants receiving benefits on 12-31-74 have been increased as follows:

Retired	Date of Increase	Monthly Increase
By 12-31-71:	1-1-75	$15.00 *
	1-1-76	7.50
	1-1-77	7.50
1-1-72 to 6-30-73:	1-1-76	7.50
	1-1-77	7.50
7-1-73 to 12-31-74	1-1-77	7.50

* The minimum increase is such to bring the normal monthly retirement benefit to at least $120 per month for a retired participant with 20 years of service or for any disabled participant.

If any actuarial adjustment (including early reduction, Option A or Option B) has been selected, the increases are reduced to the actuarial equivalent of the normal form of payment.

13. Contribution Rate:

Since amendment of the Plan as of January 1, 1960, employees contribute one-third and the Company two-thirds of the amounts necessary to fund current service as it accrues and to fund past service over a period of years.

Contribution rates expressed as a percentage of compensation have been as follows:

Fiscal Year Ending June 30	Company	Employee
1950	4.50%	2.25%
1951	5.00	2.50
1952 to 1955	8.50	4.25
1956 to 1960	11.00	5.50
6 Months Ending 12-31-60	11.00	5.50
1-1-61 to 1975	9.80	4.90

TWIN CITY LINES VALUATION AS OF JANUARY 1, 1975

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This memorandum contains the following:

1. Statistical and Valuation Data
2. Discussion of Valuation Results
3. Conclusion

1. Statistical and Valuation Data

Results of the valuation reports as of January 1, 1974 and January 1, 1975 are shown for comparative purposes. Figures are rounded where necessary for simplicity of presentation.

	As of January 1, 1974	As of January 1, 1975
(1) Membership		
Active Members	1,346	1,547
Retired Members	599	568
Disabled Members	124	110
Deferred Annuitants	8	8
(2) Payroll and Annuities Payable	(Thousands of Dollars)	
Covered Payroll	$ 14,975	$ 18,624
Annuities (Annual)	1,242	1,400
(3) Valuation Balance Sheet	(Thousands of Dollars)	
Accrued Liability	$ 25,518	$ 28,562
Assets	9,356	10,719
Unfunded Accrued Liability (Deficit)	16,162	17,843
Funding Ratio (Assets/Accrued Liability)	36.7%	37.5%

	As of January 1, 1974	As of January 1, 1975
(4) Normal Costs and Funding Costs	Percent of Payroll	Percent of Payroll
Normal Cost	5.64%	5.75%
Expenses	.07	.05
	5.71%	5.80%
Normal Cost Plus Expenses	5.71%	5.80%
Interest on Deficit	3.96	4.79
Minimum Contribution	9.67%	10.59%
Normal Cost Plus Expenses	5.71%	5.80%
Amortization by 1997	6.81	6.93
Total Contribution	12.52%	12.73%
(5) Current Contributions		
Employee	4.9%	4.9%
Employer	9.8	9.8
Total	14.7%	14.7%
(6) Estimated Investment Yield*	4.80%	6.17%

*Ratio of reported investment income to estimated mean assets for fiscal year.

2. Discussion of Valuation Results

The benefits and contributions under this plan are subject to bargaining but with the restriction that adequate financing must be maintained. The agreements provide for an employer contribution double that of the employee but without any allocation of specific portions between normal cost and amortization of the deficit. Thus, at the time of a valuation, the amortization period is the unknown quantity to be determined.

In recent years, the contribution rates have been 4.9% of pay by the employees and 9.8% by the employer. The results of the 1975 valuation indicate that the deficit will be retired by September 1, 1989.

The 1975 results are not comparable with those obtained in 1974. The 1974 valuation was based upon a 3½% interest assumption without any salary scale assumption. This year, the assumed interest rate was changed to 5%, and a 3½% salary scale assumption was introduced.

At the same time, the new bargaining agreement provided for improvements in benefits. The new retirement benefit formula increased the average prospective benefit (based on present salary) about 4%. For participants with long periods of service, smaller actuarial reductions upon early retirement are to be used. Some of those already retired were given benefit increases.

The net effect of all these changes is a slight increase in the costs as a percentage of payroll. The continued increase in the total payroll, and a drop in the ratio of the number of retired participants to the number of active participants has held down the increase in costs.

The rate of return on investments increased substantially during the past year, but a net capital loss of $490,462 was realized. In addition, the market value of the assets was about $1,843,000 less than the cost.

The unfunded accrued liability increased from $16,161,991 to $17,843,283, an increase of $1,681,292. The Actuary for the Fund presented the following analysis of this increase:

Increases:

Changes in Benefits	$ 4,505,437	
Realized Capital Losses	490,462	
New Entrants Accrued Liability	122,948	
Salary Increases	644,957	
Other Actuarial Losses	60,604	
Total Increases		$ 5,824,408

Decreases:

Changes in Assumptions	$ 2,787,266	
Excess Interest	255,121	
Amortization Contribution	1,100,729	
Total Decreases		$ 4,143,116
Net Increase		$ 1,681,292

3. Conclusion

As stated above, the bargaining agreement stipulates benefits and contribution rates, and the purpose of a valuation is to determine the period required to amortize the unfunded accrued liability. However, the information is presented in such a manner that it can easily be translated into the form of other reports to the Commission.

As indicated above, the present level of total support is more than adequate to provide the normal cost and to amortize the deficit before 1997 (14.70% vs. 12.73%).

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MTC / TRANSIT OPERATING DIVISION
3118 NICOLLET AVE. • MINNEAPOLIS, MINN. 55408 • 612·827·4071

June 10, 1976

Mr. John Mandeville
Executive Secretary
Legislative Retirement Study Commission
41 State Office Building
St. Paul, Minnesota 55155

Dear Mr. Mandeville:

Your letter dated June 3, 1976 requested a completion date for the actuarial valuation of the Metropolitan Transit Commission/Transit Operating Division Employees Retirement Plan (formerly Twin City Lines Employes Retirement Plan).

Mr. James Bordewick of George V. Stennes and Associates informs me that the valuation will be completed no later than August 15, 1976.

Yours truly,

Dorothe B. Bowes

Dorothe B. Bowes, Secretary
Retirement Allowance Committee
MTC/Transit Operating Division
Employees Retirement Plan