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ASS'T. ADMINISTRATORS

August 15, 1971

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, 1971. The attached report summarizes the results of this valuation.

As indicated in the report, the estimated period of time required for a 14.7% contribution rate to fund the benefits has decreased by approximately 2.25 years as compared to the January 1, 1970 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 made and the accrued liability will be funded by July 1, 1992.

I 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 my knowledge.

Respectfully submitted,

John H. Flittie
Fellow, Society of Actuaries

JHF:ml

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TWIN CITY LINES

EMPLOYEES' RETIREMENT PLAN

ACTUARIAL VALUATION

AS OF JANUARY 1, 1971

This report contains the results of the actuarial valuation of the Plan performed as of January 1, 1971.

The actuarial assumptions as to mortality, morbidity, termination, and interest rates 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.)

Since the contribution rates for employees and the Company set forth later in the report are expressed in percentages of compensation, 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, 1971 is estimated at approximately $10,640,000 annually. This is a 10.6% increase from the January 1, 1970 level. The number of active employees covered increased by 171 from the previous valuation. The average prospective pensions for active employees, assuming continuation of present pay rates, were virtually unchanged.

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 and again as of January 1, 1965. 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.

RESULTS OF VALUATION

This valuation is the tenth 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, 1970 again showed higher mortality among retirees than expected and fewer new disabilities 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 and a continued rapid 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. However, the 1965 Plan amendments, the increased Social Security benefits and a liberalized "earnings" test, and economic and employment conditions could create a much greater trend toward early retirement in the future and create a financial strain on this Plan.); (4) a continued high level of disability costs; (5) in 1970, 1969, and 1968, a sharp increase in the growth rate of the fund, ($463,000, $240,000 and $226,000 increases, respectively, compared to $10,000, $63,000, and $140,000 in the three previous years).

The report submitted last year, the sixth after the 1965 amendments, 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 24.75 years from January 1, 1970, (by October 1, 1994), assuming the covered payroll is unchanged and experience follows the actuarial assumptions. The January 1, 1971 valuation indicates that the unfunded liability will be amortized in approximately 21.50 years from January 1, 1971 (by July 1, 1992). This advance in the funding date is primarily due to the increase in the dollar amount of contributions resulting from increases in covered payroll and an influx of new entrants. Thus, the funding of the Plan is progressing approximately eight years ahead of the schedule estimated at the time of the 1965 amendments.

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

COMPARATIVE

ACTUARIAL BALANCE SHEET

AS OF JANUARY 1, 1970 AND JANUARY 1, 1971

	1-1-70	1-1-71
Assets		
Funds on Valuation Date (At Cost)	$ 5,725,664	$ 6,112,955
Accrued Contribution	68,986	144,421
Total Funds (at cost) per Trustee	$ 5,794,650	$ 6,257,376
Present Value of Future Contributions for:		
Current Service	$ 4,555,722	$ 5,223,808
Accrued Liability	15,867,080	15,315,285
	$ 20,422,802	$ 20,539,093
Total Assets	$ 26,217,452	$ 26,796,469
Liabilities		
Present Value of Retirement Allowances Payable to Currently Retired Participants:		
Regular Retirements	$ 7,293,683	$ 7,141,958
Disability Retirements	1,080,647	1,003,913
Total for Retirees	$ 8,374,330	$ 8,145,871
Present Value of Future Benefits for Participants Terminated with a Vested Interest	81,752	133,534
Present Value of Future Benefits for Active Participants	17,761,370	18,517,064
Total Liabilities	$ 26,217,452	$ 26,796,469

STATEMENT OF INCOME AND DISBURSEMENTS

1-1-70 TO 12-31-70

Trust Assets, 1-1-70 (Includes Accrued Contribution of $68,985.75)		$ 5,794,650.18
Income		
Company and Employee Contributions	$ 1,383,112.35	
Company and Employee Contributions (Accrued)	144,420.51	
Interest (Net)	247,408.71	
Dividends	48,187.75	
Total Income		1,823,129.32
Sum		$ 7,617,779.50
Disbursements		
Loss on Sale and Redemption of Securities	$ 100,359.95	
Pensions and Refunds at Death on Retirees	1,089,320.88	
Refunds of Contributions on Actives	156,833.48	
Trustee's Fees to 6-30-70	6,810.00	
Actuarial Fees (Accrued)	4,000.00	
Auditors' Fees	800.00	
Miscellaneous (Postage, Insurance, Printing, Administration, etc.)	2,279.44	
Total Disbursements		1,360,403.75
Trust Assets, 12-31-70 (Cost) (Includes Accrued Contributions of $144,420.51 and Accrued Expenses of $4,000.00)		$ 6,257,375.75

The total assets of the fund of $26,796,469 minus the funds in hand (including accrued contributions) of $6,257,376 represent the present value of required future contributions to the Plan toward future service credits and the unfunded accrued liability for earned and projected benefits.

The unfunded accrued liability for earned and projected benefits is $15,315,285, a decrease of $552,000 since last year.

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

Regular Retirement Allowances	$ 359,832
Disability Retirement Allowances	37,856
Death Benefits Before Retirement	34,181
Withdrawal Benefits	140,878
Total Normal Cost	$ 572,747

The normal cost is 5.38% of current covered annual payroll.

The estimated total (Employees and Company) contributions to the Plan in 1971 are $1,564,048. After deducting the normal cost of $572,747, this leaves $991,301 as available as an amortization payment toward the unfunded accrued liability. (This compares with $935,831 available for the payment toward the unfunded liability in 1970.)

Amortization payments at this level would be required for approximately 21 1/2 years from January 1, 1971 to completely fund the accrued liability. Thus, the date on which the Plan could become fully funded is estimated to be approximately July 1, 1992, as compared to October 1, 1994, as shown by last year's valuation.

If the common stock portion of the trust fund is valued at market, instead of cost, the approximate $123,000 of unrealized market appreciation existing on January 1, 1971 could be thought of as an offset to the unfunded accrued liability. If this same amount of market appreciation continues unchanged, the funding period would be reduced from approximately 21.50 years to 21.25 years from January 1, 1971. Additional market appreciation would further shorten the funding period.

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 have a very adverse effect on the future security of pension benefits.

The total number of retirees decreased slightly more than expected, due to high mortality. The number of retirees is slightly less than estimated on the basis of the projection made with the 1-1-64 valuation. Note that the actuarial liability for retirees again decreased substantially during the year, as the gains on death more than offset the effect of the higher average pension of new retirees.

APPENDIX I

Membership of Plan

The following tables show the participants in the plan, arranged by type of membership.

The total annual compensation shown is the approximate annual rate in effect on December 31, 1970 rather than the amount actually paid in 1970.

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

ACTIVE - OPERATING

Age Group	12-31-68 No.	12-31-68 Total Prospective Ann. Pension (Thousands)	12-31-68 Total Annual Salary * (Thousands)	12-31-69 ** No.	12-31-69 ** Total Prospective Ann. Pension (Thousands)	12-31-69 ** Total Annual Salary * (Thousands)	12-31-70 ** No.	12-31-70 ** Total Prospective Ann. Pension (Thousands)	12-31-70 ** Total Annual Salary * (Thousands)
25 & Under	97	$ 394	$ 620	75	$ 368	$ 575	126	$ 598	$ 934
26 - 28	71	308	517	61	309	517	88	406	683
29 - 31	74	330	588	56	305	546	111	484	879
32 - 34	56	235	451	64	317	602	82	376	717
35 - 37	36	133	278	30	145	298	53	247	502
38 - 40	45	153	352	44	177	414	41	173	398
41 - 43	58	199	469	44	175	433	37	139	343
44 - 46	80	289	648	72	298	709	61	240	588
47 - 49	74	250	593	74	287	733	80	308	775
50 - 52	94	291	741	86	294	815	74	269	716
53 - 55	97	271	732	94	304	880	101	331	946
56 - 58	80	205	598	89	255	827	93	271	850
59 - 61	67	147	491	65	158	577	60	150	530
62 - 64	45	88	330	53	111	477	55	121	482
65 & Over	7	13	47	7	14	53	8	16	59
Total	981	$ 3,306	$ 7,455	914	$ 3,517	$ 8,456	1,070	$ 4,129	$ 9,402
Average Annual Pension		$ 3,370			$ 3,848			$ 3,859	

* This is the salary of employees who have not reached their normal retirement date.

** Approximate.

ACTIVE - OFFICE & SUPERVISORY

Age Group	12-31-68 ** No.	12-31-68 ** Total Prospective Ann. Pension (Thousands)	12-31-68 ** Total Annual Salary * (Thousands)	12-31-69 ** No.	12-31-69 ** Total Prospective Ann. Pension (Thousands)	12-31-69 ** Total Annual Salary * (Thousands)	12-31-70 ** No.	12-31-70 ** Total Prospective Ann. Pension (Thousands)	12-31-70 ** Total Annual Salary * (Thousands)
25 & Under	19	$ 62	$ 94	15	$ 58	$ 86	17	$ 70	$ 106
26 - 28	4	12	21	2	10	17	5	20	33
29 - 31	8	34	60	5	22	39	6	29	51
32 - 34	6	26	47	5	31	59	6	30	58
35 - 37	5	23	45	6	33	63	6	33	63
38 - 40	6	22	45	4	16	33	3	7	17
41 - 43	6	19	39	6	27	56	8	33	70
44 - 46	16	59	135	15	58	144	10	33	85
47 - 49	9	27	66	11	39	99	20	64	165
50 - 52	19	63	167	15	59	169	11	40	109
53 - 55	11	36	95	13	43	128	17	55	175
56 - 58	8	18	55	8	21	72	12	38	121
59 - 61	14	35	124	9	24	96	6	12	50
62 - 64	5	12	44	10	24	97	13	35	135
65 & Over	5	7	6	4	6	8	3	3	0
Total	141	$ 455	$ 1,043	128	$ 471	$ 1,166	143	$ 502	$ 1,238
Average Annual Pension		$ 3,227			$ 3,680			$ 3,510	

* This is the salary of employees who have not reached their normal retirement date.

** Approximate.

RETIRED

Age Group	Non-Disability Retirements 12-31-68 No.	Pension*	12-31-69 No.	Pension*	12-31-70 No.	Pension*	Disability Retirements 12-31-68 No.	Pension*	12-31-69 No.	Pension*	12-31-70 No.	Pension*
Under 50	0	$ 0	0	$ 0	0	$ 0	5	$ 6,088	4	$ 5,118	4	$ 5,257
50 - 54	1	1,298	1	1,298	1	1,298	10	12,094	7	8,346	6	7,390
55 - 59	3	1,902	3	1,903	3	1,903	17	20,797	17	21,896	11	13,895
60 - 64	26	34,802	22	29,458	22	29,740	12	15,249	18	23,608	21	27,989
65 - 69	143	202,792	120	184,016	116	184,631	27	32,557	20	23,381	18	21,962
70 - 74	182	260,437	180	254.063	170	239,330	30	35,165	26	31,799	22	27,422
75 - 79	160	217,710	156	214,504	141	199,696	30	34,614	30	35,595	32	37,268
80 - 84	111	152,265	116	158,917	120	164,558	15	17,680	19	21,941	17	19,351
85 - 89	42	45,027	46	55,290	51	67,465	1	660	1	1,181	2	2,542
90 & Over	7	4,260	10	6,974	12	8,712	0	0	0	0	0	0
Total	675	$920,493	654	$906,423	636	$897,333	147	$174,904	142	$172,865	133	$163,076
Average Annual Pension		$1,364		$1,386		$1,411		$1,190		$1,217		$1,226

December 31:	1968	1969	1970
Total Retired	822	796	769
Total Pensions	$1,095,397	$1,079,288	$1,060,409

*All pensions shown are on an annual basis.

TERMINATED WITH A VESTED INTEREST

Age Group	12-31-68 No.	Annual Pension at 65	12-31-69 No.	Annual Pension at 65	12-31-70 No.	Annual Pension at 65
Under 50	4	$ 6,750	2	$ 4,182	2	$ 6,161
50 - 54	4	4,236	5	6,181	7	9,105
55 - 59	0	0	0	0	1	1,723
60 - 64	1	724	1	724	1	724
65 & Over	1	756	1	756	1	756
Total	10	$ 12,466	9	$ 11,843	12	$ 18,469
Average Annual Pension		$ 1,247		$ 1,316		$ 1,539

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%

In addition, there was approximately $123,000 of unrealized market appreciation in the common stock portfolio as of December 31, 1970 which was not taken into account in computation of the above yields. This is a decrease of $100,000 in unrealized appreciation during the year.

It should be noted that interest earnings in excess of the rate of 3.50% assumed in the calculations result in an actuarial gain to the trust fund, and help to reduce the unfunded liability. Also, unrealized market appreciation can be thought of as a partial offset to the unfunded liability.

APPENDIX III

Actuarial Assumptions

Interest:	3 1/2% per annum, net after Investment expenses.
Death Rates:	
Non-Disabled Lives: Males:	A modification of the 1937 Standard Annuity Table set back one year.
Females:	This Table set back four years.
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:	Average Retirement Age: 65
Future Salary Increases:	None.
Provision for future non-investment expenses:	None.
Cost Method:	Entry Age Normal.

APPENDIX IV

Summary of Benefits and Contributions

BENEFITS (AFTER 1965 AMENDMENTS)

1. Normal retirement allowance is a monthly pension payable for life commencing on the first day of the month following the employee's sixty-fifth birthday equal to 1% of past service compensation for each year, or fraction thereof in complete months, of continuous service prior to January 1, 1950 plus 1 1/4% of the employee's total creditable compensation between that date and December 31, 1964, plus 1 1/2% of the employee's total creditable compensation after December 31, 1964 subject to minimum and maximum provisions. (Past Service compensation is defined at specified amounts of $3,120, $3,480 and the total earnings for the best of the five years preceding January 1, 1950, for various classes of employees.) The minimum allowance is $75 provided an employee has 20 years creditable service and has attained age 65 or more. The minimum is proportionately reduced for shorter periods of service. The maximum allowance is $7,500 per year.

2. Early retirement is permitted after attainment of age 55. The early retirement allowance is equal to a participant's earned allowance up to his actual retirement reduced by 5% for each year that his age is below 65 at retirement. No reduction is made if retirement occurs after age 60 if the employee has completed 35 years of service. The allowance paid upon late retirement is the same as if the employee had retired on his normal retirement date.

3. Disability retirement allowance is permitted under certain circumstances after an employee has been employed continuously by the Company for 10 years. The disability retirement allowance is equal to his earned allowance up to the date of his disability, but not less than $85 monthly.

4. Return of employee contributions is made to an employee who resigns or is dismissed before retirement. The amount is equal to: (a) his contributions made after January 1, 1950 with interest at 2% plus (b) one-half of his contributions made prior to that date without interest.

5. In the event of the death of a participant before retirement, a death benefit will be paid which is equal to the withdrawal benefit described in item (4) above minus any benefits received from the Plan prior to his death. In the event a participant dies after retirement, the death benefit is the withdrawal benefit described in item (4) (a) above, minus any benefit received from the Plan.

6. The allowance accrued by a participant up to the time of his withdrawal is vested in him if he has completed 10 years of service at that time provided he does not withdraw his contributions. The benefit provided is a retirement allowance starting at age 65 equal to his accrued credits to the date of his termination.

7. The retirement allowance of all pensioners on the rolls as of December 31, 1964 was increased $5.00 per month, effective January 1, 1965.

APPENDIX IV

Summary of Benefits and Contributions

CONTRIBUTIONS

Since amendment of the Plan as of January 1, 1950, 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 1971	9.80	4.90

GVS Minnesota Memorandum No. 71-15
March 24, 1972

TWIN CITY LINES VALUATION AS OF JANUARY 1, 1971

The purpose of this memorandum is to discuss the valuation report of the Twin City Lines Employees' Retirement Plan as of January 1, 1971. The valuation was made on the basis of the entry age normal cost method and assuming 3 1/2% interest. The 1970 valuation and the current one were prepared by John H. Flittie of George V. Stennes and Associates.

This memorandum contains the following:

1. Statistical and Valuation Data
2. Discussion of Valuation Results
3. Study of Actuarial Assumptions
4. Conclusions

1. Statistical and Valuation Data

Results of the valuation reports as of January 1, 1970 and January 1, 1971 are shown for comparative purposes. Figures are founded where necessary for simplicity of presentation.

(1) Membership	As of January 1, 1970	As of January 1, 1971
Active Members	1,042	1,213
Retired Members	654	636
Disabled Members	142	133
Deferred Annuitants	9	12
(2) Payroll and Annuities Payable	(Thousands of Dollars)	
Covered Payroll	$ 9,622	$10,640
Annuities (Annual)	1,079	1,060
(3) Valuation Balance Sheet	(Thousands of Dollars)	
Accrued Liability	$21,662	$21,572
Assets	5,795	6,257
Unfunded Accrued Liability (Deficit)	$15,867	$15,315
Funding Ratio (Assets/Accrued Liability)	26.8%	29.0%

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	As of January 1, 1970	As of January 1, 1971
(4) Normal Costs and Funding Costs		
	Percent of Payroll	Percent of Payroll
Normal Cost	4.97%	5.38%
Expenses	.06	.07
	5.03%	5.45%
Normal Cost Plus Expenses	5.03%	5.45%
Interest on Deficit	5.77	5.04
Minimum Contribution	10.80%	10.49%
Normal Cost Plus Expenses	5.03%	5.45%
Amortization by 1997	8.83	7.87
Total Contribution	13.86%	13.32%
(5) Current Contributions		
Employee	4.9%	4.9%
Employer	9.8	9.8
Total	14.7%	14.7%
(6) Estimated Investment Yield*	4.20%	4.91%

* 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 1970 valuation indicated that the deficit would be retired by October 1, 1994; the results of the 1971 valuation indicated a change in this date to July 1, 1992.

For the benefit of the Commission, the valuation results have been recast into the usual format which shows the minimum contribution and that necessary to provide normal cost and retire the deficit by 1997. The total support at the present time exceeds the latter contribution by a comfortable margin (14.70% vs. 13.32%). However, as the actuary for the Fund points out "any changes which would materially increase the unfunded liability, decrease the income of the fund, or a substantial decrease in covered payroll would have a very adverse effect on the future security of pension benefits."

Since this is the first time that a Twin City Lines Valuation has been reviewed for the Commission, a summary of the benefits is attached to this memorandum.

3. Study of Actuarial Assumptions

A study of the actuarial assumptions was included in the valuation as of January 1, 1970. The study covered the three-year period from January 1, 1967 to December 31, 1969, and the results were combined with those from previous periods of time.

The number of deaths and terminations among active lives during the three-year period exceeded the predicted number, and the ratio of actual to expected was 281%. This compared with 181% during the period 1964-1966.

On the other hand, the number of disablements ran 182% of expected.

The average age at retirement during the three-year period turned out to be 64.8 which was identical with the result for the period 1964-1966 and 0.4 years higher than the result for the period 1961-1963. The valuations were based upon an assumed average retirement age of 65.

Among non-disability retirements, the ratio of actual deaths to expected deaths was 94% which was lower than the ratio for the period 1964-1966. The Actuary comments that lower mortality rates probably should be assumed, particularly for ages 65 to 74. Similar results were obtained on disability retirements, but since the number is small, less credibility can be given to the results.

The 1971 Valuation contains a 10-year table showing the yield of the fund both with realized capital gains and losses included and with such items excluded. Part of the table follows:

	Realized Capital Gains	
Year	Included	Excluded
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%

As of December 31, 1970, there was approximately $123,000 of unrealized market appreciation in the common stock portfolio.

The valuations were based upon an assumed interest rate of 3 1/2%.

4. Conclusion

The Twin City Lines has requested that the 1971 Valuation be accepted as the current report to the Commission. Since this has been performed by the entry age normal cost method and is based upon an assumed interest rate of 3½%, and since the results can be easily recast into the usual format, the report satisfies the requirements of the various statutes, and it is recommended that the request be granted.

Furthermore, the survey information in the 1970 valuation conforms to the requirements for such information, and it is recommended that the Twin City Lines be permitted to continue the practice of studying assumptions for three-year periods.

As indicated above, the present level of total support appears adequate to provide the normal cost and to amortize the deficit before 1997.

Franklin C. Smith
Associate, Society of Actuaries
GEORGE V. STENNES AND ASSOCIATES
Consulting Actuaries

APPENDIX

SUMMARY OF BENEFITS

1. Normal retirement allowance is a monthly pension payable for life commencing on the first day of the month following the employee's sixty-fifth birthday equal to 1% of past service compensation for each year, or fraction thereof in complete months, of continuous service prior to January 1, 1950 plus 1 1/4% of the employee's total creditable compensation between that date and December 31, 1964, plus 1 1/2% of the employee's total creditable compensation after December 31, 1964 subject to minimum and maximum provisions. (Past Service compensation is defined at specified amounts of $3,120, $3,480 and the total earnings for the best of the five years preceding January 1, 1950, for various classes of employees.) The minimum allowance is $75 provided an employee has 20 years creditable service and has attained age 65 or more. The minimum is proportionately reduced for shorter periods of service. The maximum allowance is $7,500 per year.

2. Early retirement is permitted after attainment of age 55. The early retirement allowance is equal to a participant's earned allowance up to his actual retirement reduced by 5% for each year that his age is below 65 at retirement. No reduction is made if retirement occurs after age 60 if the employee has completed 35 years of service. The allowance paid upon late retirement is the same as if the employee had retired on his normal retirement date.

3. Disability retirement allowance is permitted under certain circumstances after an employee has been employed continuously by the Company for 10 years. The disability retirement allowance is equal to his earned allowance up to the date of his disability, but not less than $85 monthly.

4. Return of employee contributions is made to an employee who resigns or is dismissed before retirement. The amount is equal to: (a) his contributions made after January 1, 1950 with interest at 2% plus (b) one-half of his contributions made prior to that date without interest.

5. In the event of the death of a participant before retirement, a death benefit will be paid which is equal to the withdrawal benefit described in item (4) above minus any benefits received from the Plan prior to his death. In the event a participant dies after retirement, the death benefit is the withdrawal benefit described in item (4) (a) above, minus any benefit received from the Plan.

6. The allowance accrued by a participant up to the time of his withdrawal is vested in him if he has completed 10 years of service at that time provided he does not withdraw his contributions. The benefit provided is a retirement allowance starting at age 65 equal to his accrued credits to the date of his termination.

7. The retirement allowance of all pensioners on the rolls as of December 31, 1964 was increased $5.00 per month, effective January 1, 1965.