

STATEMENT TO EMPLOYEES DECEMBER 31, 1967

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INNESOTA STATE IREMENT SYSTEM



STATE DE MINNESOTA MINNESOTA STATE RETIREMENT SYSTEM

530 North Robert Street St. Paul, Minnesota 55101

BOARD OF DIRECTORS

ELECTED

Berdine Erickson, Chairman Rochester State Hospital Herbert C. Schultz, Vice Chairman State Highway Department Carolyn Anderson University of Minnesota Francis Hage Department of Conservation

EX OFFICIO

State Auditor State Treasurer Commissioner of Insurance

Robert H. Little, Actuary COATES, HERFURTH AND ENGLAND Consulting Actuaries Pasadena, San Francisco, Denver

Arne Ulvi, Executive Director Paul L. Groschen, Assistant Director



P/R 88.5-MSRS

This report covers operations of the Retirement Fund from January 1 through December 31, 1967.

EMPLOYEE STATISTICS

1964	1966
34,278	33,006
6,538	5,680
9,238	9,046
6,006	5,692
325	403
1,272	1,610
	34,278 6,538 9,238 6,006 325

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The following is a comparison of an "average" male employee as of December 31:

	Average Age	Average Credited Service	Average Accumulated Contributions
1967	41.9 Yrs.	8.8 Yrs.	\$1,307.68
1966	41.7 Yrs.	8.6 Yrs.	1,234.17
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and the average female employee:

1967	36.9 Yrs.	5.2 Yrs.	\$ 622.01
1966	37.2 Yrs.	5.3 Yrs.	617.10

Average as used in this report is defined as the arithmetic mean.

The median age, or that age at which one-half of the active employees are younger and one-half are older, was 42 years in 1967 and 41 years in 1966 for males, and 34 years in 1967 and 35 years in 1966 for females.

The active employees ranged in age from age 15 to age 88 in 1967 and from age 15 to age 87 in 1966.

A total of 9,187 of the active employees had at least 10 years of credited service at the end of 1967 compared to 8,768 at the end of 1966. Those age 65 and older show:

	1907	1900
Active employees at age 65 or older	1,031	989
Age 65 and over with at least 10 years service credit	739	692

The average and median ages of new employees covered by the system in 1967 and 1966:

	Male		Fen	nale
	1967	1966	1967	1966
Average age	32.0 Yrs.	31.4 Yrs.	28.1 Yrs.	26.1 Yrs
Median age	27.0 Yrs.	26.0 Yrs.	22.0 Yrs.	21.0 Yrs.

The average age and service forfeited by those who took refundments in the past two years was:

Male		le	Female		
Average:	1967	1966	1967	1966	
Age	34.5 Yrs.	34.4 Yrs.	28.1 Yrs.	29.8 Yrs.	
Service Forfeited	2.4 Yrs.	2.8 Yrs.	2.0 Yrs.	2.0 Yrs.	

Analysis of the refundments shows that in 1967, 3.0% forfeited 10 or more years of service credit compared to 4.5% in 1966.

Inactive accounts totaled 6,538 at the end of 1967 compared to 5,680 at the end of 1966. 327 of the inactive accounts at the end of 1967 show

sufficient service credit to entitle the person to a deferred annuity at age 65. This compares with 335 at the end of 1966:

	Male		Fem	ale
	1967	1966	1967	1966
10 years service or more	182	182	145	153
Average age	55	54	55	55
Average deferred annuity	\$57.59	\$56.36	\$49.71	\$50.15
ANNUIT	ANT STAT	ISTICS		
			1967	1966

	2000	
Age and service retirements at December 31	3,587	3,461
Disability benefits at December 31	146	130
Survivor benefits at December 31	39	41
Annuities and benefits granted during the year	322	403
Deaths	191	184

Average monthly benefits authorized in 1967 and 1966, also showing average age, service, and salaries:

Туре 1967	Age at Retire- ment	Salary Before 7/1/57	Salary After 6/30/57		rvice & Mos.	Average Benefit
Service	66.0 Yrs.	\$276.06	\$380.11	22	10	\$91.47
Disability 1966	59.4 Yrs.	258.88	361.27	18	2	62.70
Service Disability	66.2 Yrs. 58.0 Yrs.	\$279.27 283.80	$\$367.54\ 367.68$	$\begin{array}{c} 23 \\ 19 \end{array}$	$\frac{4}{3}$	\$89.51 69.58

Social security benefits are in addition to above.

The average service benefit authorized in 1967 was \$1.96 more than the average benefit in 1966. The increase is due to the higher salary after July 1, 1957, despite a lower average salary before July 1, 1957 and a decrease in length of service for new annuitants.

The "average salaries" before July 1, 1957 continues to appear as a declining figure as it has with one exception over the past seven years:

1961	\$296.75	1965	\$284.89
1962	293.44	1966	279.27
1963	284.54	1967	276.08
1964	270.74		

This downward trend in average salaries before July 1, 1957 is correlated to the date of entry into state service; those retiring in 1961 had progressed further in their state service careers, consequently, their salaries were higher for the five years before July 1, 1957 than were the salaries of later retirees.

The average age at death and the average length of retirement for disability and service retirements in the last two years is shown below:

	Male		Fem	ale
	1967	1966	1967	1966
Service Retirement				
Age at Death	76.5 Yrs.	76.8 Yrs.	77.4 Yrs.	76.6 Yrs.
$\mathbf{Retirement}$	9.0 Yrs.	9.6 Yrs.	10.3 Yrs.	9.2 Yrs.
Disability Retirement				
Age at Death	61.9 Yrs.	62.9 Yrs.	61.5 Yrs.	65.0 Yrs.
Retirement	3.3 Yrs.	4.9 Yrs.	2.3 Yrs.	4.3 Yrs.

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REVENUES

Employee and employer contributions totaled \$5,014,460 and \$8,323,603, respectively in 1967. This compares with \$4,254,614 and \$7,060,569 in 1966. Total investment income and interest on back payments increased by \$504,143 to a total of \$4,103,673 in 1967.

EXPENDITURES

Benefit payments totaled \$3,806,130 in 1967, an increase of \$189,025 over 1966. A breakdown of benefit payments for the last two years is as follows:

	1907	1900
Service Retirement Annuities*	\$3,616,804	\$3,444,801
Disability Retirement Annuities	109,094	95,996
Widows Benefit Payments	32,868	33,647
Surviving Children's Payments	2,248	3,590
Interest Paid Beneficiaries of deceased employee	es 45,116	39,071
	\$3,806,130	\$3,617,105

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*Starting July 1, 1967 an additional \$107,253.55 in supplemental benefits was paid to employees with 20 or more years service credit who had retired prior to July 1, 1963. The supplemental benefit is payable from the State General Revenue Fund but for purposes of economy such benefit was included in the warrants on which annuities were paid from the Retirement Fund. Amounts so paid are reimbursed monthly by transfer from the General Revenue Fund.

Refundments amounted to \$1,795,575 in 1967, a decrease of \$7,137 from the amount refunded to or on behalf of former employees in 1966.

Operating expenses amounted to \$314,186 in 1967, compared to \$271,286 in 1966.

INVESTMENTS

The book value of investments increased by \$10,929,375 in 1967 for a total of \$101,984,780 on December 31, 1967, consisting of \$74,126,134 in fixed income securities at amortized cost and \$27,858,646 in stocks at original cost.

A total of \$7,172,100 was invested in fixed income securities during 1967, with an average yield of 6.07%. The average yield to maturity (or call) of the fixed income portfolio was 4.52% as of December 31, 1967, compared to 4.35% as of December 31, 1966.

A total of 6,084,357 was invested in corporate stocks in 1967 and 23,058 shares of stock having a cost basis of 709,294 were sold for 816,971. The market value of the stocks held exceeded original cost by 2,547,857 as of December 31, 1967. The average yield based on original cost was 3.52% in 1967 and 3.58% in 1966 (the 9.14% appreciation is not reflected in yield rates).

The rate of return on average invested assets and cash was 4.19% in 1967 compared to 4.09% in 1966.

1967 LAW CHANGES

Legislation adopted in 1967 changed the management concept underlying the system, provided for contributions on total salary, and broadened the investment authority.

The Minnesota State Retirement System, a continuation of the State Employees Retirement Association, was established July 1, 1967. Management of the system is vested in the Executive Director with the policy making function vested in a Board of Directors. Removal of the ceiling on participating salary will result in improved retirement benefits because the retirement annuity is based on average participating salary.

The investment authority was broadened to permit a maximum position of 60% of total assets in corporate fixed income securities and 35% of total assets in equities.

Other changes increased the interest rate paid on accumulated contributions of deceased employees covered by the system from 2% to $2\frac{1}{2}\%$, increased the amount a retired employee can earn upon re-employment, without affecting his annuity payments, to \$2,000 a year, and reduced the waiting period for making application for refundment from 90 days to 60 days.

EMPLOYER CONTRIBUTIONS FOR NATIONAL GUARD TECHNICIANS

Past due employer contributions from the Department of Military Affairs for National Guard technicians paid on federal payrolls amounted to \$1,040,743 at the end of 1967. This was an increase of \$147,329 for the year compared to a \$120,860 increase the previous year. A total of $6\frac{1}{2}\%$ of payroll is available from federal funds for employer Social Security contributions and employer state retirement contributions. The employer Social Security obligation is satisfied first out of the $6\frac{1}{2}\%$ and, with the constant increase in Social Security rates and/or salary base, the balance left for state retirement is continually diminishing.

A bill for Federal retirement coverage of National Guard technicians is still pending in Congress. Federal coverage would mean withdrawal (with few exceptions) from MSRS coverage.

COMMENTS ON ACTUARIAL VALUATION

The report on an actuarial valuation of the Retirement Fund shows a decrease in the unfunded accrued liability from \$28,769,458 the previous year to \$28,032,854 at December 31, 1967. This valuation was based on an interest assumption of 3% as provided in Minnesota Statutes, Chapter 356. The decrease in the unfunded liability was small, due primarily to the removal of the ceiling on participating salary.

EXHIBITS

The exhibits in this report are presented as prescribed in Minnesota Statutes, Chapter 356.

Respectfully submitted,

Rulin Gilla

Chairman of the Board

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Executive Director

Coates, Herfurth & England

OFFICES IN SAN FRANCISCO DENVER PASADENA CONSULTING ACTUARIES 301 EAST COLORADO BLVD. PASADENA, CALIFORNIA 91101

TELEPHONE AREA CODE 213 681-4455

July 9, 1968

Board of Directors Minnesota State Retirement System 530 North Robert Street St. Paul, Minnesota 55101

Gentlemen:

We hereby certify that we made an Actuarial Survey of your Retirement System as of December 31, 1967. Pursuant to sections 356.20 to 356.23 of Minnesota Statutes 1965, Chapter 356, such Actuarial Survey included an analysis of the experience of the System for the three year period ending December 31, 1967 as well as a valuation of the System as of that date. The valuation was made on the following basis prescribed in the sections just referred to:

- 1. Interest assumption 3%
- 2. Other actuarial assumptions as determined during the course of our investigation into the experience of the System for the three year period ending December 31, 1967, and
- 3. Use of the entry age normal cost method of funding to determine unfunded accrued liability.

We further certify that the results of the valuation referred to in the foregoing paragraph indicate that the contributions required from the employees and from the State under Minnesota Statutes 1965, Chapter 352, as presently constituted are adequate to provide the benefits that will be paid from the System.

Very truly yours,

COATES, HERFURTH & ENGLAND **Consulting Actuaries** Βv

Robert H. Little, F.S.A.

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MINNESOTA STATE RETIREMENT SYSTEM EXHIBIT REQUIRED BY MINNESOTA STATUTES 1965, CHAPTER 356, AS AMENDED BY LAWS 1967, CHAPTER 249 AS OF DECEMBER 31, 1967

ASSETS AND UNFUNDED ACCRUED LIABILITY

Assets		
Cash in Office		\$ 42.52
Deposits in Banks		334,913.59
Short Term Investments		1,489,061.57
Accounts Receivable:		
(a) Members' Contributions	\$ 123,409.49	
(b) Employer Contributions	1,234,029.33	
(c) Other	46,205.86	1,403,644.68
Accrued Interest on Investments		921,085.07
Dividends declared but not received		23,240.30
Bonds at Amortized Cost		74,126,134.67
Stocks at Cost		
(Market Value 12/31/67-\$30,406,503.00)		$27,\!858,\!645.65$
Equipment at Cost, less depreciation		9,301.37
Other—Prepaid Postage		1,000.00
TOTAL ASSETS		\$106,167,069.42
Unfunded Accrued Liability Unfunded Accrued Liability to be funded by portion of State's 3% "Matching Contri- bution" in excess of State's share of en- try age normal cost contribution and		
Operating Expenses Unfunded Accrued Liability to be funded by State's 2% "Additional" contribution		\$ 6,265,595.00 21,767,259.35
Total Unfunded Accrued Liability		\$ 28,032,854.35
TOTAL ASSETS AND UNFUNDED ACCRUED LIABILITY		\$134,199,923.77

CURRENT LIABILITIES AND RESERVES REQUIRED

Current Liabilities

Current Lindonities					
Accounts Payable:					
(a) Annuity Payments	\$	3,827.92			
(b) Survivor Payments		2,978.97			
(c) Refunds to members		14,498.19			
(d) Accrued expenses	_	24,464.38	\$	45,769.46	
Suspense items				2,696.31	
Total Current Liabilities			\$	48,465.77	
Reserves Required Total Reserves Required per attached schedul TOTAL CURRENT LIABILITIES AND	е		_13	4,151,458.00	
RESERVES REQUIRED			\$134,199,923.77		

Note 1: Accumulated contributions, without interest, of employees not yet retired amounted to \$34,361,928.36 as of December 31, 1967.

Note 2: There is a deficiency in employer contributions from federal funds for employees of the Department of Military Affairs. Refer to text for detail.

MINNESOTA STATE RETIREMENT SYSTEM DETERMINATION OF RESERVES REQUIRED AS OF DECEMBER 31, 1967

	(1)	(2) Present Value	(3)
	Present Value of Benefits	of Applicable Portion of Normal Cost Contribution	Reserves Required (1) - (2)
Benefits For:			
Active Members:			
(a) Retirement Benefits	\$145,635,416.00	\$58,761,120.00	\$ 86,874,296.00
(b) Disability Benefits	14,129,967.00	8,975,041.00	5,154,926.00
(c) Refundments due to			
death or withdrawal	29,142,748.00	24,385,018.00	4,757,730.00
Deferred Annuitants	1,960,181.00		1,960,181. 0 0
Former Members Without			
Vested Rights	422,523.00	—	422,523.00
Annuitants:			
(a) Retirement Benefits	33,334,827.00	_	33,334,827.00
(b) Disability Benefits	1,233,597.00		1,233,597.00
(c) Survivors' Benefits	413,378.00		413,378.00
TOTAL	\$226,272,637.00	\$92,121,179.00	\$134,151,458.00

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ANALYSIS OF INCOME AND DEDUCTIONS FROM INCOME AS OF DECEMBER 31, 1967

Income

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From Members:	
(a) Employee Contributions	\$ 4,875,087.35
(b) Employee Accrued Contributions Receivable	123,409.49
(c) Employee Contributions Applied to	
Past Due Payments	15,963.74
From Employers:	
(a) Employer Contributions	4,840,926.56
(b) Employer Additional Contributions	3,142,061.38
(c) Employer Accrued Contributions Receivable	193,286.68
(d) Employer Past Due Contributions Receivable	147,328.94
From Investments:	
(a) Interest on Bonds and Notes (Net)	3,187,944.97
(b) Dividends on Corporate Stock	907,346.50
(c) Premiums on Bonds Called	3,568.19
	-,
Other Revenues: (a) Interest on Back Payments by Members	4,813.64
(a) Interest on back rayments by members (b) Employer Penalty	4,815.04 71.57
(c) Adjustment in Prior Year Benefit Payments	2,184.04
(d) Unclaimed Contributions and Benefits Canceled	209.81
Net Gain on Sale of Investments	107,676.53
TOTAL INCOME	\$17,551,879.39
	+
Deductions from Income	
Benefits:	
(a) Annuities, Disability and Retirement Allowances	\$ 3,725,898.47
(b) Survivor Benefits	35,116.51
(c) Interest Paid on Deposits of Deceased Members	45,116.02
Refundments:	
(a) Left Service	1,483,236.97
(b) Members of Other Retirement Systems	33,966.89
(c) Member Deaths	211,486.37
(d) Annuitant Deaths	56,059.11
(e) Erroneous Deductions	10,825.39
Operating Expenses Increase in Total Reserves Required:	314,186.29
(a) Reserves Required 12-31-66 \$123,252,075.00	
(a) Reserves Required $12-31-67$ (b) Reserves Required $12-31-67$ $134,151,458.00$	10,899,383.00
(b) Reserves Required 12-51-67	10,099,000.00
TOTAL DEDUCTIONS FROM INCOME	\$16,815,275.02
EXCESS OF INCOME OVER	
DEDUCTIONS FROM INCOME	\$ 736,604 .37
REDUCTION IN UNFUNDED ACCRUED LIABILITY:	
(a) Unfunded Accrued Liability 12-31-66 \$28,769,458.72	
(b) Unfunded Accrued Liability 12-31-67 28,032,854.35	
	\$ 736,604.37

\$ 736,604.37

COMPARATIVE STATEMENT - SIX YEARS ENDED DECEMBER 31, 1967

	Revenues	1967	1966	1965	1964	1963	1962
	Employee contributions	\$ 5,014,460	\$ 4,254,614	\$ 3,979,369	\$ 3,247,430	\$ 3,110,653	\$ 2,972,410
	Employer contributions	8,176,275	6,939,710	6,574,919	5,376,401	5,174,473	4,908,764
	Employer contrib. receivable (Fed.)	147,329	120,859	28,957	18,021	22,590	51,406
	Net interest, dividends, premiums Gain on sale of investments	4,103,673	3,599,530	3,104,511	2,777,754	2,473,256	2,172,907
	Miscellaneous revenues	$107,\!676 \\ 2,\!465$	519	1,102	1,296		10
	Total	\$ 17,551,878	\$14,915,232	\$13,688,858	<u>\$11,420,902</u>	\$10,780,972	\$10,105,497
	Distribution of Revenues	φ 11,001,010	φ1 4 ,010,202	ψ10,000,000	φ11,420,002	φ10,100,012	φ10,100, 1 01
	Benefits paid	\$ 3,806,131	\$ 3,617,105	\$ 3,357,538	\$ 3,154,050	\$ 2,993,966	\$ 2,890,880
	Refundments paid	3,300,131 1,795,574	3,017,105 1,802,712	3,597,687	$^{\circ}$ 3,154,050 1,273,565	¢ 2,993,900 1,352,232	\$ 2,850,880 1,311,432
	Operating expenses	314,186	271,286	240,685	229,915	227,251	217,503
	Loss on sale of investments	011,100	289,395	129,761	191,421	72,639	298,080
	Miscellaneous expenses			,	140	812	20,027
	Increase in reserves	11,635,987	8,934,734	8,363,187	6,571,811	6,134,072	5,367,575
	Total	\$ 17,551,878	\$14,915,232	\$13,688,858	\$11,420,902	\$10,780,972	\$10,105,497
12	Assets						
	Cash and temporary investments Accounts receivable:	\$ 1,824,018	\$ 1,315,546	\$ 1,195,721	\$ 1,252,530	\$ 677,177	\$ 658,430
	Accrued contributions	316,696	356,398	366,860			
	Past due employer contributions	1,040,743	893,414	772,554	798,326	780,305	$801,\!137$
	Accrued interest and dividends	944,325	844,961	759,897	676,845	701,883	632,283
	Other accruals	46,206	36,193	97,476	19,036	18,665	36,613
	Investments at amortized cost	101,984,780	91,055,405	82,375,512	74,471,935	68,460,171	62,382,948
	Other assets	10,301	12,574	11,234	13,362	13,436	16,273
	Total	\$106,167,069	\$94,514,491	\$85,579,254	\$77,232,034	\$70,651,637	\$64,527,684
	Liabilities and Reserves					· · · · · · ·	
	Current liabilities	\$ 48,466	\$ 31,875	\$ 31,372	\$ 47,340	\$ 38,754	\$ 48,873
	Employee contribution reserve	34,361,928	32,028,080	30,724,612	29,428,864	28,390,261	27,451,405
	Retirement and benefits reserve State contribution reserve	34,977,860	33,714,602	31,040,647	29,279,436	28,408,824	27,503,275
	Total	36,778,815 106,167,069	28,739,934 94,514,491	23,782,623 \$85,579,254	18,476,394 77,232,034	13,813,798 \$70,651,637	9,524,131 \$64,527,684
		φ100,101,009	<i>ψ34,014,491</i>	<i>φ</i> 00,019,204	ψ11,404,00 4	φ10,001,001	ψ04,041,004
	Rate of return on average invested assets and cash	4.1878%	4.0917%	3.8978%	3.8350%	3.7422%	3.5982%
	Average bond yield to maturity (or call)		4.3477%	4.1018%	3.9812%	3.8688%	3.7663%
	interest of the second se	1.0220 /0	1.0 111 /0		0.0014 /0	5.0000 /0	0.1000 70

INVESTMENT PORTFOLIO CALENDAR YEAR ENDED DECEMBER 31, 1967

	Book Value	Par Value	Yield (to maturity or call)
Bond portfolio, December 31, 1966	\$68,567,999.76	\$68,590,399.24	4.3477%
Add: Purchases in 1967	7,172,100.00	7,214,600.00	6.0686%
	\$75,740,099.76	\$75,804,999.24	
Deduct: Bonds matured and called in 1967 Add: Net amortization	1,620,096.05 6,130.96	1,620,824.24	
Bond portfolio, December 31, 1967	\$74,126,134.67	\$74,184,175.00	4.5228%
Average yield to maturity (or call) December 31, 1963 3.8688% 1964 3.9812%	•	-/	477% 228%

1965 4.1018%

Percentage distribution of investments at cost as of December 31, 1966 and 1967:

		Book '	% Distribution		
		1967	1966	1967	1966
Governments	\$	20,177,046.83	\$20,997,954.33	19.78%	23.06%
Merchant Marine Bonds 100% Govt. Guar.	,	2,370,000.00	1,800,000.00	2.32	1.98
Canadian Government		792,116.19		.78	
Corporate fixed income securities	_	50,786,971.65	45,770,045.43	49.80	50.26
Total fixed income					
securities	\$	74,126,134.67	\$68,567,999.76	72.68%	75.30%
Corporate Stocks		27,858,645.65	22,487,405.01	27.32	24.70
Total Investments	\$	101,984,780.32	\$91,055,404.77	100.00%	100.00%

The market value of corporate stocks was 330,406,503 at December 31, 1967 and 22,957,470 at December 31, 1966. The average yield on the original cost basis of equities was 3.52% in 1967 and 3.58% in 1966. Investment income and average rate of return:

	1967	1966
Interest income: Long term investments Short term investments	\$ 3,139,744 48,200	\$ 2,843,966 41,062
Dividend income	907,346	710,275
Interest from employee back payments	4,813	_1,830
Premium on bonds called	3,568	2,396
	\$ 4,103,671	\$ 3,599,529
Average invested assets and cash*	\$97,990,953	\$87,971,092
Rate of return	4.19%	4.09%

*Simple average of beginning and ending balances in 1966 and a 12 month average in 1967.

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