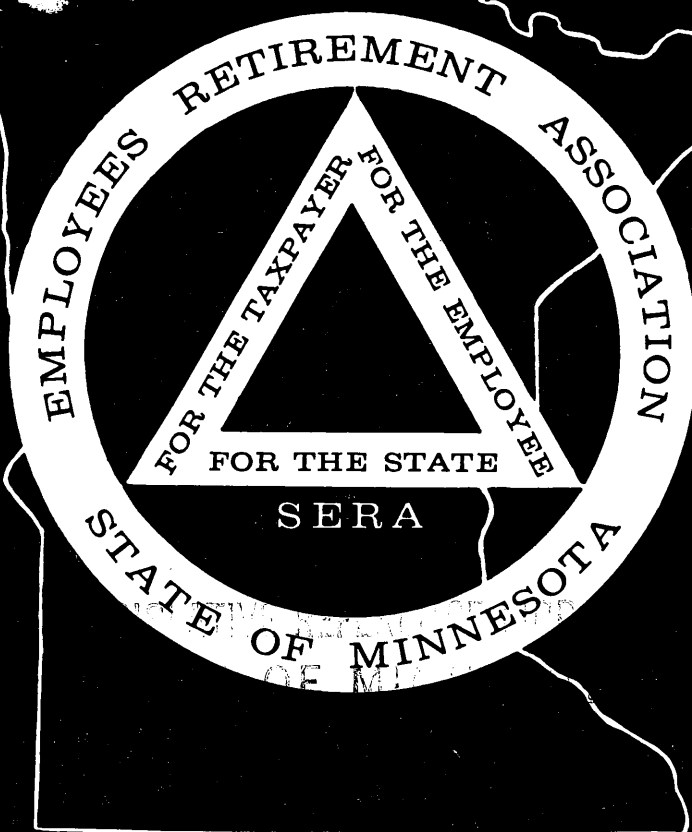




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1966

STATEMENT TO MEMBERS DECEMBER 31, 1966

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STATE EMPLOYEES
RETIREMENT ASSOCIATION
STATE OF MINNESOTA



STATE OF MINNESOTA

MEMBERS OF THE BOARD OF TRUSTEES OF THE STATE EMPLOYEES RETIREMENT ASSOCIATION

ELECTED

Berdine Erickson, Chairman
Rochester State Hospital
Herbert C. Schultz, Vice Chairman
State Highway Department
Carolyn Anderson
University of Minnesota
George T. Gaylord
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

Michael N. Thome, Executive Secretary
194 Centennial Office Building
St. Paul, Minnesota 55101

This report covers operations of the Retirement Fund from January 1 through December 31, 1966.

MEMBERSHIP STATISTICS

	1966	1965
Active membership at December 31	33,006	31,396
Inactive accounts at December 31	5,680	5,065
New members and former members returned	9,046	7,889
Refundments and deaths	5,692	4,808
Transfers to annuities	403	368
Net increase in active membership	1,610	1,843

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

	Average Age	Average Credited Service	Average Accumulated Contributions
1966	41.7 Yrs.	8.6 Yrs.	\$1,234.17
1965	41.6 Yrs.	8.6 Yrs.	1,206.00

and the average female member:

1966	37.2 Yrs.	5.3 Yrs.	\$ 617.10
1965	37.7 Yrs.	5.6 Yrs.	642.00

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

The median age, or that age at which one-half the active membership is younger and one-half is older, was 41 years for males in both 1966 and 1965 and 35 years in 1966 and 37 years in 1965 for females.

The active membership ranged from age 15 to age 87 in 1966 and from age 15 to age 86 in 1965.

A total of 8,768 of the active membership had at least 10 years of credited service at the end of 1966 compared to 8,424 at the end of 1965. Those age 65 and older show:

	1966	1965
Active membership age 65 or older	989	998
Age 65 and over with at least 10 years service credit	692	679

The average and median ages for new members were identical for 1966 and 1965:

	Male	Female
Average age	31.4 Yrs.	26.1 Yrs.
Median age	26 Yrs.	21 Yrs.

The average age and service forfeited by those who took refundments in the past 2 years was:

	Male		Female	
Average:	1966	1965	1966	1965
Age	34.4 Yrs.	36.2 Yrs.	29.8 Yrs.	29.7 Yrs.
Service Forfeited	2.8 Yrs.	2.8 Yrs.	2.0 Yrs.	2.0 Yrs.

Analysis of the refundments shows that in 1966, 4.5% forfeited 10 or more years of service credit compared to 3% in 1965.

Inactive accounts totaled 5,680 at the end of 1966 compared to 5,065 at the end of 1965. 335 of the inactive accounts at the end of 1966 show

sufficient service credit to entitle the person to a deferred annuity at age 65. This compares with 322 at the end of 1965:

	Male		Female	
	1966	1965	1966	1965
10 years service or more	182	170	153	152
Average age	54	55	55	55
Average deferred annuity	\$56.36	\$57.73	\$50.15	\$48.90

ANNUITANT STATISTICS

	1966	1965
Age and service retirements at December 31	3,461	3,244
Disability benefits at December 31	130	115
Survivor benefits at December 31	41	42
Annuities and benefits granted during the year	403	368
Deaths	184	152

Average monthly benefits authorized in 1966 and 1965 also showing average age, service, and salaries:

Type	Age at Retirement	Salary Before 7/1/57	Salary After 6/30/57	Service Yrs. & Mos.	Average Benefit
1966					
Service	66.2 Yrs.	\$279.27	\$367.54	23 4	\$39.51
Disability	58.0 Yrs.	283.80	367.68	19 3	69.58
1965					
Service	66.4 Yrs.	\$284.89	\$360.85	23 9	\$91.80
Disability	56.3 Yrs.	257.02	351.79	17 3	56.77

Social security benefits are in addition to above.

The decrease in average service benefit in 1966 was due primarily to a decrease in the average credited service and a declining trend in the average salary before July 1, 1957.

An average of the "average salaries before July 1, 1957" for each of the last six years demonstrates the declining trend.

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

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		Female	
	1966	1965	1966	1965
Service Retirement				
Age	76.8 Yrs.	74.4 Yrs.	76.6 Yrs.	77.9 Yrs.
Retirement	9.6 Yrs.	7.6 Yrs.	9.2 Yrs.	10.1 Yrs.
Disability Retirement				
Age	62.9 Yrs.	64.3 Yrs.	65.0 Yrs.	66.0 Yrs.
Retirement	4.9 Yrs.	1.6 Yrs.	4.3 Yrs.	5.3 Yrs.

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STATE OF MINNESOTA

REVENUES

Employee and employer contributions totaled \$4,254,614 and \$7,060,569, respectively, in 1966. This compares with \$3,979,369 and \$6,574,919 in 1965. Total investment income and interest on back payments increased by \$495,019 to a total of \$3,599,530 in 1966.

EXPENDITURES

Benefit payments totaled \$3,617,105 in 1966, an increase of \$259,567 over 1965. A breakdown of benefit payments for the last two years is as follows:

Service Retirement Annuities	\$3,444,801	\$3,195,249
Disability Retirement Annuities	95,996	82,417
Widows Benefit Payments	33,647	33,978
Surviving Childrens Payments	3,590	3,660
Interest Paid Beneficiaries of deceased members	39,071	42,234
	<u>\$3,617,105</u>	<u>\$3,357,538</u>

Refundments amounted to \$1,802,712 in 1966, an increase of \$205,025 over the amount refunded to or on behalf of former members in 1965.

Operating expenses amounted to \$271,286 in 1966 compared to \$240,685 in 1965.

INVESTMENTS

The book value of investments increased by \$8,679,892 in 1966 to a total of \$91,055,405 at December 31, 1966, which includes \$22,487,405 in corporate stocks compared to \$17,545,634 in corporate stocks the previous year. The market value of equities exceeded cost by \$470,065 at the end of 1966 compared to \$2,874,501 at the end of 1965. This of course reflects the downturn in the market during the latter part of 1966. The market has recovered considerably since then.

The book value of bonds (fixed income securities) at December 31, 1966 represented 75.30% of the total portfolio, with 66.8% of the bonds in corporate obligations and 33.2% in government bonds and merchant marine bonds (which are fully government guaranteed).

The rate of return on average invested assets and cash was 4.09% in 1966 compared to 3.90% in 1965.

Short term investments yielded 5.08% in 1966 compared to 3.85% in 1965. Corporate stocks yielded 3.58% in 1966 compared to 3.39% in 1965. The law provides for a maximum position of 50% of total assets in corporate fixed obligations and 30% in common and preferred stocks.

SALE OF TAX EXEMPT BONDS

Again in 1966 tax exempt municipal bonds were sold and it is estimated the sales will provide a net gain of approximately \$166,165 to the fund. This estimate was obtained by projecting interest income at the average yield of fixed income securities purchased in 1966 for the life of the old bonds as compared to the net income from the old bonds if they had been held to maturity, less the loss on principal amount.

Divestment of low yield governments was started in 1961. The book value of bonds sold during the six years 1961-66 totaled \$21,347,673 and net proceeds amounted to \$20,180,603. The projected gain in interest income is estimated to be about \$2,795,318, and, after deducting the loss on principal amount, the net gain to the fund will be approximately \$1,628,248.

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 \$893,413.71 at the end of 1966. This was an increase of \$120,859.33 over the 1965 figure. A total of 6½% of payroll is available from Federal funds for employer Social Security and state retirement contributions. The employer Social Security contribution is paid in full from the 6½% and the remainder is left for employer contributions to the state retirement fund. The Social Security rate was 4.2% in 1966 which left only 2.3% for employer SERA contributions. In 1967 the Social Security rate is 4.4% which will further reduce the contribution to SERA.

A bill for Federal retirement coverage of National Guard technicians was reintroduced on the Federal level and if this passes the technicians would withdraw from SERA. This would mean that the receivable would not be collected. It would also mean a substantial reduction in the unfunded accrued liability.

COMMENTS ON ACTUARIAL VALUATION

The report on the actuarial valuation of the Retirement Fund at December 31, 1966 shows a decrease in the unfunded accrued liability of \$2,194,594.22—down from \$30,964,052.94 to \$28,769,458.72. The reduction was not as much as anticipated primarily for two reasons, (1) retired persons lived longer than previous experience indicated, and (2) for the first time, administrative expense was projected on an actuarial basis. Administrative expenses in the 1966 Actuarial Report are projected at nineteen one-hundredths of one percent of the participating salaries.

Since the 1967 legislature has provided for substantially higher salaries for all state employees, there will be an increase in the unfunded liability at December 31, 1967. Removal of the ceiling on the salary upon which contributions are based also tends to increase the unfunded liability, however the amount available for funding the liability will also be greater.

The valuation was made using the entry-age-normal-cost-method of funding with a 3 per cent interest assumption.

EXHIBITS

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

Respectfully submitted,

Berdie Erickson

Chairman of the Board

Michael A. Thome

Executive Secretary

OFFICES IN
SAN FRANCISCO
DENVER
PASADENA

COATES, HERFURTH & ENGLAND
CONSULTING ACTUARIES
301 EAST COLORADO BLVD.
PASADENA, CALIFORNIA 91101

TELEPHONE
AREA CODE 213 681-4455

May 25, 1967

Board of Trustees
State Employees Retirement Association
of Minnesota
Centennial Office Building
St. Paul, Minnesota 55101

Gentlemen:

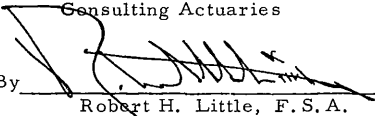
We hereby certify that we made an actuarial valuation of your Retirement System as of December 31, 1966 and that such valuation was made on the basis prescribed in Minnesota Statutes 1965, Chapter 356, namely:

1. Interest assumption - 3%
2. Other actuarial assumptions as determined during the course of our investigation into the experience of the System for the four year period ending December 31, 1964, and
3. Use of the entry age normal cost method of funding to determine unfunded accrued liability.

We also 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

By 
Robert H. Little, F. S. A.

RHL:ie

EXHIBITS REQUIRED BY MINNESOTA STATUTES, CHAPTER 356
SECTION 356.20, SUBDIVISION 4(1)
AS OF DECEMBER 31, 1966

ASSETS AND UNFUNDED ACCRUED LIABILITY

Assets

Cash in office	\$ 25.00
Deposits in banks	201,395.30
Short term investments	1,114,126.18
Accounts receivable:	
(a) Employee contributions	\$136,726.28
(b) Employer contributions	219,672.24
(c) Past due employer contributions (see note 2)	893,413.71
(d) Other	<u>36,192.56</u>
Accrued interest on investments	837,337.84
Dividends declared but not yet received	7,623.40
Bonds at amortized cost	68,567,999.76
Stocks at cost (market value 12/31/66, \$22,957,470)	22,487,405.01
Equipment at cost, less depreciation	11,573.97
Other—Prepaid postage	<u>1,000.00</u>
TOTAL ASSETS	\$ 94,514,491.25

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 entry age normal cost contribution (2.11% of participating salary) and operating ex- penses (.19% of participating salary) or .70% of participating salary	\$ 9,150,239.00
Unfunded accrued liability to be funded by state's 2% "additional" contribution	<u>19,619,219.72</u>
TOTAL UNFUNDED ACCRUED LIABILITY	\$ 28,769,458.72
TOTAL ASSETS AND UNFUNDED ACCRUED LIABILITY	<u>\$123,283,949.97</u>

CURRENT LIABILITIES AND RESERVES REQUIRED

Current Liabilities

Accounts payable	
(a) Annuity payments	\$ 2,615.04
(b) Survivor payments	3,108.97
(c) Refundment of employee contributions	7,224.18
(d) Accrued expenses	<u>16,869.70</u>
Suspense items	<u>2,057.08</u>
Total current liabilities	\$ 31,874.97
Total reserves required per schedule	<u>123,252,075.00</u>
TOTAL CURRENT LIABILITIES AND RESERVES REQUIRED	<u>\$123,283,949.97</u>

Note 1: Accumulated contributions, without interest, of employees not yet retired amounted to \$32,028,080.18 as of December 31, 1966.

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

**SCHEDULE OF RESERVES REQUIRED
AS OF DECEMBER 31, 1966**

	(1) Present Value of Benefits	(2) Present Value of Applicable Portion of Normal Cost Contribution	(3) Reserves Required (1) - (2)
Benefits For:			
Active Members			
(a) Retirement benefits	\$121,115,232.00	\$43,921,149.00	\$ 77,194,083.00
(b) Disability benefits	9,857,136.00	5,882,297.00	3,974,839.00
(c) Refundments due to death or withdrawal	22,746,176.00	16,993,301.00	5,752,875.00
Deferred Annuitants	2,015,156.00	—	2,015,156.00
Former members without vested rights	383,782.00	—	383,782.00
Annuitants:			
(a) Retirement benefits	32,362,458.00	—	32,362,458.00
(b) Disability benefits	1,146,888.00	—	1,146,888.00
(c) Survivors' benefits	421,994.00	—	421,994.00
TOTAL	<u>\$190,048,822.00</u>	<u>\$66,796,747.00</u>	<u>\$123,252,075.00</u>

ANALYSIS OF INCOME AND DEDUCTIONS FROM INCOME
AS OF DECEMBER 31, 1966

Income

From employees:

(a) Employee contributions	\$ 4,105,331.25
(b) Employee accrued contributions receivable	136,726.28
(c) Employee contributions applied to past due payments	12,556.71

From employers:

(a) Employer contributions	4,083,515.55
(b) Employer additional contributions	2,636,522.21
(c) Employer accrued contributions receivable	219,672.24
(d) Employer past due contributions receivable	120,859.33

From investments:

(a) Interest on bonds and notes (net)	2,885,028.51
(b) Dividends on corporate stock	710,275.31
(c) Premiums on bonds called	2,395.82

Other revenues

(a) Interest on back payment by employees	1,830.02
(b) Gain on sale of assets	10.00
(c) Unclaimed contributions and benefits canceled	509.01

TOTAL INCOME	<u>\$14,915,232.24</u>
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Deductions from Income

Benefits:

(a) Annuities, disability and retirement allowances	\$ 3,540,796.78
(b) Widows benefit payments	33,647.00
(c) Surviving childrens payments	3,590.00
(d) Interest paid on deposits of deceased members	39,070.65

Refundments:

(a) Left service	1,515,413.68
(b) Eligible to other retirement systems	35,773.19
(c) Employee deaths	198,023.23
(d) Annuitant deaths	42,875.07
(e) Erroneous deductions	10,626.69

Operating expenses	271,285.96
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Net loss on sale of investments	289,395.30
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Increase in total reserves required:

(a) Reserves required 12-31-65	\$116,511,935.00	
(b) Reserves required 12-31-66	<u>123,252,075.00</u>	6,740,140.00

TOTAL DEDUCTIONS FROM INCOME	<u>\$12,720,638.02</u>
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EXCESS OF INCOME OVER

DEDUCTIONS FROM INCOME	\$ 2,194,594.22
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REDUCTION IN UNFUNDED ACCRUED LIABILITY:

(a) Unfunded accrued liability 12-31-65	\$30,964,052.94	
(b) Unfunded accrued liability 12-31-66	<u>28,769,458.72</u>	\$ 2,194,594.22

COMPARATIVE STATEMENT — SIX YEARS ENDED DECEMBER 31, 1966

	1966	1965	1964	1963	1962	1961
Revenues						
Employee contributions	\$ 4,254,614	\$ 3,979,369	\$ 3,247,430	\$ 3,110,653	\$ 2,972,410	\$ 2,882,562
Employer contributions	6,939,710	6,574,919	5,376,401	5,174,473	4,908,764	4,658,131
Employer contrib. receivable (Fed.)	120,859	23,957	18,021	22,590	51,406	156,282
Net interest, dividends, premiums	3,599,530	3,104,511	2,777,754	2,473,256	2,172,907	1,915,023
Miscellaneous revenues	519	1,102	1,296	—	10	165
Total	\$14,915,232	\$13,688,858	\$11,420,902	\$10,780,972	\$10,105,497	\$ 9,612,163
Distribution of Revenues						
Benefits paid	\$ 3,617,105	\$ 3,357,538	\$ 3,154,050	\$ 2,993,966	\$ 2,890,880	\$ 2,770,662
Refundments paid	1,802,712	1,597,687	1,273,565	1,352,232	1,311,432	1,170,018
Operating expenses	271,286	240,685	229,915	227,251	217,503	219,893
Loss on sale of investments	289,395	129,761	191,421	72,639	298,080	159,979
Miscellaneous expenses	—	—	140	812	20,027	82,476
Increase in reserves	8,934,734	8,363,187	6,571,811	6,134,072	5,367,575	5,209,135
Total	\$14,915,232	\$13,688,858	\$11,420,902	\$10,780,972	\$10,105,497	\$ 9,612,163
Assets						
Cash and temporary investments	\$ 1,315,546	\$ 1,195,721	\$ 1,252,530	\$ 677,177	\$ 658,430	\$ 808,864
Accounts receivable:						
Accrued contributions	356,398	366,860	—	—	—	—
Past due employer contributions	893,414	772,554	798,326	780,305	801,137	766,428
Accrued interest and dividends	844,961	759,897	676,845	701,883	632,283	574,696
Other accruals	36,193	97,476	19,036	18,665	36,613	58,121
Investments at amortized cost	91,055,405	82,375,512	74,471,935	68,460,171	62,382,948	56,924,770
Other assets	12,574	11,234	13,362	13,436	16,273	17,673
Total	\$94,514,491	\$85,579,254	\$77,232,034	\$70,651,637	\$64,527,684	\$59,150,552
Liabilities and Reserves						
Current liabilities	\$ 31,875	\$ 31,372	\$ 47,340	\$ 38,754	\$ 48,873	\$ 39,316
Employee contribution reserve	32,028,080	30,724,612	29,428,864	28,390,261	27,451,405	26,679,830
Retirement and benefits reserve	33,714,602	31,040,647	29,279,436	28,408,824	27,503,275	26,199,505
State contribution reserve	28,739,934	23,782,623	18,476,394	13,813,798	9,524,131	6,231,901
Total	\$94,514,491	\$85,579,254	\$77,232,034	\$70,651,637	\$64,527,684	\$59,150,552
Rate of return on average invested assets and cash	4.0917%	3.8978%	3.8350%	3.7422%	3.5982%	3.4696%
Average bond yield to maturity (or call)	4.3477%	4.1018%	3.9812%	3.8688%	3.7663%	3.5504%

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BOND PORTFOLIO AND BOND YIELDS CALENDAR YEAR ENDED DECEMBER 31, 1966

	Book Value	Par Value	Yield (to Maturity or call)
Bond portfolio, December 31, 1965	\$64,829,878.80	\$64,842,339.57	4.1018%
Add: Purchases in 1966	<u>10,241,653.97</u>	<u>10,248,653.97</u>	5.1574%
	\$75,071,532.77	\$75,090,993.54	
Deduct: Bonds matured and called in 1966	1,398,448.48	1,398,594.30	
Bonds sold in 1966	<u>5,109,469.72</u>	<u>5,102,000.00</u>	2.9511%
Add: Net amortization	<u>4,385.19</u>		
Bond portfolio, December 31, 1966	<u>\$68,567,999.76</u>	<u>\$68,590,399.24</u>	4.3477%

Average yield to maturity (or call), last 5 years:

December 31, 1962	3.7663%	December 31, 1965	4.1018%
1963	3.8688%	1966	4.3477%
1964	3.9812%		

Book value of long term investments at December 31, 1965 and 1966 and percentage distribution:

	Book Values		% Distribution	
	1966	1965	1966	1965
Governments	\$20,997,954.33	\$26,857,557.89	23.06%	32.60%
Merchant Marine Bonds, 100% Govt. Guar.	1,800,000.00	—	1.98	—
Railroad debt and equipment	10,834,828.44	8,732,042.42	11.90	10.60
Corporate bonds and notes	<u>34,935,216.99</u>	<u>29,240,278.49</u>	<u>38.36</u>	<u>35.50</u>
Total bonds and notes	\$68,567,999.76	\$64,829,878.80	75.30%	78.70%
Corporate stocks	<u>22,487,405.01</u>	<u>17,545,633.60</u>	<u>24.70</u>	<u>21.30</u>
Total Investments	<u>\$91,055,404.77</u>	<u>\$82,375,512.40</u>	<u>100.00%</u>	<u>100.00%</u>

Investment income and average rate of return:

Interest income—long term investments	\$ 2,843,966
short term investments	41,062
Dividend income	710,275
Interest from members	1,830
Premium on bonds called	<u>2,396</u>
	<u>\$ 3,599,529</u>
Average of invested assets and cash	<u>\$87,971,092</u>
Rate of return on average invested assets and cash	4.09%