Actuarial Valuations

Active Members June 30, 1960 and

Retirants and Beneficiaries June 30, 1961

Public Employees Retirement System

of Ohio 3/2/62

A. G. GABRIEL & COMPANY CONSULTING ACTUARIES DETROIT 26, MIGHIGAN



THE REPORT OF

AN ACTUARIAL VALUATION OF

ACTIVE MEMBERS

June 30, 1960

and

RETIRANTS AND BENEFICIARIES

June 30, 1961

of the

STATE OF OHIO

PUBLIC EMPLOYEES RETIREMENT SYSTEM

Columbus, Ohio

Submitted to

THE RETIREMENT BOARD

State of Ohio

Public Employees Retirement System

by

.A. G. Gabriel & Company

Consulting Actuaries

March 12, 1962

#### A. G. GABRIEL & COMPANY

CONSULTING ACTUARIES FIRST NATIONAL BUILDING DETROIT 26, MICHIGAN

March 12, 1962

The Retirement Board

State of Ohio

Public Employees Retirement System

Columbus, Ohio

Ladies and Gentlemen:

Submitted in this report are the results of actuarial valuations of (1) the Retirement System's liabilities for retirement allowances being paid retirants and beneficiaries as of June 30, 1961, and (2) the Retirement System's liabilities for retirement allowances to be paid members as of June 30, 1960.

The statistical data required to make the valuations was furnished by your Executive Secretary and his Staff. The data was compiled using punch card machine equipment.

The interest rate used in making the valuations was 3 percent per annum, compounded annually.

The mortality table used in evaluating retirement allowances being paid and to be paid was the 1937 Standard Annuity Mortality Table.

The probabilities of withdrawal from service, death in service, and retirement and the salary increase factors were determined by the previous actuarial investigation for the two year period ended December 31, 1959.

#### This report is divided into two Chapters:

- Chapter I The valuations of retirement allowances being paid June 30, 1961 to retirants and beneficiaries.
- Chapter II The valuations of retirement allowances likely to be paid after June 30, 1960 to active and inactive members who retire.

<u>In accordance</u> with resolutions, effective December 31, 1961, adopted by the Retirement Board, the Divisions evaluated are as follows:

#### Chapter I: Retirants and Beneficiaries

Part A - State Division

Part B - Non-State Division, which includes all retirants and beneficiaries not included in Part A.

#### Chapter II: Active and Inactive Members

Part A - State Division

Part B - Non-State Division

Part C - Cleveland Transit Division

Part D - Shaker Heights Transit Division

#### This report is divided into two Chapters:

Chapter I - The valuations of retirement allowances being paid June 30, 1961.

Chapter II - The valuations of retirement allowances to be paid June 30, 1960.

In accordance with resolutions, effective December 31, 1961, adopted by the Retirement Board, the Divisions evaluated are as follows:

#### Chapter I: Retirants and Beneficiaries

Part A - State Division

Part B - Non-State Division, which includes all retirants and beneficiaries not included in Part A.

#### Chapter II: Active and Inactive Members

Part A - State Division

Part B - Non-State Division

Part C - Cleveland Transit Division

Part D - Shaker Heights Transit Division

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CHAPTER I

PART A

STATE DIVISION

#### STATE DIVISION

State Division retirants and beneficiaries receiving benefits from the Annuity and Pension Reserve Fund at June 30, 1961 totaled 6,318, involving annual retirement allowances of \$7,370,208.

State Division beneficiaries receiving benefits from the Survivors' Benefit Fund totaled 782, involving annual retirement allowances of \$984,648.

State Division beneficiaries with an established right to receive benefits from the Survivors\* Benefit Fund totaled 104, involving deferred annual benefits of \$99,060.

State Division cost of living pension increments being paid to present retirants and beneficiaries totaled \$341,280 per annum.

#### Schedule 1

#### STATE DIVISION

Retirants and Beneficiaries June 30, 1961

By Type of Benefit Being Paid

from Annuity and Pension Reserve Fund

Group	Number	Annual Normal Annuities	Annual Normal Pensions	Annual Additional Annuities	Total Retirement Allowances	Cost of Living Increases
		SUPE	RANNUATION R	ETIREMENT		
	Straig	ht Life Allo	wance - Bene	fit Terminat	ing at Death	
Men	2,676	\$ 732,408	\$2,404,920	\$11,232	\$3,148,560	\$162,984
Women	1,920		1,701,120	7,248	2,062,752	•
Totals	4,596	1,086,792	4,106,040	18,480	5,211,312	278,304
	Opt	ion l Allowa	nce - Joint	and Survivor	Benefit	
Men	266	47,760	162,672	948	211,380	6,084
Women	16	1,944	7,680	120	9,744	936
Totals	282	49 <b>,7</b> 04	170,352	1,068	221,124	7,020
	Option .	2 Allowance	- Modified J	oint and Sur	vivor Benefi	t
Men	447	145,932	665,220	3,564	814,716	13,116
Women	15	2,760	17,760	1,056	21,576	936
Totals	462	148,692	682,980	4,620	836,292	14,052
Option	3 Allow	ance - Life	Benefit With	Guaranteed	Periods 0 to	5 Years
Men	158	47,988	154,476	48	202,512	3,264
Women	26	4,320	18,012		22,332	648
Totals	184	52,308	172,488	48	224,844	3,912

(Schedule 1 continued on Page 6)

#### Schedule 1 - continued

#### STATE DIVISION

#### Retirants and Beneficiaries June 30, 1961

#### By Type of Benefit Being Paid

#### from Annuity and Pension Reserve Fund

Group	Number	Annual Normal Annuities	Annual Normal Pensions	Annual Additional Annuities	Total Retirement Allowances	Cost of Living Increases
Option 3	3 Allowan	ce - Life Be	nefit With G	uaranteed Pe	riods 5 to 1	.0 Years
Men Women	235 20	3,804	18,888	-	\$ 312,456 22,692	768
Totals	255	69,792	263,820	1,536	335,148	6,684
Option 3	3 Allowan	ce - Life Be	nefit With G	uaranteed Pe	riods 10 to	15 Years
Men	19	5,088	18,288		23,376	276
Women	5	960	4,416		5,376	48
Totals	24	6,048	22,704		28,752	324
Option 3	Allowan	ce - Life Be	nefit With G	uaranteed Pe	riods 15 to	20 Years
Men Women	3	516	1,764		2,280	
Totals	3	516	1,764		2,280	
	Option 3	Allowance -	Special Joi	nt and Survi	vor Benefit	
Men Women	3	1,860	15,396		17,256	
Totals	3	1,860	15,396		17,256	
Allowa	nce to S	urvivor Rene	ficiary of D	ecased Supa	rannuation R	Otivant

Allowance to Survivor Beneficiary of Deceased Superannuation Retirant Who Elected Option 1, 2, or 3 - Life Benefit

Men	3	252	960		1,212	48
Women	231	31,260	114,900	264	146,424	20,652
Totals	234	31,512	115,860	264	147,636	20,700

(Schedule 1 concluded on Page 7)

#### Schedule 1 - concluded

#### STATE DIVISION

Retirants and Beneficiaries June 30, 1961

By Type of Benefit Being Paid

from Annuity and Pension Reserve Fund

		3				
		Annual	Annual	Annual	Total	Cost of
Group	Number	Normal Annuities	Normal Pensions	Additional Annuities		Living Increases
A11 oraș	man to S	umrinom Dom	eficiary of I	opposed Cure	Tananation T	
ATTOWA			tion 3 - Guar			etrant
M-W	75	\$ 17,052	\$ 49,224	\$ 936	\$ 67,212	\$ 3 384
**	.5	7 27,032	4 47,424	ų )30	γ 07,222	ų 3,304
	Tot	al for Supe	rannuation Al	llowances Bei	ng Paid	
Men	3,810	1,047,792	3,668,628	17,328	4,733,748	191,688
Women	2,233				2,290,896	
M-W	75				67,212	
Totals	6,118	1,464,276	5,600,628	26,952	7,091,856	334,380
		DI	SABILITY RET	LREMENT		
	Straigh	t Life Allo	wance - Benei	it Terminati	ng at Death	
Men	121	\$ 32,724	\$ 141,996	\$ 1,248	\$ 175,968	\$ 5,532
Women	79	15,156	86,520	708	102,384	1,368
Totals	200	\$ 47,880	\$ 228,516	\$ 1,956	\$ 278,352	\$ 6,900
		TOTA	L BENEFITS BE	EING PAID		
Men	3,931			\$18,576	\$4,909,716	
Women			1,969,296	9,396	2,393,280	
M-W	75	17,052 \$1,512,156			67,212	
Totals	6,318	\$1,312,130	93,029,144	\$28,908	\$7,370,208	\$341,280

#### Schedule 2

#### STATE DIVISION

#### Survivor Benefit Beneficiaries June 30, 1961

#### By Type of Benefit Being Paid

#### from Survivor Benefit Fund

Group	Number	Annual Normal Annuities	Annual Normal Pensions	Annual Additional Annuities	Total Retirement Allowances
Survivor		to Benefici nd Survivor	•	eased Member on	
Men Women Totals	3 258 261	\$ 528 62,088 62,616	\$ 1,620 239,892 241,512	\$ 312 312	\$ 2,148 302,292 304,440
Survivor I		o Beneficia d Benefit A		ased Member	
Widower - no child Child only - male Sub-totals	11 11 22		10,620 14,820 25,440		10,620 14,820 25,440
Widow - no child Widow - child Child only - female Parent - female	320 160 11 8		313,980 315,540 18,108 7,140		313,980 315,540 18,108 7,140
Sub-totals	499		654,768		654,768
Totals	521	4	680,208		680,208
Total Bene	fits Bein	g Paid from	Survivor	Benefit Fund	l
Men Women	25 757	\$ 528 62,088	\$ 27,060 894,660	\$ <u>312</u>	\$ 27,588 957,060
Totals	782	\$62,616	\$921,720	\$312	\$984,648

#### Schedule 3

STATE DIVISION

# Deferred Survivor Benefit Beneficiaries June 30, 1961 By Type of Benefit to be Paid

from Survivor Benefit Fund

Gro	1 <b>p</b>	Number	Deferred Annual Retirement Allowances
	Fixed Benefit	Amounts	
Widowers -			
Deferred	to age 65	5	\$ 4,560
Widows -			
Deferred	to age 50	6	7,200
Deferred	to age 62	45	48,600
Deferred	to age 65	<u>48</u> 99	38,700
Totals		99	94,500
Totals -			
Deferred	to age 50	6	7,200
	to age 62	45	48,600
	to age 65	53	43,260
Totals	-	104	\$99,060
			•

#### Schedule 4

STATE DIVISION

# Recapitulation of Retirement Allowances Being Paid Retirants and Beneficiaries June 30, 1961

	Number	Annual Normal Annuities	Annual Normal Pensions	Annual Additional Annuities	Annual Retirement Allowances	Cost of Living Increases
Superannuation Retirants and Beneficiaries	6,118	\$1,464,276	\$5,600,628	\$26,952	\$7,091,856	\$334,380
Disability Retirants	200	47,880	228,516	1,956	278,352	6,900
Allowances being paid from A & PR	6,318	1,512,156	5,829,144	28,908	7,370,208	341,280
Beneficiaries Survivor Benefit Fund	782	62,616	921,720	312	984,648	the state of the s
Total Allowances Being Paid June 30, 1961	7,100	\$1,574,772	\$6,750,864	<b>\$29,2</b> 20	\$8,354,856	\$341,280
Deferred Survivor Benefits to be Paid from Survivor Benefit Fund	- 104		\$ 99,060		\$ 99,060	

#### Schedule 5

STATE DIVISION

#### Retirants and Beneficiaries June 30, 1961

#### By Attained Ages

	Supe	rannuation_	D-	sah	ility		Surv Bene	ivor		[otals	Cost of
Attained	_осрс	Annual			nnual			nnual		Annual	Living
Ages	No.		No.			No.			No.	Allowances	
3		\$		\$		2	\$	4,320	2	\$ 4,320	\$
5						2	-	3,600	2	3,600	•
7						1		1,800	1	1,800	
10						3		4,500	3	4,500	
12						4		5,400	4	5,400	
13						1		900	1	900	
14						2		2,400	2	2,400	
15						1		1,800	1	1,800	
16						4		4,680	4	4,680	
17						1		1,080	1	1,080	
19						1		312	1	312	
23						1		1,800	1	1,800	
25						1		2,160	1	2,160	
26						2		5,268	2	5,268	
29						2		4,392	2	4,392	
30						2		4,560	2	4,560	
31			1		1,752			•	1	1,752	
33			1		1,464	2		5,208	3	6,672	
34					•	2		5,520	2	5,520	
<b>3</b> 5						4		8,820	4	8,820	
36			1		1,944	2		4,560	3	6,504	
37						6		11,880	6	11,880	
38						2		3,960	2	3,960	
39						7		11,664	7	11,664	
40			3		5,664	3		5,160	6	10,824	
41			1		1,644	3		4,716	4	6,360	
42			3		5,856	7		15,840	10	21,696	
43			1		1,560	13		28,212	14	29,772	
44			3		4,992	4		7,824	7	12,816	

(Schedule 5 continued on Page 12)

#### Schedule 5 - continued

STATE DIVISION

# Retirants and Beneficiaries June 30, 1961

#### By Attained Ages

		Survivor							
	Supe	rannuation	D:	isability		Benefit		Totals	Cost of
Attained		Annual		Annual		Annual		Annua1	Living
Ages	No.	Allowances	No.	Allowances	No.	Allowances	No.	Allowances	Increases
, -									
45		\$	3	\$ 4,848	7	\$ 11,208	10		\$
46			1	924	15	27,420	16	28,344	
47	_		7	10,080	21	35,460	28	45,540	528
48	1	84	4	5,388	16	20,868	21	26,340	108
49			2	3,036	18	30,324	20	33,360	
50	1	60	6	9,384	16	24,420	23	33,864	
51	1	348	8	13,188	23	37,140	32	50,676	
52			10	15,048	17	18,588	27	33,636	
53			17	24,516	27	33,072	44	57,588	
54			9	10,212	29	34,212	38	44,424	228
55	2	6,960	18	22,008	24	27,948	44	56,916	420
56	11	22,356	17	21,936	27	37,920	55	82,212	168
57	11	12,024	15	21,696	29	35,208	55	68,928	780
58	13	19,920	15	21,432	32	35,472	60	76,824	396
59	12	26,928	14	18,516	23	24,708	49	70,152	996
		,,,,,		,5		21,700	14 = 1	70,132	990
60	26	<b>58,788</b>	11	10,644	37	<b>43,98</b> 0	74	113,412	144
61	79	107,112	10	14,052	35	37 <b>,</b> 4 <b>7</b> 6	124	158,640	1,872
62	95	151,500	10	15,840	25	24,276	130	191,616	1,896
63	115	148,716	1	444	36	33,444	152	182,604	900
64	133	143,460	4	5,340	38	56,376	175	205,176	2,316
						·	655		•
65	171	183,168	4	4,944	27	25,440	202	213,552	2,040
66	261	343,332			28	27,300	289	370,632	2,268
67	303	387,276			25	24,240	328	411,516	7,032
68	312	392,652			18	19,620	330	412,272	9,384
69	301	350,556			24	23,184	325	373,740	9,420
70	315	369,864			15	13,788	330	383,652	5,244
71	490	626,304			14	13,008	504	639,312	10,692
72	456	570,300			15	16,152	471	586,452	12,720
73	426	492,264			5	4,680	431	496,944	19,440
74	404	457,092			9	7,812	413	464,904	20,124

(Schedule 5 concluded on Page 13)

#### Schedule 5 - concluded

STATE DIVISION

# Retirants and Beneficiaries June 30, 1961

#### By Attained Ages

	Supe	rannuation	D.	isability		Surv Bene	ivor	,	r <sub>o</sub> +	1	0
Attained		Annual		Annual			nnual		LOL	Annual	Cost of Living
Ages	No.		No.	Allowances	No.			No.	A 1	lowances	Increases
										10	Increases
<b>7</b> 5	362			\$	7	\$	5,280	369	\$	401,652	\$ 14,472
76	316	351,816			4		4,380	320	·	356,196	19,176
77	292	•			4		2,460	296		327,600	23,124
78	227	236,220					•	227		236,220	22,812
<b>7</b> 9	182	186,384			2		1,068	184		187,452	22,764
											,
80	152	148,332			3		2,580	155		150,912	19,752
81	115	97,920			1		900	116		98,820	17,436
82	102	106,272			1		900	103		107,172	16,260
83	80	89,628						80		89,628	13,452
84	<b>7</b> 0	53 <b>,</b> 2 <b>5</b> 6						70		53,256	10,944
										•	•
85	52	44,400						52		44,400	11,580
86	43	34,080						43		34,080	9,492
87	38	28,824						38		28,824	8,616
88	22	15,996						22		15,996	6,000
89	15	11,952						15		11,952	3,216
										_	
90	13	8,484						13		8,484	3,036
91	7	4 <b>,78</b> 8						7		4 <b>,78</b> 8	1,764
92	4	4,632						4		4,632	840
93	3	2,268						3		2,268	1,020
94	3	2,292						3		2,292	1,260
0.5											-
95	4	2,304						4		2,304	900
97	2	2,220						2		2,220	864
D 1 1											
Period	<b>-</b>	<b>(= 010</b>									
Certain	<u>75</u>	67,212						<u>75</u>		67,212	3,384
Total -	6 110	\$7 001 05C	200	6070 050	700	A					
Totals	0,110	\$ <b>7,</b> 091,856	200	\$278,352	782	\$98	4,648	7,100	\$8 <b>,</b>	354 <b>,</b> 856	\$341 <b>,</b> 280

#### Schedule 6

#### STATE DIVISION

#### Survivor Benefit Fund

#### Deferred Beneficiaries June 30, 1961

By Attained Ages and Deferment Ages

	Deferr	ed to Age 50	Deferr		Deferr			Totals
Attained		Annual		Annual		Annual		Annual
Ages	No.	Allowances	No.	Allowances	No.	Allowances	No.	Allowances
38		\$	1	\$ 1,080		\$	1	\$ 1,080
41			1	1,080			1	1,080
42				•	1	1,080	1	1,080
45	1	1,200			1	600	2	1,800
46	2	2,400	1	1,080	1	900	4	4,380
47			2	2,160	1 2	1,500	4	3,660
48	1	1,200	1	1,080			2	2,280
49	1 1	1,200	1	1,080			2	2,280
50	1	1,200	2	2,160			3	3,360
51		-	1	1,080	3	2,100	4	3,180
52			1	1,080	2	1,500	3	2,580
53			3	3,240	2	1,500	5	4,740
54			5	5,400	3 2 2 2	1,500	7	6,900
55			1	1,080	1	900	2	1,980
56			5	5,400	4	3,000		8,400
5 <b>7</b>			4	4,320	4	3,600	9 8	7,920
58			1	1,080	7	6,300	8	7,380
59			3	3,240	10	8,100	13	11,340
60			5	5,400	2	1,500	7	6,900
61			5	5,400	5	3,900	10	9,300
62			2	2,160	4	3,300	6	5,460
63				•	1	1,080	1	1,080
65	-	<del> </del>	-		_1	900	1	900
Totals	6	\$7,200	45	\$48,600	53	\$43,260	104	\$99,060

#### Schedule 7

#### STATE DIVISION

# Liabilities, June 30, 1961, for Benefits Being Paid Retirants and Beneficiaries

#### from Annuity and Pension Reserve Fund

		Li	abilities fo	or	
	Normal	Normal	Additional	Retirement	C of L
Group	Annuities	Pensions	Annuities	Allowances	Increases
		SUPERANNUATIO	N RETIREMENT		
		Straigh	t Life		
Men	\$ 5,995,956	\$20,129,232	\$ 89,928	\$26,215,116	\$1,082,784
Women	3,777,144	18,248,436	67,524	22,093,104	990,768
Totals	9,773,100	38,377,668	157,452	48,308,220	2,073,552
		Opti	on 1		
Man	640 204	_		0 071 000	70 100
Men Women	640,284 25,152	2,220,144 101,544	11,460	2,871,888	73,188
Totals	665,436	2,321,688	$\frac{1,584}{13,044}$	128,280 3,000,168	12,048
IULAIS	005,430	2,321,000	13,044	3,000,108	85,236
		Opti	on 2		
Men	1,674,300	7,823,004	36,168	9,533,472	124,080
Women	38,112	244,224	11,496	293,832	9,912
Totals	1,712,412	8,067,228	47,664	9,827,304	133,992
	Option 3 -	Life Benefit	with Guaran	teed Period	
Men	1,151,160	4,147,812	15,588	5,314,560	73,452
Women	106,116	499,680	,	605,796	13,368
Totals	1,257,276	4,647,492	15,588	5,920,356	86,820
	Option 3 -	Special Join	t and Surviv	or Benefit	
Men Women	24,024	210,504		234,528	
Totals	24,024	210,504		234,528	
	(Sch	edule 7 concl	uded on Page	16)	
205-21		-:	15-		

#### Schedule 7 - concluded

#### STATE DIVISION

# Liabilities, June 30, 1961, for Benefits Being Paid

#### Retirants and Beneficiaries

#### from Annuity and Pension Reserve Fund

			abilities fo	or	
	Normal	Normal	Additional	Retirement	C of L
Group	Annuities	Pensions	Annuities	Allowances	Increases
	Survivor Benef		eased Supera Benefit	annuation Reti	rant
Men	\$ .1.320	\$ 5,328	\$	\$ 6,648	\$ 624
Women		1,246,380		1.590.276	183.708
Totals		1,251,708	2,412	1,590,276 1,596,924	184,332
	•		•	, , ,	
	Survivor Benef		eased Supera Period Only		rant
M-W	69,288	203,580	2,484	275,352	7,380
	Total for	Superannuati	on Allowance	s Being Paid	
Men	\$ 9,487,044	\$34,536,024	\$153,144	\$44,176,212	\$1,354,128
Women	4,288,008	20,340,264		24,711,288	
M-W	69,288	203,580	2,484	275,352	
Totals	\$13,844,340	\$55,079,868	\$238,644	\$69,162,852	
		DISABILITY	RETIREMENT		
		Straig	ht Life		
Men	\$ 344,400	\$ 1,538,544	\$ 13,968	\$ 1,896,912	\$ 54,252
Women	175,608	1,023,900	7,608	1,207,116	15,744
Totals	\$ 520,008	\$ 2,562,444	\$ 21,576	\$ 3,104,028	\$ 69,996
	TOTAL L	IABILITIES FO	R BENEFITS B	EING PAID	
Men	\$ 9,831,444	\$36,074,568	\$167,112	\$46,073,124	\$1,408,380
Women	4,463,616	21,364,164	90,624	25,918,404	1,225,548
W-W	69,288	203,580	2,484	275,352	7,380
Totals 205-21	\$14,364,348	\$57,642,312	\$260,220 -1 <b>6-</b>	\$72,266,880	\$2,641,308

#### Schedule 8

#### STATE DIVISION

## Liabilities for Benefits Being Paid and To Be Paid

#### from Survivor Benefit Fund

	Liabilities for						
Group	Normal Annuities	Normal Pensions	Additional Annuities	Retirement Allowances			
LIABILITIES FO	OR SURVIVOR	BENEFITS BEIN	G PAID				
Joint a	and Survivo	r Computation					
Men Women Total Liabilities for Survivor Benefits Being Paid	\$ 4,992 797,556 802,548	\$ 17,196 3,134,556 3,151,752	\$ <u>5,304</u> 5,304	\$ 22,188 3,937,416 3,959,604			
Fi	ixed Benefit	. Amount					
Widower - no child Child only - male Sub-totals		88,008 84,228 172,236		88,008 84,228 172,236			
Widow - no child Widow - with children Children only - female Parents - female Sub-totals		3,958,692 3,166,476 130,368 63,252 7,318,788		3,958,692 3,166,476 130,368 63,252 7,318,788			
Total Liabilities for Fixed Benefits		7,491,024	- <del> </del>	7,491,024			
Total Liabilities for Survivor Benefits Being Paid	\$802,548	\$10,642,776	\$5,304	\$11,450,628			
LIABILITIES E	OR DEFERRE	SURVIVOR BEN	EFITS				
Fi	ixed Benefit	Amount					
Widower - deferred to age 65		\$ 32,520		\$ 32,520			
Widow - deferred to age 50 - deferred to age 62 - deferred to age 65 - Subtotals		120,612 524,568 359,016 1,004,196		120,612 524,568 359,016 1,004,196			
Total Liabilities for Deferred Benefits		1,036,716	de antique de la constante de	1,036,716			
TOTAL LIABILITIES FOR SURVIVOR BENEFIT FUND	\$802,548	\$11,679,492	\$5,304	\$12,487,344			
205-21	-17-						

#### Schedule 9

#### STATE DIVISION

Recapitulation of Liabilities June 30, 1961

for Benefits Being Paid and To Be Paid

Retirants and Beneficiaries

		Li	abilities f	or	
	Normal	Normal		Retirement	C of L
	Annuities	Pensions	Annuities	Allowances	Increases
	ANNUITY AND	PENSION RESE	RVE FUND		
Superannuation retirants and beneficiaries	\$13,844,340	\$55 <b>,</b> 0 <b>79,8</b> 68	\$238,644	\$69,162,852	\$2,571,312
Disability retirants	520,008	2,562,444	21,576	3,104,028	69,996
Total Liabilities for Annuity and Pension Reserve Fund	14,364,348	57,642,312	260,220	72,266,880	2,641,308
	SURVIVO	R BENEFIT FUN	<u>1D</u>		
Liabilities for survivor benefits being paid	802,548	10,642,776	5,304	11,450,628	
Liabilities for deferred survivor benefits		1,036,716		1,036,716	
Total Liabilities for Survivor Benefit Fund	802,548	11,679,492	5,304	12,487,344	

#### TOTAL LIABILITIES FOR RETIRANTS AND BENEFICIARIES

Total liabilities \$15,166,896 \$69,321,804 \$265,524 \$84,754,224 \$2,641,308

STATE DIVISION

Annuity and Pension Reserve Fund
Fund Balance and Liabilities

The ledger balance, at June 30, 1961, in the State Division Annuity and Pension Reserve Fund was reported to your actuary to be \$71,317,627.

The computed liabilities for retirement allowances being paid from the Annuity and Pension Reserve Fund totaled \$72,266,880. This amount does not include the liabilities for cost of living increases, since the increases are handled on a cash disbursement basis.

The Retirement Board adopted resolutions, effective December 31, 1961, providing for the 1937 Standard Annuity Mortality Table and a 3% per annum interest rate to be used as the bases for evaluating liabilities. The liabilities of \$72,266,880 were computed under these bases.

The Board adopted a further resolution, effective December 31, 1961, providing that any deficiency in the Annuity and Pension Reserve Fund, resulting from this change of bases, be transferred from the Income Fund to the Annuity and Pension Reserve Fund. At June 30, 1961, this deficiency amounted to \$949,253.

#### STATE DIVISION

Survivor Benefit Fund

Fund Balance and Liabilities

The ledger balance, at June 30, 1961, in the State Division Survivor Benefit Fund was reported to your actuary to be \$18,027,930, distributed as follows:

> Beneficiaries of Deceased Members \$11,584,517 Present Active Members 6,443,413 Tota1 \$18,027,930

The computed liabilities for beneficiaries of deceased members totaled \$12,487,344. These liabilities were computed using the 1937 Standard Annuity Mortality Table and a 3% per annum interest rate as the bases.

The Retirement Board adopted a resolution, effective December 31, 1961, providing that any deficiency in the Survivor Benefit Fund for beneficiaries of deceased members, resulting from the change in bases, be transferred from the Income Fund to the Survivor Benefit Fund. At June 30, 1961, this deficiency amounted to \$902,827.

John define of 1852,080 + COL. Reficiency Charged a Carl Basis.

#### STATE DIVISION

Survivor Benefit Fund

#### Fund Balance and Liabilities

The ledger balance, at June 30, 1961, in the State Division Annuity and Dencion Reserve Fund was reported to your actuary to be \$18,027,930, distributed as follows:

Beneficiaries of Deceased Members	\$11,584,517
Present Active Members	6,443,413
Total	\$18,027,930

The computed liabilities for beneficiaries of deceased members totaled \$12,487,344. These liabilities were computed using the 1937 Standard Annuity Mortality Table and a 3% per annum interest rate as the bases.

The Retirement Board adopted a resolution, effective December 31, 1961, providing that any deficiency in the Survivor Benefit Fund for beneficiaries of deceased members, resulting from the change in bases, be transferred from the Income Fund to the Survivor Benefit Fund. At June 30, 1961, this deficiency amounted to \$902,827.

CHAPTER I

PART B

NON-STATE DIVISION

#### NON-STATE DIVISION

Non-State Division retirants and beneficiaries receiving benefits from the Annuity and Pension Reserve Fund at June 30, 1961 totaled 9,796, involving annual retirement allowances of \$11,112,360.

Non-State Division beneficiaries receiving benefits from the Survivors' Benefit Fund totaled 1,393, involving annual retirement allowances of \$1,740,768.

Non-State Division beneficiaries with an established right to receive benefits from the Survivors Benefit Fund totaled 165, involving deferred annual benefits of \$151,800.

Non-State Division cost of living pension increments being paid to present retirants and beneficiaries totaled \$616,860 per annum.

#### Schedule 10

#### NON-STATE DIVISION

Retirants and Beneficiaries June 30, 1961

By Type of Benefit Being Paid

from Annuity and Pension Reserve Fund

Group	Number	Annual Normal Annuities	Annual Normal Pensions	Annual Additional Annuities	Total Retirement Allowances	Cost of Living Increases
		SUPER	ANNUATION RE	TIREMENT		
	Straigh	t Life Allow	ance - Benef	it Terminati	ng at Death	
Men	4,731	\$1,333,104	\$4,162,836	\$21,276	\$ 5,517,216	\$331,428
Women	2,286	414,300		15,048	2,473,776	152,952
Totals	7,017	1,747,404	6,207,264	36,324	7,990,992	484,380
	Opti	on 1 Allowan	ce - Joint a	nd Survivor	Benefit	
Men	497	89,664	313,788	768	404,220	17,484
Women	30	2,772	14,844	24	17,640	1,476
Totals	527	92,436	328,632	792	421,860	18,960
	Option 2	Allowance -	Modified Jo	int and Surv	ivor Benefit	
Men	687	214,944	804,924	2,160	1,022,028	20,016
Women	15	2,652	12,492	-,100	15,144	912
Totals	702	217,596	817,416	2,160	1,037,172	20,928
		<b>,</b>	027, 120	-,200	2,037,272	20,720
Option	3 Allowa	nce - Life B	enefit With	Guaranteed P	eriods 0-5 Ye	ars
Men	213	61,464	186,468	408	248,340	13,740
Women	41	6,804	32,208	36	39,048	3,564
Totals	254	68,268	218,676	444	287,388	17,304
		•	•		, , ,	,

(Schedule 10 continued on Page 23)

#### Schedule 10 - continued

#### NON-STATE DIVISION

Retirants and Beneficiaries June 30, 1961

By Type of Benefit Being Paid

#### from Annuity and Pension Reserve Fund

		Annual	Annual	Annual	Total	Cost of
		Normal	Normal	Additional	Retirement	Living
Group	Number	Annuities	Pensions	Annuities	Allowances	Increases
Ontion 2	A13	an Tifa Da				
option 3	Altowan	ce - Lite Be	merit with G	suaranteed Pe	riods 5-10 Ye	ears
Men	306	\$ 86,616	\$ 317,856	\$ <b>7</b> 92	\$ 405,264	\$ 8,880
Women	35	6,480	34,068		40,548	•
Totals	341	93,096	351,924	<b>7</b> 92	445,812	10,056
					-	•
Ontion	2 4110530	maa tifa n	amafik With	C		<b>X</b> Y
Option	2 ALIOWA	nce - Life B	enerit with	Guaranteed P	eriods 10-15-	Years
Men	44	11,052	48,228		59,280	468
Women	6	1,188	8,784	12	9,984	108
Totals	50	12,240	57,012	12	69,264	576
Option	3 Allowa	nce - Life R	enefit With	Guaranteed P	eriods 15-20	Veare
				oddianeced i	C110U3 13-20	icars
Men	9	2,436	12,564		15,000	
Women						
Totals	9	2,436	12,564		15,000	
	Option	3 Allowance	- Special Jo	int and Surv	ivor Benefit	
Men	4	2,364	12,468	8	14,832	
Women	*	0.011				
Totals	4	2,364	12,468		14,832	

Allowance to Survivor Beneficiary of Deceased Superannuation Retirant Who Elected Option 1, 2, or 3 - Life Benefit

Men	7	408	1,860		2,268	516
Women	538	67,116	<u>248,556</u>	2,748	318,420	51,540
Totals	545	67,524	250,416	2,748	320,688	52,056

(Schedule 10 concluded on Page 24)

#### Schedule 10 - concluded

#### NON-STATE DIVISION

Retirants and Beneficiaries June 30, 1961

By Type of Benefit Being Paid

from Annuity and Pension Reserve Fund

<u>Group</u> Allowa					Total Retirement Allowances rannuation Re	Cost of Living Increases				
M-W	Who 109	Elected Opt	ion 3 - Guar	anteed Perio	d Only 142,752	6,336				
	Tot	als for Supe	rannuation A	allowances Be	ing Paid					
Men Women M-W Totals	6,498 2,951 109 9,558	1,802,052 501,312 30,312 2,333,676	5,860,992 2,395,380 112,428 8,368,800	25,404 17,868 12 43,284	7,688,448 2,914,560 142,752 10,745,760	392,532 211,728 6,336 610,596				
DISABILITY RETIREMENT										
	Straigh	t Life Allow	ance - Benef	it Terminati	ng at Death					
Men Women Totals	176 62 238		\$ 231,792 73,596 \$ 305,388	\$ 1,140 \$ 1,140	\$ 278,556 88,044 \$ 366,600	\$ 4,560 1,704 \$ 6,264				
		TOTAL	BENEFITS BE	ING PAID						
Men Women M-W Totals	6,674 3,013 109 9,796	1,848,816 514,620 30,312 \$2,393,748	2,468,976 112,428	25,404 19,008 12 \$44,424	7,967,004 3,002,604 142,752 \$11,112,360	6,336				

#### Schedule 11

#### NON-STATE DIVISION

## Survivor Benefit Beneficiaries June 30, 1961

## By Type of Benefit Being Paid

#### from Survivor Benefit Fund

		Annual Normal	Annual	Annual	Total				
Group	Number	Annuities	Normal Pensions	Additional Annuities	Retirement Allowances				
Survivor	Benefit	to Benefici	lary of Decea	sed Member					
			Computation						
Men	5	\$ 1,056	\$ 5,568	\$	\$ 6,624				
Women	431	105,240	404,976	684	510,900				
Totals	436	106,296	410,544	684	517,524				
Survivor Benefit to Beneficiary of Deceased Member Fixed Benefit Amounts									
Widower - no child	13		11,820		11,820				
Widower - child	1		2,160		2,160				
Child only - male	18		25,320		25,320				
Parent - male	1		1,800		1,800				
Sub-totals	33		41,100		41,100				
Widow - no child	619		611,124		611,124				
Widow - child	274		530,892		530,892				
Child only - female	18		26,208		26,208				
Parent - female	<u>13</u>		13,920		13,920				
Sub-totals	924		1,182,144		1,182,144				
Totals	957		1,223,244		1,223,244				
Total Benef	its Bein	g Paid from	Survivor Be	nefit Fund					
Men	38	1,056	46,668		47,724				
Women	1,355	•	1,587,120	684	1,693,044				
Totals	1,393		\$1,633,788	\$684	\$1,740,768				

Chapter I - Part B

#### Schedule 12

NON-STATE DIVISION

# Deferred Survivor Benefit Beneficiaries June 30, 1961 By Type of Benefit to be Paid from Survivor Benefit Fund

Gro				Number	Deferred Annual Retirement Allowances
_1	'ixe	ed Be	enefit	Amounts	
Widowers					
Deferred	to	age	65	6	\$ 5,760
Widows					
Deferred	to	age	50	9	9,900
Deferred	to	age	62	63	68,040
Deferred	to	age	65	_87	68,100
Totals				159	146,040
Totals					
Deferred	to	age	50	9	9,900
Deferred				63	68,040
Deferred				93	73,860
Totals				165	\$151,800

#### Schedule 13

#### NON-STATE DIVISION

#### Recapitulation of Retirement Allowances

#### Being Paid Retirants and Beneficiaries June 30, 1961

		Annual Normal	Annual Normal	Annual Additional		Cost of Living
	Number	Annuities	Pensions	Annuities	Allowances	Increases
Superannuation Retirants and Beneficiaries	9,558	\$2,333,676	\$ 8,368,800	\$43,284	\$10,745,760	\$610,596
Disability						
Retirants	238	60,072	305,388	1,140	366,600	6,264
Allowances being paid from A & PR	9,796	2,393,748	8,674,188	44,424	11,112,360	616,860
Beneficiaries Survivor Benefit Fund	1,393	106,296	1,633,788	684	1,740,768	
Total Allowances Being Paid June 30, 1961	11,189	\$2,500,044	\$10,307,976	\$45,108	\$12,853,128	\$616,860
Deferred Survivor Benefits to be Paid from Survivor						
Benefit Fund	165		151,800		151,800	

#### Schedule 14

#### NON-STATE DIVISION

#### Retirants and Beneficiaries June 30, 1961

#### By Attained Ages

						urvivor			
	Supe	rannuation	D:	isability	B	enefits		<u> rotals</u>	Cost of
Attained		Annual	Annual		Annual			Annual	Living
Ages	No.	Allowances	No.	Allowances	No.	Allowances	No.	Allowances_	Increases
4		\$		\$	. 1	\$ 900	1	\$ 900	\$
5					2	3,600	2	3,600	
6					3	5,400	3	5,400	
7					2	2,880	2	2,880	
8					1	2,520	1	2,520	
9					1	900	1	900	
10					3	5,220	3	5,220	
11					2	2,100	2	2,100	
12					5	8,100	5	8,100	
13					4	5,400	4	5,400	
14					1	1,800	1	1,800	
15					3	4,728	3	4,728	
16					5	5,100	5	5,100	
17					2	1,980	2	1,980	
18					1	900	1	900	
21					1	2,160	1	2,160	
22	1	624			1	2,160	2	2,784	144
23					1	2,760	1	2,760	1-1-1
24					1	2,760	ī	2,760	
26					1	2 <b>,7</b> 60	1	2,760	
27					3	6,720	3	6,720	
29					3	7,320	3	7,320	
30			1	3,204	2	2,028	3	5,232	
31	Ş)		_	- ,	1	2,760	1	2,760	
32					3	5 <b>,7</b> 60	3	5,760	
33					1	1,800	1		
34			1	2,916	4	7,920	5	1,800	
			-	2,710	-+	1,940	ر	10,836	

(Schedule 14 continued on Page 29)

# Chapter I - Part B Schedule 14 - continued

#### NON-STATE DIVISION

#### Retirants and Beneficiaries June 30, 1961

#### By Attained Ages

	Supe	rannuation	D:	isability	Benefit			Totals	Cost of
Attained		Annual		Annual	Annual		Annual		Living
Ages	No. Allowances				No. Allowances		No.	Allowances	Increases
35		\$	1	\$ 972	5	\$ 8,748	6	\$ 9,720	\$
37			4	10,104	2	3,600	6	13,704	
38			1	2,388	6	15,288	7	17,676	
39	2	480			8	17,328	10	17,808	72
40			3	6,792	10	20,868	13	27,660	
41			5	10,548	13	25,728	18	36,276	
42	1	84	2	4,092	11	20,628	14	24,804	24
43			3	6,084	13	21,612	16	27,696	
44			1	2,028	11	18,528	12	20,556	
45			3	6,564	23	36,144	26	42,708	
- 46			8	13,236	17	23,064	25	36,300	168
47	1	336	6	9,156	32	52,608	39	62,100	276
48	1	240	10	17,376	26	30,840	37	48,456	204
49			8	8 <b>,7</b> 60	24	35,064	32	43,824	
50			5	10,200	31	39,732	36	49,932	192
51	2	1,848	10	14,796	33	41,496	45	58,140	60
52	3	2,256	11	18,024	51	73,056	65	93,336	384
53	1	492	10	14,700	47	62,772	58	77,964	588
54	6	9,216	12	17,208	40	52,428	58	78,852	156
55	9	12,552	18	29,508	42	59,724	69	101,784	420
56	20	23,448	16	25,992	49	63,540	85	112,980	684
5 <b>7</b>	21	39,612	11	20,268	50	67,548	82	127,428	660
58	36	54,360	16	22,140	61	69,156	113	145,656	960
59	43	77,196	18	23,448	50	58,200	111	158,844	36
						•		Ī	
60	5 <b>7</b>	83,928	20	24,144	60	74,736	137	182,808	1,332
61	122	131,904	13	17,856	53	59,172	188	208,932	1,812
62	164	187,296	6	6,096	58	62,292	228	255,684	2,088
63	205	215,484	6	5,772	6 <b>2</b>	71,088	273	292,344	2,340
64	238	262,056	5	7,464	58	65,520	301	335,040	2,988

(Schedule 14 concluded on Page 30)

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# <u>Chapter I - Part B</u> <u>Schedule 14 - concluded</u>

#### NON-STATE DIVISION

#### Retirants and Beneficiaries June 30, 1961

#### By Attained Ages

		<del></del>				S	urvivor				
	Superannuation		Disability		Benefit			Totals		Cost of	
Attained	l Annual		Annual			Annual		Annual		Living	
Ages	No.	Allowances	No.	<u>A11</u>	owances	No.	Allowances	No.	<u>A1</u>	lowances	Increases
65	295	\$ 341,676	3	\$	3,888	60	\$ 58,092	358	\$	403,656	\$ 4,872
66	439	521,316	1		876	54				581,376	7,188
67	505	593,556				40	37,416	545		630,972	11,532
68	489	542,232				38	38,124	527		580,356	10,512
69	550	652,020				43	45,444	593		697,464	12,948
<b>7</b> 0	560	653,532				25	25,668	585		679,200	15,516
71	531	631,524				22				655,764	
72	5 <b>73</b>	691,284				18				708,900	
73	56 <b>7</b>	672,888				23				696,564	
74	516	591,144				23				611,124	
<b>7</b> 5	523	589,824				11	11,292	534		601,116	31,908
<b>7</b> 6	451	515,196				11	12,612			527,808	28,320
77	444	472,644				5				477,084	
78	369	390,864				5	5,856			396,720	38,700
79	320	364,920				5 5	2,904			367,824	37,032
80	302	328,476						302		328,476	47,208
81	215	208,560						215		208,560	28,536
82	194	178,800				3	2,400			181,200	30,288
83	157	130,752				3 1	1,080			131,832	27,312
84	126	112,092				_	.,,,,,,,	126		112,092	27,720
85	127	91,404						127		91,404	25,356
86	57	53,064				1	900			53,964	13,416
87	63	52,044				1	900			52,944	14,268
88	45	38,088				_	700	45		38,088	9,876
89	35	28,164						35		28,164	8,028
90	21	18,768						21		18 <b>,7</b> 68	8,160
91	8	5,436						8		5,436	2,016
92	11	10,776						11		10,776	3,456
93	7	6,072						7		6,072	2,940
94	7	5,172						7		5,172	2,604
95	3	804						3		804	504
96	3	3,540						3		3,540	2,004
97	2	2,532						2		2,532	-
103	1	432						1		432	2,088 108
Period	_	. 3.						-		1,52	100
Certain	109	142,752						109		142,752	6,336
Totals	9,558	\$10,745,760	238	\$30	6,600	1,393	\$1,740,768		\$1		

## Schedule 15

## NON-STATE DIVISION

#### Survivor Benefit Fund

Deferred Beneficiaries June 30, 1961

By Attained Ages and Deferment Ages

Attained Ages		red to Age 50 Annual Allowances		red to Age 62 Annual Allowances		red to Age 65 Annual Allowances	No.	Totals Annual Allowances
<b>3</b> 8		\$	1	\$ 1,080		\$	1	\$ 1,080
41 42 43 44	1	1,200	1	1,080 1,080	1 1 2	900 600 1,200	2 2 1 2	1,980 1,800 1,080 1,200
45 46 47	1 2	900 2,400	1	1,080	1 2	600	1 2 4	600 1,980 4,200
48 <b>49</b>	1 3	1,200 3,000	3	3,240 3,240	6 4	4,200 3,000	10 10	8,640 9,240
50 51 52 53 54	1	1,200	3 1 1 1 3	3,240 1,080 1,080 1,080 3,240	4 6 1 1 5	3,300 4,500 600 900 3,900	8 7 2 2 8	7,740 5,580 1,680 1,980 7,140
55 56 57 58 59			5 2 5 7 5	5,400 2,160 5,400 7,560 5,400	5 7 4 6 12	4,200 5,880 3,000 5,100 10,200	10 9 9 13 17	9,600 8,040 8,400 12,660 15,600
60 61 62 64			8 9 <b>3</b>	8,640 9,720 3,240	5 7 7 4	3,900 5,100 6,000 3,180	13 16 10 4	12,540 14,820 9,240 3,180
65 66 Totals	<del></del> 9	<del></del> \$9,900	<del></del> 63	\$68,040	1 1 93	900 900 \$73,860	1 1 165	900 900 \$151,800

## Schedule 16

#### NON-STATE DIVISION

# Liabilities, June 30, 1961, for Benefits Being Paid

#### Retirants and Beneficiaries

#### from Annuity and Pension Reserve Fund

	Normal	Normal	abilities fo Additional	Retirement	C of L
Group	Annuities	Pensions	Annuities	Allowances	Increases
		SUPERANNUAT	ION RETIREME	'NT	
			2.021		
		Strai	ght Life		
Men	\$11,196,168	\$35,174,256	\$164,748	\$ 46,535,172	\$2,161,90
Women	4,381,872	21,728,100	151,872	26,261,844	1,300,320
Totals	15,578,040	56,902,356	316,620	72,797,016	3,462,228
		Ор	tion 1		
Men	1,223,256	4,342,512	12,648	5,578,416	206,736
Women	39,456	209,004	300	248,760	19,608
Totals	1,262,712	4,551,516	12,948	5,827,176	226,344
		Ор	tion 2		
Men	2,380,644	9,196,536	22,812	11,599,992	184,452
Women	31,464	148,476		179,940	9,840
Totals	2,412,108	9,345,012	22,812	11,779,932	194,292
	Option 3	- Life Benef	it with Guar	anteed Period	
Men	1,566,708	5,732,700	9,804	7,309,212	157,260
Women	172,872	926,472	636	1,099,980	45,984
Totals	1,739,580	6,659,172	10,440	8,409,192	203,24
	Option 3	- Special Jo	int and Surv	vivor Benefit	
Men Women	19,284	118,416		137,700	
Totals	19,284	118,416		137,700	

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## Schedule 16 - concluded

#### NON-STATE DIVISION

## Liabilities, June 30, 1961, for Benefits Being Paid

#### Retirants and Beneficiaries

#### from Annuity and Pension Reserve Fund

			=			
		T.i	abilities fo	or		
Group	Normal Annuities	Normal Pensions	Additional Annuities	Retirement	C of L Increases	
	Survivor Bene	eficiaries of	Deceased Sur	perannuation Re	etirant	
Men Women	\$ 5,760 728,820	•	\$ 30,636	\$ 33,240 3,451,872		
Totals	734,580	2,719,896	30,636	3,485,112	491,724	
Survivor Beneficiary of Deceased Superannuation Retirant Guaranteed Period Only						
M-W	144,720	587,220	12	731,952	12,684	
	Totals fo	or Superannuat	ion Allowand	ces Being Paid		
Men	\$16,391,820	\$54,591,900	\$210,012	\$ 71,193,732		
Women M-W	5,354,484 144,720	25,704,468 587,220	183,444 12	31,242,396 731,952		
Totals	\$21,891,024					
		DISABILIT	Y RETIREMENT			
		Stra	ight Life			
Men	\$ 505,392	\$ 2,622,420	\$	\$ 3,127,812	\$ 46,008	
Women	155,136	878,136	13,116	1,046,388	•	
Totals	\$ 660,528	\$ 3,500,556	\$ 13,116	\$ 4,174,200	\$ 64,956	
	TOTAL	LIABILITIES F	OR BENEFITS	BEING PAID		
Men	\$16,897,212	\$57,214,320	\$210,012	\$ 74,321,544	\$2,764,140	
Women M-W	5,509,620	26,582,604	196,560	32,288,784	1,878,648	
Totals	144,720 \$22,551,552	587,220 \$84,384,144	\$406,584	731,952 \$107,342,280	12,684 \$4,655,472	
	7, 771, 772	404,004,144	4-00,004	4101,342,200	Y4,000,474	

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## Schedule 17

#### NON-STATE DIVISION

# Liabilities for Benefits Being Paid and To Be Paid

#### from Survivor Benefit Fund

		Liabilit	ies for	
Group	Normal Annuities	Normal Pensions	Additional Annuities	Retirement Allowances
LIABILITIES FOR	SURIVIVOR B	ENEFITS BEING	PAID	
Joint an	d Survivor C	omputation		
Men	\$ 9,912	\$ 54,732	\$	\$ 64,644
Women	1,320,996	5,132,688	11,364	6,465,048
Total Liabilities for Survivor Benefits Being Paid	1,330,908	5,187,420	11,364	6,529,692
Fiv	ed Benefit A	mounts		
Widower - no child	ed benefit A			105 040
Widower - no child Widower - with children		105,840 6,432		105,840 6,432
Child only - male		116,652		116,652
Parent		18,672		18,672
Sub-totals		247,596		247,596
Widow		7,591,440		7,591,440
Widow with children		5,258,736		5,258,736
Child only		144,696		144,696
Parents - female		105,924		105,924
Sub-totals		13,100,796		13,100,796
Total Liabilities for Fixed Benefits		13,348,392		13,348,392
Total Liabilities for				<del></del>
Survivor Benefits Being Paid	\$1,330,908	\$18,535,812	\$11,364	\$19,878,084
LIABILITIES FO	OR DEFERRED S	URVIVOR BENEF	TITS	
Fix	ted Benefit A	mount		
Widower - deferred to age 65		\$ 51,504		\$ 51,504
Widow - deferred to age 50		166,440		166,440
- deferred to age 62		757,260		757,260
- deferred to age 65		598,068		598,068
- Sub-totals		1,521,768		1,521,768
Total Liabilities for				
Deferred Benefits	*****	1,573,272		1,573,272
		· · · · · · · · · · · · · · · · · · ·		
TOTAL LIABILITIES FOR SURVIVOR BENEFIT FUND	\$1,330,908	\$20,109,084		

#### Schedule 18

#### NON-STATE DIVISION

# Recapitulation of Liabilities June 30, 1961 for Benefits Being Paid and To Be Paid Retirants and Beneficiaries

	Liabilities for					
	Normal Annuities	Normal Pensions	Additional Annuities	Retirement Allowances	C of L	
	Amulties	rensions	Miliutites	Allowances	Increases	
	ANNUITY AND	PENSION RESI	ERVE FUND			
Superannuation retirants and beneficiaries	\$21,891,024	\$ 80,883,588	\$393,468	\$103,168,080	\$4,590,516	
Disability retirants	660,528	3,500,556	13,116	4,174,200	64,956	
Total Liabilities for Annuity and Pension Reserve Fund	22,551,552	84,384,144	406,584	107,342,280	4,655,472	
	SURVIVO	OR BENEFIT FU	ND			
Liabilities for survivor benefits being paid	1,330,908	18,535,812	11,364	19,878,084		
Liabilities for deferred survivor benefits	Charles - Charle	1,573,272		1,573,272		
Total Liabilities for Survivor Benefit Fund	1,330,908	20,109,084	11,364	21,451,356		

## TOTAL LIABILITIES FOR RETIRANTS AND BENEFICIARIES

Total Liabilities \$23,882,460 \$104,493,228 \$417,948 \$128,793,636 \$4,655,472

NON-STATE DIVISION

Annuity and Pension Reserve Fund
Fund Balance and Liabilities

The ledger balance, at June 30, 1961, in the Non-State Division Annuity and Pension Reserve Fund was reported to your actuary to be \$105,424,191.

The computed liabilities for retirement allowances being paid from the Annuity and Pension Reserve Fund totaled \$107,342,280. This amount does not include the liabilities for cost of living increases, since the increases are handled on a cash disbursement basis.

The Retirement Board adopted resolutions, effective December 31, 1961, providing for the 1937 Standard Annuity Mortality Table and a 3% per annum interest rate to be used as the bases for evaluating liabilities. The liabilities of \$107,342,280 were computed under these bases.

The Board adopted a further resolution, effective December 31, 1961, providing that any deficiency in the Annuity and Pension Reserve Fund, resulting from this change of bases, be transferred from the Income Fund to the Annuity and Pension Reserve Fund. At June 30, 1961, this deficiency amounted to \$1,918,089.

#### NON-STATE DIVISION

Survivor Benefit Fund

#### Fund Balance and Liabilities

The ledger balance, at June 30, 1961, in the Non-State Division Survivor Benefit Fund was reported to your actuary to be \$27,059,385, distributed as follows:

Beneficiaries of Deceased Members \$19,569,886
Present Active Members 7,489,499
Total \$27,059,385

The computed liabilities for beneficiaries of deceased members totaled \$21,451,356. These liabilities were computed using the 1937 Standard Annuity Mortality Table and a 3% per annum interest rate as the bases.

The Retirement Board adopted a resolution, effective December 31, 1961, providing that any deficiency in the Survivor Benefit Fund for beneficiaries of deceased members, resulting from the change in bases, be transferred from the Income Fund to the Survivor Benefit Fund. At June 30, 1961, this deficiency amounted to \$1,881,470.

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#### NON-STATE DIVISION

#### Survivor Benefit Fund

#### Fund Balance and Liabilities

The ledger balance, at June 30, 1961, in the Non-State Division Annuity and Bever! The Pension Reserve Fund was reported to your actuary to be \$27,059,385, distributed as follows:

Beneficiaries of Deceased Members
Present Active Members
Total

\$19,569,886 7,489,499 \$27,059,385

The computed liabilities for beneficiaries of deceased members totaled \$21,451,356. These liabilities were computed using the 1937 Standard Annuity Mortality Table and a 3% per annum interest rate as the bases.

The Retirement Board adopted a resolution, effective December 31, 1961, providing that any deficiency in the Survivor Benefit Fund for beneficiaries of deceased members, resulting from the change in bases, be transferred from the Income Fund to the Survivor Benefit Fund. At June 30, 1961, this deficiency amounted to \$1,881,470.

CHAPTER II

PART A

STATE DIVISION

#### STATE DIVISION

The minimum retirement allowance of \$72 a year times years of credited service was taken into account by adjusting individual salaries under certain "key salaries" to the applicable "key salary". The "key salary at each age is the annual salary at that age, which will, on the average, result in a final average salary of \$4,364. The "key salary" for each age group in the State Division valuation is shown below.

	Key Salary				
	to Produce \$4,364				
Age	Final Aver	age Salary			
Group	Men	Women			
Under 21	\$1,932	\$2,363			
21-25	2,175	2,597			
26-30	2,708	3,038			
31-35	3,186	3,315			
36-40	3,459	3,499			
41-45	3,654	3,678			
46-50	3,819	3,842			
51-53	3,973	4,019			
54 <del>-</del> 56	4,114	4,146			
57-59	4,226	4,290			
60 and Over	4,364	4,364			

State Division active members included in the valuation totaled 50,995, involving an annual payroll of \$221,909,508, and an adjusted annual payroll, after increasing the salaries under "key salary" to "key salary", of \$238,039,511.

## Schedule 19

STATE DIVISION

## Active Members in Valuation June 30, 1960

## By Attained Age Groups

#### Annual Payroll

Attained		Men		Women		Totals
Age		Annua1		Annual		Annual
Groups	Number	Payrol1	Number	Payroll	Number	Payrol1_
Under 21	718	\$ 2,142,774	989	\$ 2,744,474	1,707	\$ 4,887,248
21-25	2,789	10,221,925	2,645	8,667,737	5,434	18,889,662
26-30	3,065	14,226,635	1,725	6,063,100	4,790	20,289,735
31-35	3,070	15,580,192	1,798	6,453,736	4,868	22,033,928
36-40	3,214	16,953,301	2,111	7,476,494	5,325	24,429,795
41-45	3,057	15,549,617	2,317	8,345,312	5,374	23,894,929
46-50	3,414	16,954,992	2,527	9,122,178	5,941	26,077,170
<b>51-</b> 53	2,168	10,927,037	1,469	5,566,521	3,637	16,493,558
54 <b>-</b> 56	2,249	11,412,130	1,358	5,137,501	3,607	16,549,631
57-59	2,005	10,037,535	1,084	4,110,595	3,089	14,148,130
60	727	3,437,294	369	1,329,456	1,096	4,766,750
61	623	3,178,089	270	1,017,000	893	4,195,089
62	649	3,289,019	279	1,080,699	928	4,369,718
63	596	2,967,090	229	892,072	825	3,859,162
64	590	3,012,592	221	819,957	811	3,832,549
65	506	2,500,983	203	791,157	709	3,292,140
66	393	2,002,557	148	585,938	541	2,588,495
67	369	1,872,332	109	422,664	478	2,294,996
68	290	1,446,545	124	448,418	414	1,894,963
69	231	1,274,164	67	240,435	298	1,514,599
70	81	470,144	26	93,071	107	5 <b>63,215</b>
71	30	185,806	6	29,270	36	215,076
72	21	234,158		,	21	234,158
73	18	152,784	2	8,187	20	160,971
74	12	141,762		,,,,,,,	12	141,762
75 and Ove	er <u>32</u>	280,794	2	11,285	34	292,079
Totals	30,917	\$150,452,251	20,078	\$71,457,257	50,995	\$221,909,508

## Schedule 20

STATE DIVISION

## Active Members in Valuation June 30, 1960

## By Attained Age Groups

## Annual Payroll Adjusted for Minimum Allowance

Attained		Men		Women		Totals
Age		Adjusted		Adjusted		Adjusted
Groups	Number	Payrol1	Number	Payrol1	Number	<u>Payroll</u>
Under 21	718	\$ 2,201,890	989	\$ 2,873,517	1,707	\$ 5,075,407
21-25	2,789	10,404,116	2,645	8,952,534	5,434	19,356,650
26-30	3,065	14,407,249	1,725	6,402,423	4,790	20,809,672
31-35	3,070	15,882,917	1,798	6,992,148	4,868	22,875,065
36-40	3,214	17,363,437	2,111	8,330,786	5,325	25,694,223
41-45	3,057	16,104,753	2,317	9,499,340	5,374	25,604,093
46-50	3,414	17,722,327	2,527	10,623,271	5,941	28,345,598
51-53	2,168	11,507,472	1,469	6,491,460	3,637	17,998,932
54-56	2,249	12,144,085	1,358	6,110,364	3,607	18,254,449
57-59	2,005	10,837,601	1,084	4,996,799	3,089	15,834,400
60	727	3,788,753	369	1,671,837	1,096	5,460,590
61	. 623	3,444,927	270	1,251,676	893	4,696,603
62	649	3,558,839	279	1,302,851	928	4,861,690
63	596	3,238,391	229	1,078,022	825	4,316,413
64	590	3,250,050	221	1,008,121	811	4,258,171
65	506	2,706,696	203	965,047	709	3,671,743
66	393	2,162,296	148	693,891	541	2,856,187
67	369	2,035,978	109	514,218	478	2,550,196
68	290	1,562,822	124	564,354	414	2,127,176
69	231	1,382,342	67	297,304	298	1,679,646
70	81	502,165	26	119,136	107	621,301
71	30	202,516	6	32,703	36	235,219
72	21	241,649			21	241,649
73	18	155,700	2	9,391	20	165,091
74	12	141,762		ĺ	12	141,762
75 and Ove	r <u>32</u>	294,577	2	13,008	34	307,585
Totals	30,917	\$157,245,310	20,078	\$80,794,201	50,995	\$238,039,511

## Schedule 21

STATE DIVISION

# Employees Savings Fund and Employers Accumulation Fund

## Liabilities June 30, 1960

	Member	Employer	
	Financed	Financed	Total
Present Value, June 30, 1960, of	<u>Liabilities</u>	<u>Liabilities</u>	<u>Liabilities</u>
Accrued portions of retirement allowances			
to be paid present active members based			
on service rendered before July 1, 1960	\$ 48,626,114	\$72,652,647	\$121,278,761
Deferred retirement allowances likely to			
be paid present inactive members	1,150,579	4,480,118	5,630,697
Probable refunds of members' accumulated			
contributions standing to their credit June 30, 1960	16 702 004		16 700 004
Julie 30, 1900	16,783,994		16,783,994
TOTAL ACCRUED LIABILITIES	\$ 66,560,687	\$77,132,765	\$143,693,452
* * * * * *			
Prospective portions of retirement allowances to be paid present active members based on service to be rendered			
after June 30, 1960	\$ 45,882,037	\$71,730,338	\$117,612,375
Disability allowances likely to be paid present active members who become totally			
and permanently disabled		5,483,334	5,483,334
Probable refunds of contributions to be made after June 30, 1960 by present active			
members	55,126,748		55,126,748
TOTAL PROSPECTIVE LIABILITIES	\$101,008,785	\$77,213,672	\$178,222,457
			-

#### STATE DIVISION

Employees Savings Fund - Employer Accumulation Fund

The State Division's balances, at June 30, 1960, in the Employees Savings
Fund and Employer Accumulation Fund were reported to your actuary to be
\$84,009,276. In addition, of the \$4,672,173 Employees Savings Fund balances
credited to leave of absence members of all divisions, an amount of
\$1,725,868 was pro-rated to State Division members, making the total Employees
Savings Fund and Employer Accumulation Fund balances used in the valuation
\$85,735,144, as follows:

Employees Savings Fund	
Active members	\$64,834,819
Inactive members pro-rate	1,725,868
Total	66,560,687
Employer Accumulation Fund	19,174,457
Total for the two Funds	\$85,735,144

In financing the State Division liabilities, the above fund balances of \$85,735,144 were applied as follows:

Fund Balances Applied to	Employees Savings	Employer Accumulation	Totals
Active members' accrued service retirement allowance liabilities	\$48,626,114	\$13,906,856	\$62,532,970
Inactive members' retirement allowance liabilities	1,150,579	5,267,601	6,418,180
Liabilities for probable refunds of members' present accumulated			
contributions	16,783,994		16,783,994
Total Ledger Balances	\$66,560,687	\$19,174,457	\$85,735,144

#### STATE DIVISION

Method of Financing the State Division Liabilities
Employer Accumulation Fund and Employees Savings Fund

Accrued liabilities for members, \$143,693,452, less applicable fund balances, \$85,735,144, resulted in unfunded accrued liabilities of \$57,958,308, which were amortized over a period of 29 years.

Prospective superannuation retirement allowance liabilities, \$117,612,375, were financed over the present members' periods of prospective service to retirement.

<u>Liabilities for probable refunds of future contributions</u> to be made by present active members, \$55,126,748, were financed over the members' periods of prospective service to withdrawal or death.

The State's contributions for disability retirement allowances to be paid present active members, who become disabled, were determined on a terminal funding basis. The liabilities, \$5,483,334, were computed by applying the terminal funding cost, expressed as a percent of payroll, to the present value of active members' future salaries.

#### Schedule 22

STATE DIVISION

## Computed Contributions to Retirement System

Computed Contributions for	Percent of Activ Member Payroll	re —
Current service Refunds of members' future contributions Disability	8.15% 3.82 0.38-	
Survivor benefit fund Cost of living increases	1.05 0.06	
Total Current Cost Less: Members' contributions	13.46 7.00	#1,46 #1,46
State's Current Cost Unfunded accrued service	6.46 1.49	14.95
State's Computed Contributions	7.95%	7,55

As outlined on page 70 of this report, a transfer of \$1,772,953 from the Income Fund would reduce the unfunded liabilities from \$57,958,308 to \$56,185,355. This would result in a reduction in the unfunded accrued service cost from 1.49% to 1.45% resulting in a State's computed contributions of 7.91%.

CHAPTER II

PART B

NON-STATE DIVISION

<u>Comment</u>. The State's computed contributions, shown in Schedule 22, are based on membership in the State Division and fund balances credited to the State Division as of June 30, 1960.

The difference in contribution rates as shown in this report and the report dated August 15, 1961 arises only from a change in mortality table and a change in interest rate assumption.

In accordance with a resolution effective December 31, 1961, adopted by the Retirement Board, the 1937 Standard Annuity Mortality Table with an interest rate assumption of 3% per annum were the bases for the liabilities and, consequently, the computed contributions shown in Schedule 22.

#### NON-STATE DIVISION

The minimum retirement allowance of \$72 a year times years of credited service was taken into account by adjusting individual salaries under certain "key salaries" to the applicable "key salary". The 'key salary" at each age is the annual salary at that age, which will, on the average, result in a final average salary of \$4364. The "key salary" for each age group in the Non-State Division valuation is shown below.

	Key S <b>alary</b>			
	to Produce \$4364			
Age	Final Aver	age Salary		
Group	Men	Women		
Under 21	\$2,042	\$2,466		
21 25				
21-25	2,541	2,943		
26-30	3,066	3,316		
31-35	3,364	3,484		
36-40	3,526	3,650		
41-45	3,668	3,794		
/.6EO	2 001	/ 000		
46-50	3,881	4,028		
51-53	4,018	4,128		
54 <del>-</del> 56	4,151	4,214		
57 <b>-</b> 59	4,281	4,303		
60 and Over	4,364	4,364		

Non-State Division active members included in the valuation totaled 76,419, involving an annual payroll of \$299,306,499, and an adjusted annual payroll after increasing the salaries under "key salary" to "key salary", of \$347,833,069.

## Schedule 23

#### NON-STATE DIVISION

## Active Members in Valuation June 30, 1960

## By Attained Age Groups

## Annual Payroll

Attained		Men		Women		Totals
Age		Annual		Annual		Annual
Groups	Number	Payrol1	Number	Payrol1	Number	Payrol1
Under 21	991	\$ 2,454,003	1,274	\$ 2,752,907	2,265	\$ 5,206,910
21-25	3,094	11,113,748	2,791	8,159,050	5,885	19,272,798
26-30	3,846	15,956,404	2,093	6,405,825	5,939	22,362,229
31~35	4,524	20,157,285	2,359	7,055,820	6,883	27,213,105
36-40	4,956	22,793,716	2,811	8,624,922	7,767	31,418,638
41-45	5,023	22,662,227	3,239	9,939,630	8,262	32,601,857
46-50	5,395	24,206,328	3,735	11,960,534	9,130	36,166,862
51-53	3,610	16,665,398	2,227	7,510,274	5,837	24,175,672
54-56	3,432	15,769,816	1,998	6,854,423	5,430	22,624,239
57-59	3,252	14,740,438	1,608	5,539,716	4,860	20,280,154
60	1,210	5,401,239	541	1,845,145	1,751	7,246,384
61	917	4,140,474	427	1,446,603	1,344	5,587,077
62	1,059	4,752,594	425	1,447,333	1,484	6,199,927
63	915	4,174,710	314	1,044,387	1,229	5,219,097
64	1,003	4,482,749	356	1,209,117	1,359	5,691,866
65	924	4,146,740	271	953,986	1,195	5,100,726
66	734	3,311,027	216	711,966	950	4,022,993
67	656	2,847,553	205	671,380	861	3,518,933
68	616	2,567,174	149	512,379	765	3,079,553
69	519	2,380,786	128	424,226	647	2,805,012
70	440	1,931,829	97	327,019	537	2,258,848
71	349	1,287,847	69	220,247	418	1,508,094
72	279	1,017,436	65	183,861	344	1,201,297
73	229	876,610	36	99,260	265	975,870
<b>7</b> 4	221	825,816	32	92,915	253	918,731
75 and Ov	er <u>670</u>	2,394,883	89	254,744	759	2,649,627
Totals	48,864	\$213,058,830	27,555	\$86,247,669	76,419	\$299,306,499

## Schedule 24

#### NON-STATE DIVISION

## Active Members in Valuation June 30, 1960

## By Attained Age Groups

## Annual Payroll Adjusted for Minimum Allowance

Attained		Men	Women			Totals	
Age		Adjusted		Adjusted		Adjusted	
Groups	Number	Payrol1	Number	Payrol1 Payroll	Number	Payrol1	
Under 21	991	\$ 2,841,271	1,274	\$ 3,422,697	2,265	\$ 6,263,968	
21-25	3,094	11,668,364	2,791	9,305,195	5,885	20,973,559	
26-30	3,846	16,952,481	2,093	7,647,132	5,939	24,599,613	
31-35	4,524	21,450,830	2,359	8,957,825	6,883	30,408,655	
36-40	4,956	24,411,451	2,811	11,036,655	7,767	35,448,106	
41-45	5,023	24,576,383	3,239	13,080,553	8,262	37,656,936	
46-50	5,395	26,646,624	3,735	15,917,090	9,130	42,563,714	
<b>51-5</b> 3	3,610	18,400,620	2,227	9,766,599	5,837	28,167,219	
54-56	3,432	17,593,169	1,998	8,945,829	5,430	26,538,998	
57-59	3,252	16,803,687	1,608	7,368,530	4,860	24,172,217	
60	1,210	6,180,689	541	2,479,733	1,751	8,660,422	
61	917	4,768,704	427	1,959,916	1,344	6,728,620	
62	1,059	5,430,041	425	1,942,008	1,484	7,372,049	
63	915	4,763,292	314	1,447,583	1,229	6,210,875	
64	1,003	5,187,276	356	1,633,716	1,359	6,820,992	
65	924	4,766,740	271	1,248,788	1,195	6,015,528	
66	734	3,847,521	216	988,041	950	4,835,562	
67	656	3,412,246	205	944,756	861	4,357,002	
68	616	3,156,609	149	698,535	765	3,855,144	
69	5 <b>19</b>	2,811,537	128	582,976	647	3,394,513	
70	440	2,346,446	97	446,487	537	2,792,933	
71	349	1,727,430	69	310,635	418	2,038,065	
72	279	1,358,452	65	294,132	344	1,652,584	
73	229	1,140,994	36	161,688	265	1,302,682	
74	221	1,118,273	32	142,516	253	1,260,789	
75 and Over	670	3,346,177	89	396,147	<u>759</u>	3,742,324	
Totals	48,864	\$236,707,307	27,555	\$111,125,762	76,419	\$347,833,069	

## Schedule 25

#### NON-STATE DIVISION

# Employees Savings Fund and Employers Accumulation Fund

## Liabilities June 30, 1960

Present Value, June 30, 1960, of	Member Financed Liabilities	Employer Financed Liabilities	Total Liabilities
Accrued portions of retirement allowances to be paid present active members based on service rendered before July 1, 1960	\$ 76,168,516	\$ 95,585,372	\$171,753,888
Deferred retirement allowances likely to be paid present inactive members	1,921,296	4,605,331	6,526,627
Probable refunds of members' accumulated contributions standing to their credit June 30, 1960	26,350,154		26,350,154
TOTAL ACCRUED LIABILITIES	\$104,439,966	\$100,190,703	\$204,630,669
Prospective portions of retirement allowances to be paid present active members based on service to be rendered			
after June 30, 1960	\$ 70,632,907	\$ 91,514,038	\$162,146,945
Disability allowances likely to be paid present active members who become totally and permanently disabled		7,071,257	7,071,257
Probable refunds of contributions to be made after June 30, 1960 by present		· • · · · · · · · · · · · · · · · · · ·	. , ,
active members	66,863,754		66,863,754
TOTAL PROSPECTIVE LIABILITIES	\$137,496,661	\$ 98,585,295	\$236,081,956

#### NON-STATE DIVISION

Employees Savings Fund - Employer Accumulation Fund

The Non-State Division's balances, at June 30, 1960, in the Employees Savings Fund and the Employer Accumulation Fund were reported to your actuary to be \$163,369,055. In addition, of the \$4,672,173 Employees Savings Fund balances credited to leave of absence members of all Divisions, an amount of \$2,881,945 was pro-rated to Non-State Division members, making the total Employees Savings Fund and Employer Accumulation Fund balances used in the valuation \$166,251,000 as follows:

Employees Savings Fund	
Active members	\$101,558,021
Inactive members pro-rate	2,881,945
Total	104,439,966
Employer Accumulation Fund	61,811,034
Total for the two Funds	\$166,251,000

In financing the Non-State Division liabilities, the above fund balances of \$166,251,000 were applied as follows:

Fund Balances Applied to	Employees Savings	Employer Accumulation	Totals
Active members' accrued service retirement allowance liabilities	\$ 76,168,516	\$56,888,016	\$133,056,532
Inactive members' retirement allowance liabilities	1,921,296	4,923,018	6,844,314
Liabilities for probable refunds of members' present accumulated contributions	26,350,154		26,350,154
Total Ledger Balances	\$104,439,966	\$61,811,034	\$166,251,000

#### NON-STATE DIVISION

Method of Financing the Non-State Division Liabilities Employer Accumulation Fund and Employees Savings Fund

Accrued liabilities for members, \$204,630,669, less applicable fund balances, \$166,251,000, resulted in unfunded accrued liabilities of \$38,379,669, which were amortized over a period of 18 years.

<u>Prospective superannuation retirement allowance liabilities</u>, \$162,146,945, were financed over the members' periods of prospective service to retirement.

<u>Liabilities for probable refunds of future contributions</u> to be made by present active members, \$66,863,754, were financed over the members' periods of prospective service to withdrawal or death,

The Non-State Division employers' contribution for disability retirement allowances to be paid present active members, who become disabled, were determined on a terminal funding basis. The liabilities, \$7,071,257, were computed by applying the terminal funding cost, expressed as a percent of payroll, to the present value of active members' future salaries.

#### Schedule 26

NON-STATE DIVISION

## Computed Contributions to Retirement System

Computed Contributions for	Percent of Active Member Payroll
Current service	8.25%
Refunds of members' future contributions	3.40
Disability	0.36
Survivor benefit fund	1.35
Cost of living increases	0.06
Total Current Cost	13.42
Less: Members' contributions	7.00
Non-State's Current Cost	6.42
Unfunded accrued service	<u>1.01</u>
Non-State's Computed Contributions	7.43%

As outlined on page 70 of this report, a transfer of \$6,007,044 from the Income Fund would reduce the unfunded liabilities from \$38,379,669 to \$32,372,625. This would result in a reduction in the unfunded accrued service cost from 1.01% to 0.85% resulting in a Non-State's computed contributions of 7.27%.

<u>Comment.</u> The Non-State's computed contributions, shown in Schedule 26, are based on membership in the Non-State Division and fund balances credited to the Non-State Division as of June 30, 1960.

In accordance with a resolution, effective December 31, 1961, adopted by the Retirement Board, the membership and fund balances of the Non-State Division include the former Non-State, Township, and Metropolitan Housing Divisions membership and fund balances.

In accordance with a resolution, effective December 31, 1961, adopted by the Retirement Board, the 1937 Standard Annuity Mortality Table with an interest rate assumption of 3% per annum were the bases for the liabilities and, consequently, the computed contributions shown in Schedule 26.

CHAPTER II

PART C

CLEVELAND TRANSIT DIVISION

#### CLEVELAND TRANSIT DIVISION

The minimum retirement allowance of \$72 a year times years of credited service was taken into account by adjusting individual salaries under certain "key salaries" to the applicable "key salary". The "key salary" at each age is the annual salary at that age, which will, on the average, result in a final average salary of \$4364. The "key salary" for each age group in the Cleveland Transit Division valuation is shown below.

Attained	Key Salary
Age	to Produce \$4364
Group	Final Average Salary
Under 21	\$2,189
21-25	3,475
26-30	3,880
31-35	4,088
36-40	4,151
41-45	4,213
46-50	4,276
51-53	4,326
54-56	4,364
57-59	4,364
60 and Over	4,364

Cleveland Transit Division active members included in the valuation totaled 2,798, involving an annual payroll of \$16,327,093, and an adjusted annual payroll, after increasing the individual salaries under "key salary", of \$16,494,068.

#### Schedule 27

#### CLEVELAND TRANSIT DIVISION

## Active Members in Valuation June 30, 1960

## By Attained Age Groups

#### Annual Payroll and Adjusted Payroll

Attained Age	Annua	1 Dayne 11		A1 D11
•				Annual Payroll
Groups	Number	Payroll Payroll	Number	<u>Payroll</u>
Under 21	13	\$ 60,520	1.0	4 (0 500
			13	•
21-25	48	233,830	48	244,152
26-30	197	1,124,437	197	1,140,652
31-35	292	1,728,779	292	1,743,057
36-40	378	2,231,640	378	2,247,332
41-45	407	2,394,929	407	2,417,405
46-50	418	2,458,710	418	2,483,042
51-53	241	1,413,014	241	
54-56			- · <del>-</del>	1,431,278
	238	1,430,050	238	1,438,572
57 <b>-</b> 59	237	1,374,069	237	1,382,178
60	80	465,762	80	469,247
61	55	324,935	55	327,293
62	55	308,413	55	318,993
63	62	341,112	62	346,495
64	59	330,089	59	332,582
65	15	82,709	15	87,175
66	1	5,932	1	5,932
67	1	4,656	ī	4,656
69	1	13,507	ī	13,507
- <del>-</del>	<del></del>			
Totals	2,798	\$16,327,093	2,798	\$16,494,068

## Schedule 28

#### CLEVELAND TRANSIT DIVISION

## Employees Savings Fund and Employers Accumulation Fund

## Liabilities June 30, 1960

Present Value, June 30, 1960, of	Member Financed Liabilities	Employer Financed Liabilities	Total <u>Liabilities</u>
Accrued portions of retirement allow- ances to be paid present active members, based on service rendered before			
July 1, 1960	\$ 7,043,709	\$11,905,054	\$18,948,763
Deferred retirement allowances likely to be paid present inactive members	41,890	79,736	121,626
Probable refunds of members' accumulated contributions standing to their credit			
June 30, 1960	1,774,890	***************************************	1,774,890
TOTAL ACCRUED LIABILITIES	\$ 8,860,489	\$11,984,790	\$20,845,279
Prospective portions of retirement allowances to be paid present active members, based on service to be rendered			
after June 30, 1960	\$ 8,488,565	\$ 7,923,669	\$16,412,234
Disability allowances likely to be paid present active members who become			
totally and permanently disabled		480,161	480,161
Probable refunds of contributions to be made after June 30, 1960 by present			
active members	2,715,194		2,715,194
TOTAL PROSPECTIVE LIABILITIES	\$11,203,759	\$ 8,403,830	\$19,607,589

#### CLEVELAND TRANSIT DIVISION

Employees Savings Fund - Employer Accumulation Fund

The Cleveland Transit Division's balances, at June 30, 1960, in the Employees Savings Fund and Employer Accumulation Fund were reported to your actuary to be \$14,590,781. In addition, of the \$4,672,173 Employees Savings Fund balances credited to leave of absence members of all Divisions, an amount of \$55,853 was pro-rated to Cleveland Transit Division members, making the total Employees Savings Fund and Employer Accumulation Fund balances used in the valuation \$14,646,634, as follows:

Employees Savings Fund	
Active members	\$ 8,804,636
Inactive members pro-rate	55,853
Total	8,860,489
Employer Accumulation Fund	5,786,145
Total for the two Funds	\$14,646,634

In financing the Cleveland Transit Division liabilities, the above fund balances of \$14,646,634 were applied as follows:

Fund Balances Applied to	Employees Savings	Employer Accumulation	Totals
Active members' accrued service retirement allowance liabilities	\$7,043,709	\$5,699,551	\$12,743,260
Inactive members' retirement allowance liabilities	41,890	86,594	128,484
Liabilities for probable refunds of members' present accumulated			
contributions	1,774,890		1,774,890
Total Ledger Balances	\$8,860,489	\$5,786,145	\$14,646,634

#### CLEVELAND TRANSIT DIVISION

Method of Financing the Cleveland Transit Division Liabilities

Employer Accumulation Fund and Employees Savings Fund

Accrued liabilities for members, \$20,845,279, less applicable fund balances, \$14,646,634, resulted in unfunded accrued liabilities of \$6,198,645, which were amortized over a period of 25 years.

<u>Prospective superannuation</u> retirement allowance liabilities, \$16,412,234, were financed over the members' periods of prospective service to retirement.

<u>Liabilities for probable refunds of future contributions</u> to be made by present active members, \$2,715,194, were financed over the members' periods of prospective service to withdrawal or death.

The Cleveland Transit Division employer's contributions for disability retirement allowances to be paid present active members, who become disabled, were determined on a terminal funding basis. The liabilities, \$480,161, were determined by applying the terminal funding cost, expressed as a percent of payroll, to the present value of active members' future salaries.

#### Schedule 29

#### CLEVELAND TRANSIT DIVISION

## Computed Contributions to Retirement System

Computed Contributions for	Percent of Active Member Payroll
Current service	10.25%
Refunds of members' future contributions	1.70
Disability	0.30
Cost of living increases	0.06
Total Current Cost	$\frac{12.31}{}$
Less: Members' contributions	7.00
Cleveland Transit's Current Cost	5.31
Unfunded accrued service	2.24
Cleveland Transit's Computed	
Contributions	7.55%

As outlined on page 70 of this report, a transfer of \$488,714 from the Income Fund would reduce the unfunded liabilities from \$6,198,645 to \$5,709,931. This would result in a reduction in the unfunded accrued service cost from 2.24% to 2.06% resulting in a Cleveland Transit's computed contributions of \$7.37%.

Comment. Cleveland Transit's computed contributions, shown in Schedule 29, are based on membership in the Cleveland Transit Division and fund balances credited to the Cleveland Transit Division as of June 30, 1960.

The difference in contribution rates as shown in this report and the report dated August 15, 1961 arises only from a change in mortality table and a change in interest rate assumption.

In accordance with a resolution, effective December 31, 1961, adopted by the Retirement Board, the 1937 Standard Annuity Mortality Table with an interest rate assumption of 3% per annum were the baces for the liabilities and, consequently, the computed contributions shown in Schedule 29.

## CHAPTER II

PART D

SHAKER HEIGHTS TRANSIT DIVISION

#### SHAKER HEIGHTS TRANSIT DIVISION

The minimum retirement allowance of \$72 a year times years of credited service was taken into account by adjusting individual salaries under certain "key salaries" to the applicable "key salary". The "key salary" at each age is the annual salary at that age, which will, on the average, result in a final average salary of \$4364. The "key salary" for each age group in the Shaker Heights Transit Division valuation is shown below.

Attained Age Group	Key Salary to Produce \$4364 <u>Final Average Salary</u>
Under 21	\$2,189
21-25	3,475
26-30	3,880
31-35	4,088
36-40	4,151
41-45	4,213
46-50	4,276
51-53	4,326
54-56	4,364
57-59	4,364
60 and Over	4,364

Shaker Heights Transit Division active members included in the valuation totaled 118, involving an annual payroll of \$641,043, and an adjusted annual payroll, after increasing the individual salaries under "key salary" to "key salary", of \$649,991.

## Schedule 30

#### SHAKER HEIGHTS TRANSIT DIVISION

Active Members in Valuation June 30, 1960

By Attained Age Groups

## Annual Payroll and Adjusted Payroll

Attained				
Age	<u>Annual</u>	Payrol1	Adjusted A	nnual Payroll
Groups	Number	Payrol1	Number	Payroll_
04 05				
21-25	6	\$ 26,868	6	\$ 26,868
26-30	7	33,125	7	33,181
31-35	12	62,058	12	63,405
36-40	20	108,723	20	111,179
41-45	11	53,917	11	55,225
46-50	17	95,493	17	95,756
51-53	5	27,361	5	27,361
54-56	9	63,703	9	64,226
57-59	3	15,961	3	15,961
60	5	28,994	5	28,994
61	5	33,114	5	33,114
62	4	•		•
63		20,797	4	20,995
_	6	28,229	6	30,569
64	2	9,749	2	9,749
66	2	11,452	2	11,452
68	1	5,053	1	5,053
70	2	10,923	2	11,380
72	_1	5,523	_1	5,523
Totals	118	\$641,043	118	\$649,991

## Schedule 31

## SHAKER HEIGHTS TRANSIT DIVISION

# Employees Savings Fund and Employers Accumulation Fund

# Liabilities June 30, 1960

Present Value, June 30, 1960, of	Member Financed Liabilities	Employer Financed <u>Liabilities</u>	Total <u>Liabilities</u>
Accrued portions of retirement allow- ances to be paid present active members, based on service rendered before			
July 1, 1960	\$255,685	\$397,441	\$653,126
Deferred retirement allowances likely to be paid present inactive members	6,381	8,568	14,949
Probable refunds of members' accumulated contributions standing to			
their credit June 30, 1960	66,048		66,048
TOTAL ACCRUED LIABILITIES	\$328,114	\$406,009	\$734,123
Prospective portions of retirement allowances to be paid present active members, based on service to be rendered after June 30, 1960	\$296,259	\$269,264	\$565 <b>,</b> 523
Disability allowances likely to be paid present active members who become totally and permanently disabled		16,778	16,778
Probable refunds of contributions to be made after June 30, 1960 by present			
active members	95,238		95,238
TOTAL PROSPECTIVE LIABILITIES	\$391,497	\$286,042	\$677,539

#### SHAKER HEIGHTS TRANSIT DIVISION

Employees Savings Fund - Employer Accumulation Fund

The Shaker Heights Transit Division's balances, at June 30, 1960, in the Employees Savings Fund and Employer Accumulation Fund were reported to your actuary to be \$519,820. In addition, of the \$4,672,173 Employees Savings Fund balances credited to leave of absence members of all Divisions, an amount of \$8,508 was pro-rated to Shaker Heights Transit Division members, making the total Employees Savings Fund and Employer Accumulation Fund balances used in the valuation \$528,328, as follows:

Employees Savings Fund	
Active members	\$319,606
Inactive members pro-rate	8,508
Total	328,114
Employer Accumulation Fund	200,214
Total for the two Funds	\$528,328

In financing the Shaker Heights Transit Division liabilities, the above fund balances of \$528,328 were applied as follows:

Fund Balances applied to	Employees Savings	Employer Accumulation	Totals
Active members' accrued service retirement allowance liabilities	\$255,685	\$190,722	\$446,407
Inactive members' retirement allowance liabilities	6,381	9,492	15,873
Liabilities for probable refunds of members' present accumulated			
contributions	66,048		66,048
Total Ledger Balances	\$328,114	\$200,214	\$528,328

#### SHAKER HEIGHTS TRANSIT DIVISION

Method of Financing the Shaker Heights Transit Division Liabilities

Employer Accumulation Fund and Employees Savings Fund

Accrued liabilities for members, \$734,123, less applicable fund balances, \$528,328, resulted in unfunded accrued liabilities of \$205,795, which were amortized over a period of 25 years.

Prospective superannuation retirement allowance liabilities, \$565,523, were financed over the members' periods of prospective service to retirement.

<u>Liabilities for probable refunds of future contributions</u> to be made by present active members, \$95,238, were financed over the members' periods of prospective service to withdrawal or death.

The Shaker Heights Transit Division employer's contributions for disability retirement allowances, to be paid present active members who become disabled, were determined on a terminal funding basis. The liabilities, \$16,778, were determined by applying the terminal cost, expressed as a percent of payroll, to the present value of active members' future salaries.

#### Schedule 32

#### SHAKER HEIGHTS TRANSIT DIVISION

## Computed Contributions to Retirement System

Computed Contributions for	Percent of Active Member Payroll
Current service	10.11%
Refunds of members' future contributions	1.70
Disability	0.30
Cost of living increases	0.06
Total Current Cost	12.17
Less: Members' contributions	7.00
Shaker Heights Transit's	
Current Cost	5.17
Unfunded accrued service	1.94
Shaker Heights Transit's	
Computed Contributions	7.11%

As outlined on page 70 of this report, a transfer of \$20,855 from the Income Fund would reduce the unfunded liabilities from \$205,795 to \$184,940. This would result in a reduction in the unfunded accrued service cost from 1.94% to 1.74% resulting in a Shaker Heights Transit's computed contributions of 6.91%.

Comment. The Shaker Heights Transit's computed contributions, shown in Schedule 32, are based on membership in the Shaker Heights Transit Division and fund balances credited to the Shaker Heights Transit Division as of June 30, 1960.

The difference in contribution rates as shown in this report and the report dated August 15, 1961 arises only from a change in mortality table and a change in interest rate assumption.

In accordance with a resolution, effective December 31, 1961, adopted by the Retirement Board, the 1937 Standard Annuity Mortality Table with an interest rate assumption of 3% per annum were the bases for the liabilities and, consequently, the computed contributions shown in Schedule 32.

CHAPTER II

PART E

COMMENTS AND CONCLUSION

<u>Comment</u>: Members' accrued service liabilities, at any valuation date, represents the present value of the benefits to be paid the members based upon the service rendered by them to the valuation date. The "present value" is arrived at by discounting for the fact that

- (1) Some members will withdraw from Ohio public employment before becoming eligible to retire. Consequently, turnover probabilities are discount factors.
- (2) Some members will die while in Ohio public employment.
  Consequently death-in-service probabilities are discount factors.
- (3) Not all members will retire when they first become eligible to retire; some will continue in service for 1, 2, 3 or more years thereafter. Consequently, retirement rates are discount factors.
- (4) INTEREST IS EARNED ON THE MONEYS OF THE RETIREMENT SYSTEM.

  THE RATE OF INTEREST EARNING USED IN THIS VALUATION IS 3

  PERCENT PER ANNUM, COMPOUNDED ANNUALLY. CONSEQUENTLY, IT

  IS ASSUMED THAT THE AMOUNT OF ACCRUED LIABILITIES AT THE

  VALUATION DATE WILL BE INCREASED BY INTEREST ADDITIONS.

At June 30, 1960, the Employers Accumulation Fund accrued liabilities for members' accrued service were computed to be, for all divisions of PERS, \$369,903,523

That means that, if PERS had on hand \$369,903,523,

AT 3 PERCENT INTEREST, the amount would be sufficient, USING BOTH PRINCIPAL AND INTEREST, to pay all benefits due present members on account of service rendered by them.

At June 30, 1960, the total of the Employees Savings Fund balances amounted to \$180,189,256, and the total of the Employers Accumulation Fund balances amounted to \$86,971,850. The total of the two Funds represent the portion of the accrued liabilities of \$369,903,523 which are funded, namely

267,161,106

Since the members' accrued liabilities of \$369,903,523 involved an interest discount of 3 percent per annum, it is required that the PERS assets, allocated to the members' accrued liabilities, be credited with 3 percent per annum.

That leaves members unfunded accrued liabilities of

\$102,742,417

The amortization of the unfunded accrued liabilities of \$102,742,417 is an obligation of the public employers. The annual amortization payments are computed to liquidate the principal and to provide for 3 percent interest per annum on the unpaid balances.

In computing the members' accrued service liabilities of \$369,903,523 is was assumed that 3 percent interest would be credited to the amount

each year. Therefore, it is necessary that the funded portion totaling \$267,161,106 be credited with 3 percent each year; and the unfunded accrued liabilities of \$102,742,417 likewise have the interest requirement of 3 percent per annum satisfied.

<u>Comment.</u> On December 20, 1961, the Retirement Board authorized, in addition to the annual interest transfers from the Income Fund, \$8,289,566 to be transferred from the Income Fund to the Employer Accumulation Fund as of December 31, 1961.

A pro-ration based on the balances in the Employer Accumulation Fund credited to each Division as of December 31, 1961, resulted in the following:

Division	Amount of Additional Income Fund Transfer Pro-Rated by Division	
State	\$1,772,953	
Non-State	6,007,044	
Cleveland Transit	488,714	
Shaker Heights Transit	20,855	
Total	\$8,289,566	

The pro-rated additional transfer from the Income Fund to the Employer Accumulation Fund, shown above, was applied to the unfunded accrued liabilities for each Division.

The resulting reduction in contribution rates are shown in the last paragraph of the following pages:

Division	Page
State	44
Non-State	52
Cleveland Transit	59
Shaker Heights Transit	66

Acknowledgement. The helpful cooperation of the Executive Secretary and his Staff in assembling the data necessary to make the actuarial valuations is acknowledged and appreciated.

Conclusion. The Public Employees Retirement System of Ohio continues to be soundly financed in accordance with accepted actuarial principles.

Respectfully submitted,

A. G. Gabriel, Actuary Public Employees Retirement System of Ohio

CFM: EM

Why me transfer to APR + SR fundo to wase out deficiencies? What is the total "Cost of leving deficiency" What is the desability fund deficiency?