

ACTUARIAL REPORT
(Supplemental)
EMPLOYEES' RETIREMENT
ASSOCIATION
OF THE
COUNTY OF FRESNO

Made to the Board of Retirement

July 1, 1967

COATES, HERFURTH & ENGLAND

OFFICES IN
SAN FRANCISCO
DENVER
PASADENA

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October 31, 1967

Board of Retirement
County Employees' Retirement
Association
Fresno County
Court House
Fresno, California

Gentlemen:

We are pleased to transmit herewith our supplemental report setting forth the various tables and schedules developed in the process of carrying out the regular investigation and valuation of your Retirement System as of July 1, 1967. The information included in this report is similar to that found in the Statistical Section of our report as of June 30, 1962.

Respectfully submitted,

COATES, HERFURTH & ENGLAND
Consulting Actuaries

By Robert D. Drisko
Robert D. Drisko

RDD/th
Enclosures

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SCHEDULE 1

Number of Active Members and Total Monthly Salaries

By Sex and Attained Age

<u>Age</u>	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	<u>No.</u>	<u>Salary</u>	<u>No.</u>	<u>Salary</u>	<u>No.</u>	<u>Salary</u>
20 and under	3	\$ 1,236.00	40	\$14,334.00	43	\$15,570.00
21	5	1,952.00	42	15,944.00	47	17,896.00
22	17	7,737.00	28	11,749.00	45	19,486.00
23	29	14,634.00	59	28,595.00	88	43,229.00
24	41	20,380.00	53	24,326.00	94	44,706.00
25	55	30,614.00	56	27,489.00	111	58,103.00
26	35	18,662.00	44	21,396.00	79	40,058.00
27	27	15,366.00	48	21,909.00	75	37,275.00
28	33	19,817.00	21	10,298.00	54	30,115.00
29	35	21,720.00	27	12,574.00	62	34,294.00
30	48	30,238.00	19	9,296.00	67	39,534.00
31	37	23,784.00	17	8,096.00	54	31,880.00
32	56	33,883.00	27	13,415.00	83	47,298.00
33	45	27,983.50	21	11,105.00	66	39,088.50
34	41	28,485.00	14	7,429.00	55	35,914.00
35	46	34,656.00	18	8,361.00	64	43,017.00
36	39	25,957.00	26	12,579.00	65	38,536.00
37	50	34,759.00	26	11,997.00	76	46,756.00
38	43	33,448.00	20	9,307.00	63	42,755.00
39	39	27,343.00	26	12,259.00	65	39,602.00
40	43	32,157.00	35	15,709.00	78	47,866.00
41	32	21,165.00	25	13,002.00	57	34,167.00
42	32	22,523.00	47	22,714.00	79	45,237.00
43	45	34,969.00	37	18,399.00	82	53,368.00
44	41	30,093.00	39	19,870.00	80	49,963.00
45	44	31,038.00	44	20,864.00	88	51,902.00
46	36	27,301.00	44	21,585.00	80	48,886.00
47	32	23,136.00	41	23,278.00	73	46,414.00
48	37	24,963.00	35	16,387.00	72	41,350.00
49	34	22,487.00	52	26,093.00	86	48,580.00

SCHEDULE 1

Number of Active Members and Total Monthly Salaries

by Sex and Attained Age

(Continued)

<u>Age</u>	<u>Male</u>		<u>Female</u>		<u>Total</u>	
	<u>No.</u>	<u>Salary</u>	<u>No.</u>	<u>Salary</u>	<u>No.</u>	<u>Salary</u>
50	30	\$ 23,005.00	40	\$ 19,698.00	70	\$ 42,703.00
51	41	28,385.00	35	16,504.00	76	44,889.00
52	35	21,886.00	37	20,422.00	72	42,308.00
53	31	21,978.00	42	20,306.00	73	42,284.00
54	28	19,163.00	36	17,906.00	64	37,069.00
55	23	17,049.00	40	18,964.00	63	36,013.00
56	28	16,113.00	36	17,269.00	64	33,382.00
57	23	15,020.00	28	14,764.00	51	29,784.00
58	21	13,604.00	28	14,204.00	49	27,808.00
59	24	17,628.00	27	13,004.00	51	30,632.00
60	27	19,477.00	35	18,424.00	62	37,901.00
61	23	14,888.00	30	14,441.00	53	29,329.00
62	16	10,016.00	17	8,483.00	33	18,499.00
63	15	10,164.00	13	6,887.00	28	17,051.00
64	6	3,692.00	8	4,155.00	14	7,847.00
65	7	4,378.00	5	2,841.00	12	7,219.00
66	5	2,424.00	5	2,245.00	10	4,669.00
67	4	2,516.00	1	443.00	5	2,959.00
68	3	1,287.00	5	1,967.00	8	3,254.00
69	4	2,248.00	2	1,130.00	6	3,378.00
70 and over	2	2,167.00	1	721.00	3	2,888.00
Totals	1,496	\$989,574.50	1,502	\$725,137.00	2,998	\$1,714,711.50

SCHEDULE 2

Number of Retired Members and
Annual Allowances Being Paid

<u>Service Retirements</u>	<u>Number</u>	<u>Amount</u>
Unmodified	140	\$206,719.32
Option 1	199	357,181.80
Options 2, 3 and 4	60	118,544.04
Beneficiaries	<u>11</u>	<u>10,634.28</u>
Total	410	\$693,079.44
 <u>Disability Retirements</u>		
Unmodified	23	\$ 43,432.56
Option 1	20	26,394.36
Options 2 and 3	5	5,368.32
Beneficiaries	<u>8</u>	<u>6,152.88</u>
Total	56	\$ 81,348.12
 <u>Death Benefits</u>		
Line of Duty Death	1	\$ 3,186.60
Death while eligible	<u>1</u>	<u>1,193.76</u>
Total	2	\$ 4,380.36
 Grand Total	 468	 \$778,807.92

SCHEDULE 3

Probabilities of Separation from the System

(Number Separating at Each Age per 10,000 Working at that Age)

Male

<u>Age</u>	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service</u>
20	2,150	8		
21	2,000	8		
22	1,850	8		
23	1,700	8		
24	1,550	9		
25	1,400	9	1	
26	1,250	10	1	
27	1,100	10	1	
28	1,000	10	1	
29	900	11	1	
30	800	11	2	
31	700	12	2	
32	620	12	2	
33	560	13	3	
34	520	13	3	
35	490	14	3	
36	470	15	4	
37	450	17	4	
38	430	19	4	
39	410	20	5	
40	390	22	6	
41	370	26	7	
42	350	29	9	
43	330	32	11	
44	310	36	14	
45	290	40	17	
46	270	45	20	
47	250	50	23	
48	240	55	26	
49	230	61	29	

SCHEDULE 4

Probabilities of Separation from the System

(Number Separating at Each Age per 10,000 Working at that Age)

Female

<u>Age</u>	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service</u>
20	3,300	3		
21	3,100	3		
22	2,900	3		
23	2,700	3		
24	2,550	4		
25	2,400	5	1	
26	2,250	5	2	
27	2,100	6	3	
28	1,950	6	3	
29	1,800	6	3	
30	1,650	6	4	
31	1,530	6	4	
32	1,430	6	4	
33	1,330	7	4	
34	1,230	7	4	
35	1,130	8	4	
36	1,030	10	4	
37	950	13	4	
38	870	14	5	
39	810	15	5	
40	750	16	6	
41	690	17	7	
42	630	18	8	
43	590	19	9	
44	550	20	10	
45	520	22	12	
46	490	24	14	
47	460	26	16	
48	430	28	18	
49	400	30	20	

SCHEDULE 4

Probabilities of Separation from the System

(Number Separating at Each Age per 10,000 Working at that Age)
(Continued)

Female

<u>Age</u>	<u>Withdrawal</u>	<u>Death</u>	<u>Disability</u>	<u>Service</u>
50	370	32	22	
51	350	34	24	
52	330	36	26	
53	300	39	28	
54	270	42	31	
55	240	46	34	600
56	210	50	38	200
57	180	54	42	200
58	160	57	46	200
59	140	60	50	300
60		63	54	300
61		67	58	600
62		70	62	1,500
63		73	66	1,100
64		76	70	1,100
65		80		1,500
66		85		1,500
67		91		2,000
68		97		3,000
69		104		5,000
70				10,000

SCHEDULE 5

Rates of Mortality after Service Retirement

(Per Thousand)

<u>Age</u>	<u>Male</u>	<u>Female</u>
55	10.44	4.65
56	11.35	5.10
57	12.30	5.64
58	13.30	6.26
59	14.38	7.00
60	15.56	7.84
61	16.87	8.79
62	18.35	9.85
63	20.07	11.01
64	22.07	12.26
65	24.42	13.60
66	27.19	14.99
67	30.11	16.46
68	32.99	18.20
69	35.94	20.35
70	39.30	23.10
71	43.18	26.53
72	47.48	30.47
73	52.08	34.78
74	57.08	39.41
75	62.43	44.31
76	68.35	49.51
77	75.13	55.11
78	82.69	61.09
79	90.95	67.46
80	99.68	74.15
81	108.71	81.11
82	117.98	88.37
83	127.44	95.94
84	137.07	103.90

SCHEDULE 5

Rates of Mortality after Service Retirement

(Per Thousand)

(Continued)

<u>Age</u>	<u>Male</u>	<u>Female</u>
85	146.85	112.33
86	156.84	121.30
87	167.12	130.88
88	177.79	141.19
89	188.92	152.30
90	200.59	164.33
91	212.56	177.14
92	225.16	191.10
93	238.52	206.34
94	252.77	223.03
95	268.02	241.34
96	284.46	261.45
97	302.22	283.58
98	321.52	307.95
99	342.53	334.81
100	365.46	364.43
101	390.54	397.10
102	417.98	433.15
103	450.10	472.93
104	489.20	518.16
105	537.60	570.54
106	597.62	631.81
107	671.55	703.68
108	761.72	787.85
109	870.43	886.05
110	1,000.00	1,000.00

SCHEDULE 6

Rates of Mortality after Disability Retirement

(Per Thousand)

<u>Age</u>	<u>Rate</u>	<u>Age</u>	<u>Rate</u>
25	39.1	55	41.6
26	35.2	56	42.6
27	32.9	57	43.6
28	31.9	58	44.8
29	31.5	59	46.2
30	31.4	60	47.6
31	31.5	61	49.1
32	31.6	62	50.7
33	31.8	63	52.5
34	31.9	64	54.4
35	32.1	65	56.3
36	32.3	66	58.6
37	32.5	67	61.2
38	32.7	68	63.5
39	32.9	69	66.4
40	33.2	70	69.4
41	33.5	71	72.5
42	33.8	72	75.9
43	34.1	73	79.6
44	34.5	74	83.6
45	34.9	75	87.9
46	35.4	76	92.5
47	35.9	77	97.6
48	36.4	78	102.9
49	37.0	79	108.5
50	37.6		
51	38.3		
52	39.0		
53	39.8		
54	40.6		