

REPORT ON
ACTUARIAL VALUATION
OF THE
CITY EMPLOYEES' RETIREMENT SYSTEM
OF THE
CITY OF LOS ANGELES
AS OF
JUNE 30, 1965

December 2, 1965

COATES, HERFURTH & ENGLAND

CONSULTING ACTUARIES

~~325 NORTH LAKE AVENUE~~

PASADENA, CALIFORNIA 91101

301 EAST COLORADO BOULEVARD

December 2, 1965

TELEPHONE
MURRAY 1-4455

OFFICES IN
SAN FRANCISCO
DENVER
PASADENA

*Rec'd - filed
and Rates
acknowledged*
*12/14/65
Robert [Signature]*

Board of Administration
City Employees' Retirement System
1103 City Hall
Los Angeles, California 90012

Gentlemen:

We are pleased to transmit herewith our Report on the
Actuarial Valuation of your Retirement System made as of June 30,
1965.

We will be most happy to meet with you at your convenience
to discuss the items contained in this Report.

Very truly yours,

COATES, HERFURTH & ENGLAND
Consulting Actuaries

By *Harry M. Church*
Harry M. Church

HMC:th

REPORT ON
ACTUARIAL VALUATION
OF THE
CITY EMPLOYEES' RETIREMENT SYSTEM
OF THE
CITY OF LOS ANGELES

In accordance with our agreement we have completed the actuarial valuation of the City Employees' Retirement System as of June 30, 1965.

In order to complete this valuation, the office of the Retirement System furnished us with punched cards which contain all the pertinent information for each member of the System as of June 30, 1965, including such information as current compensation, years of service credited, rates of contribution, and accumulated contributions. In addition to the above information on active members, we were also furnished punched cards for each person currently receiving an allowance from the Retirement System, together with such data as was necessary to determine the value of the allowance already entered upon.

During the year ending June 30, 1965, there has been a net increase of 383 active members of the System. There has also been a net increase of 69 persons receiving service retirement allowances, a net increase of 4 persons receiving survivorship allowances, and a net reduction of 2 persons receiving disability allowances.

A summary of the active and retired membership of the System as of June 30, 1965 is shown in the following table.

SUMMARY OF MEMBERSHIP OF SYSTEM
AS OF JUNE 30, 1965

ACTIVE MEMBERS*

	<u>Number</u>	<u>Annual Salary</u>
Males	11,382	\$ 94,281,710.04
Females	3,529	21,643,077.00
Total	14,911	\$115,924,787.04

*Does not include members on military leave or members who terminated with a vested interest.

BENEFICIARIES

	<u>Number</u>	<u>Annual Retirement Allowances</u>
Service Retirement**		
Males	1,785	\$ 4,457,120.88
Females	698	1,274,107.44
Total	2,483	\$ 5,731,228.32

**Including survivors under options

Disability Retirements

Males	108	\$ 146,354.52
Females	67	77,677.68
Total	175	\$ 224,032.20

Survivorships

Male	3	\$ 6,753.24
Female	151	309,893.16
Total	154	\$ 316,646.40
<u>Grand Total</u>	2,812	\$ 6,271,906.92

COMPENSATION EXPERIENCE

Since benefits under the System are based upon compensation of members, it is of interest to compare the average monthly compensation from year to year. These averages for the years indicated are as follows:

	<u>AVERAGE MONTHLY COMPENSATION</u>					
	<u>1960</u>	<u>1961</u>	<u>1962</u>	<u>1963</u>	<u>1964</u>	<u>1965</u>
Males	\$547	\$579	\$586	\$641	\$662	\$690
Females	<u>429</u>	<u>451</u>	<u>454</u>	<u>488</u>	<u>498</u>	<u>511</u>
Combined	\$519	\$548	\$554	\$603	\$623	\$648

MORTALITY EXPERIENCE

Although the experience in mortality after retirement for only one year cannot be considered as significant, we nevertheless tested this experience against the mortality tables recommended in 1964 and obtained the following results:

SERVICE AND SURVIVOR PENSIONS

	<u>Expected Deaths</u>	<u>Actual Deaths</u>	Ratio of Actual to <u>Expected</u>
Male	107	108	101%
Female	<u>21</u>	<u>11</u>	<u>52%</u>
Total	128	119	93%

DISABILITY PENSIONS

	<u>Expected Deaths</u>	<u>Actual Deaths and Recoveries From Disability Retirement</u>	<u>Ratio Actual to Expected</u>
Male	6	10	167%
Female	<u>4</u>	<u>3</u>	<u>75%</u>
Total	10	13	130%

The above comparison does not include the actual or expected deaths of those who retired subsequent to July 1, 1964.

AMENDMENTS

The following major amendments to the Charter of the City of Los Angeles affecting the Retirement System were passed by the electors at the April 6, 1965 election:

1. "Final Compensation" is now defined, in general, as the highest three year average salary rather than the highest five year average salary.
2. The "Continuance to Eligible Spouse" benefit equal to 50% of the member's unmodified retirement allowance was added to the Charter. The members who elect to participate are required to contribute toward the total cost. The benefit is payable upon the death of a retired member.
3. The "Family Death Benefit Insurance Plan" was added to the Charter. Participation in this Plan is elective and the members who participate are required to contribute toward the total cost of the Plan. The

benefits paid under the Plan are similar to the Social Security survivor benefits and are payable upon the death of an active member.

Since the major portion of the increase in cost due to the change in definition of "Final Compensation" will be attributable to future across the board salary increases, the City's contribution rate will be adjusted annually to reflect any such salary increases that occurred during the preceding year.

The "Continuance to Eligible Spouse" benefit has been reflected in the current valuation.

The "Family Death Benefit Insurance Plan" is being funded by equal monthly contributions from the participating members and the City. The monthly contribution was initially set at \$1.62 from each. We believe that this rate should be used until such time as sufficient experience has been gathered to permit a more accurate determination.

ACCOUNTING BALANCE SHEET

We have been furnished with an Accounting Balance Sheet of the Retirement System as of June 30, 1965, which shows the distribution of the reserves now held by the System. This statement of assets was used in the completion of the actuarial valuation and no physical audit was required nor has been made by us.

ACTUARIAL BALANCE SHEET

Upon the basis of the actuarial assumptions adopted and factors developed at the time of the actuarial investigation and valuation made as of June 30, 1964, we have completed a valuation of the actuarial assets and

liabilities of the Retirement System and show the results on the Balance Sheet which follows the Accounting Balance Sheet.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACCOUNTING BALANCE SHEET

AS OF
JUNE 30, 1965

ASSETS

FUNDS:

Cash in City Treasury	\$	61,375.88
Cash on Hand		<u>50.00</u>

TOTAL CASH \$ 61,425.88

RECEIVABLES:

Accounts Receivable	\$	27,000.00
Accrued Interest on Bonds		<u>1,796,813.84</u>

TOTAL RECEIVABLES 1,823,813.84

INVESTMENTS:

Bonds on Hand - Par Value	\$	177,184,000.00
Bond Discount - Unamortized (Net)		<u>(1,508,637.55)</u>

TOTAL INVESTMENTS 175,675,362.45

TOTAL ASSETS \$177,560,602.17

LIABILITIES

Accounts Payable \$ 8,079.40

RESERVES:

Accumulated Contributions of Members	\$	67,624,184.27
Annuities and Interest Thereon		15,957,808.23
Prior Service		7,470,746.72
Subsequent Service		71,684,942.48
Disability Allowances		3,876,911.50
Death Benefits		<u>10,284,745.37</u>

TOTAL RESERVES 176,899,338.57

SURPLUS:

Undistributed Interest	\$	34,954.53
Reserve for Investment Fluctuation		512,758.17
Surplus		<u>105,471.50</u>

TOTAL SURPLUS 653,184.20

TOTAL LIABILITIES \$177,560,602.17

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET

ACTUARIAL VALUATION OF ASSETS AND LIABILITIES
AS OF JUNE 30, 1965

ASSETS

1.	Total Assets from Accounting Balance Sheet		\$177,560,602.17
2.	Present Value of Future Contributions of Members		70,129,992.00
3.	Present Value of Future Contributions by the City on Account of:		
	(a) Subsequent Service Pensions and Continuance to Eligible Spouse Future Service Benefits	\$50,338,190.58	
	(b) Disability Pensions	519,090.50	
	(c) Death Benefits	1,187,109.68	
	(d) Prior Service Pensions, Minimum Pensions, and Cost of Living Pensions	11,592,115.28	
	(e) Continuance to Eligible Spouse Prior Service Benefits	<u>9,845,982.00</u>	<u>73,482,488.04</u>
4.	TOTAL ASSETS		<u>\$321,173,082.21</u>

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET

(Continued)

LIABILITIES

5.	Accounts Payable		\$	8,079.40
6.	Limited Pensions Payable			47,133.05
7.	Death Benefits Payable			5,250.00
8.	Service Retirement Allowances Now Being Paid:			
	(a) Annuities	\$ 12,955,539.00		
	(b) Subsequent Service Pensions	26,019,834.00		
	(c) Prior Service Pensions, Minimum Pensions, and Cost of Living Pensions	<u>14,000,581.00</u>		52,975,954.00
9.	Disability Allowances Now Being Paid:			
	(a) Annuities	\$ 497,385.00		
	(b) Disability Pensions, Minimum Pensions, and Cost of Living Pensions	<u>1,674,707.00</u>		2,172,092.00
10.	Survivorship Death Allowances Now Being Paid:			
	(a) Annuities	\$ 946,306.00		
	(b) Survivorship Pensions and Cost of Living Pensions	<u>2,914,797.00</u>		3,861,103.00
11.	Service Allowances and Continuance to Eligible Spouse Benefits to be Granted in the Future For:			
	(a) Subsequent Service	\$196,502,059.00		
	(b) Prior Service and Minimum	<u>4,729,628.00</u>		201,231,687.00

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL BALANCE SHEET
(Continued)

LIABILITIES

12.	Disability Allowances to be Granted in the Future	\$ 4,898,948.00
13.	Death Benefits to be Granted in the Future	22,418,984.00
14.	Contributions to be Returned upon Withdrawal:	
	(a) Past	\$ 16,517,072.00
	(b) Future	<u>15,658,452.00</u>
		32,175,524.00
15.	Investment Reserve and Undistributed Interest	653,184.20
16.	Contributions of Inactive Members	588,956.22
17.	Member Contributions to be Refunded to Former Public Defender Employees	63,452.41
18.	City Contributions to be Paid to County Retirement System on Behalf of Former Public Defender Employees	65,583.48
19.	Excess Interest Credited to Member Contribution Account	<u>7,151.45</u>
20.	TOTAL LIABILITIES	<u><u>\$321,173,082.21</u></u>

COMMENTS ON ACTUARIAL BALANCE SHEET

The Actuarial Balance Sheet has been prepared in the same form as was used for the valuation made as of June 30, 1964. Item 3 on the asset side of the balance sheet shows the present value of the future contributions to be made by the City on account of (a) Subsequent Service Pensions and Continuance to Eligible Spouse Future Service Benefits, (b) Disability Pensions, (c) Death Benefits, (d) Prior Service Pensions, Minimum Pensions and Cost of Living Pensions and (e) Continuance to Eligible Spouse Prior Service Benefits corresponding to the various rates which are recommended in this report.

Items 8 through 14 show the actuarially computed present value of all future benefits that will be paid by the System on behalf of all presently retired and active members.

Item 15 sets forth the surplus which is shown on the Accounting Balance Sheet.

Items 17 and 18 show the member contributions and City contributions respectively for the former Public Defender employees who were transferred to the County.

RECOMMENDATIONS

Based upon the valuation completed herewith, we recommend the following contributions which, in our opinion, are in accordance with the provisions of the Charter and are adequate to maintain the System on a sound actuarial basis:

1. That members continue to contribute at the rates presently being used.

2. That City contributions for the fiscal year 1966-1967 be made up as follows:

- (a) For subsequent service pensions, continuance to eligible spouse future service benefits, disability pensions, and death benefits, 4.522% of the compensation of members covered by the System.

The 4.522% rate is made up as follows:

Subsequent Service Pensions and Continuance to Eligible Spouse Benefits.	4.374%
Disability Pensions	.045%
Deaths Benefits	<u>.103%</u>
Total	4.522%

- (b) For prior service pensions, minimum pensions, and cost of living pensions; \$2,193,370.00. Annual contributions of this amount will liquidate the unfunded liability of \$11,592,115.28 for prior service pensions, minimum pensions, and cost of living pensions by June 30, 1971.
- (c) For continuance to eligible spouse benefits applicable to service rendered to June 30, 1965; \$613,717.00. Annual contributions of this amount will liquidate the liability accrued to June 30, 1965 for continuance to eligible spouse benefits amounting to \$9,845,982.00 over the period ending June 30, 1990.
- (d) For the Family Death Benefit Insurance Plan; \$1.62 per month for each participating member.

In our letter of April 15, 1965, we suggested that the City contributions for the Continuance to Eligible Spouse benefits be made to the Death Benefit Reserve. We have studied this matter further and we now conclude that it would be advisable to make such City contributions to the Subsequent Service Reserve and the contribution rates recommended above are so determined. It is of interest to note that this is the procedure used by the Counties operating under the 1937 County Retirement Law for a comparable continuance benefit.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Number of Active Members and Total Monthly Salary
By Sex and Age Nearest Birthday

June 30, 1965

Age	Male		Female		Total	
	Number	Salary	Number	Salary	Number	Salary
20 and under	50	\$ 20,812.00	238	\$ 93,806.50	288	\$114,618.50
21	43	19,247.00	126	53,107.25	169	72,354.25
22	59	28,494.50	154	66,797.50	213	95,292.00
23	94	52,453.00	135	62,123.00	229	114,576.00
24	110	61,428.00	133	63,787.00	243	125,215.00
25	112	64,338.00	102	48,965.00	214	113,303.00
26	142	81,751.00	111	52,971.00	253	134,722.00
27	209	123,571.00	89	43,049.00	298	166,620.00
28	208	124,752.00	91	44,609.00	299	169,361.00
29	210	128,186.50	82	41,675.00	292	169,861.50
30	236	147,645.26	69	34,907.50	305	182,552.76
31	257	164,728.06	60	30,290.00	317	195,018.06
32	276	177,938.00	49	25,700.00	325	203,638.00
33	271	170,549.26	52	26,332.00	323	196,881.26
34	285	189,899.26	61	32,259.50	346	222,158.76
35	283	181,442.26	54	28,448.50	337	209,890.76
36	294	198,167.23	70	37,219.00	364	235,386.23
37	297	201,288.55	68	36,487.50	365	237,776.05
38	338	239,850.08	62	31,352.00	400	271,202.08
39	305	214,220.90	59	30,027.50	364	244,248.40
40	386	279,312.19	55	29,185.00	441	308,497.19
41	359	256,104.34	80	40,447.00	439	296,551.34
42	385	275,946.14	75	40,574.00	460	316,520.14
43	398	286,513.34	66	34,710.00	464	321,223.34
44	381	275,413.78	77	40,683.00	458	316,096.78
45	369	264,690.12	65	34,860.50	434	299,550.62
46	362	255,799.99	73	39,498.00	435	295,297.99
47	367	259,310.86	67	36,952.50	434	296,263.36
48	334	240,356.64	81	45,878.50	415	286,235.14
49	351	251,398.10	68	37,495.00	419	288,893.10

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Number of Active Members and Total Monthly Salary
By Sex and Age Nearest Birthday

June 30, 1965

Age	Male		Female		Total	
	Number	Salary	Number	Salary	Number	Salary
50	295	\$219,539.45	88	\$45,200.50	383	\$264,739.95
51	322	224,446.26	69	38,667.50	391	263,113.76
52	316	218,931.45	63	35,382.00	379	254,313.45
53	284	194,248.50	51	27,677.50	335	221,926.00
54	203	147,307.09	83	46,148.00	286	193,455.09
55	255	180,308.26	62	36,120.00	317	216,428.26
56	220	154,951.38	62	34,531.50	282	189,482.88
57	217	153,564.56	55	32,508.00	272	186,072.56
58	203	148,131.67	52	30,444.50	255	178,576.17
59	181	140,451.56	74	42,739.00	255	183,190.56
60	156	113,762.56	49	28,569.50	205	142,332.06
61	154	114,822.05	46	26,375.00	200	141,197.05
62	132	97,950.67	35	19,444.00	167	117,394.67
63	129	99,688.67	42	25,898.50	171	125,587.17
64	99	76,021.00	27	15,105.00	126	91,126.00
65	113	83,104.67	28	16,009.50	141	99,114.17
66	82	62,496.00	17	9,445.00	99	71,941.00
67	82	66,437.00	15	8,344.00	97	74,781.00
68	83	66,769.67	13	6,701.00	96	73,470.67
69	61	41,458.67	17	8,794.00	78	50,252.67
70 and over	24	16,810.67	9	5,288.50	33	22,099.17
Total	11,382	\$7,856,809.17	3,529	\$1,803,589.75	14,911	\$9,660,398.92

CITY EMPLOYEES' RETIREMENT SYSTEM

OF THE

CITY OF LOS ANGELES

3-3/4% OPERATING TABLES

EFFECTIVE JULY 1, 1965

*adopted
4/20/65
effective 7/1/65
Robert Stahl*

ACTUARIAL ASSUMPTIONS

Interest

3-3/4%

Mortality After Service Retirement

Male Members

1946 Service Pensioner Mortality
Table with ages set back one year.

Female Members

1946 Service Pensioner Mortality
Table with ages set back three
years.

Mortality After Disability Retirement

1943 Disability Mortality Table.

LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

NUMBER OF ACTIVE MEMBERS AS OF JUNE 30, 1965 HAVING PRIOR SERVICE CREDIT
BY SEX AND AGE NEAREST BIRTHDAY

Age	Male			Female			Total		
	Number	Prior Service Years	Monthly Salary	Number	Prior Service Years	Monthly Salary	Number	Prior Service Years	Monthly Salary
46	1	2.0	\$ 641.00				1	2.0	\$ 641.00
47	2	1.9	1,935.00	1	1.2	\$ 641.00	3	3.1	2,576.00
48	3	5.4	3,696.00				3	5.4	3,696.00
49	3	4.2	3,953.00	2	1.2	807.00	5	5.4	4,760.00
50	1	.9	608.00				1	.9	608.00
51	5	4.7	5,715.00	2	2.1	1,244.00	7	6.8	6,959.00
52	4	1.7	3,238.00	2	2.6	1,748.00	6	4.3	4,986.00
53	7	8.3	8,472.00	1	2.3	715.00	8	10.6	9,187.00
54	8	41.8	8,874.00	6	17.5	3,971.00	14	59.3	12,845.00
55	14	28.0	14,658.00	8	44.7	5,466.00	22	72.7	20,124.00
56	10	43.8	8,519.00	6	39.3	3,660.00	16	83.1	12,179.00
57	18	94.1	15,217.00	8	55.9	4,955.00	26	150.0	20,172.00
58	20	151.0	20,695.00	8	54.2	5,407.00	28	205.2	26,102.00
59	33	245.8	34,829.00	21	160.3	12,510.50	54	406.1	47,339.50
60	24	163.1	23,103.00	12	88.8	8,342.00	36	251.9	31,445.00
61	26	178.4	25,571.00	5	58.0	3,425.00	31	236.4	28,996.00
62	26	201.1	25,224.00	6	55.9	3,968.00	32	257.0	29,192.00
63	38	313.7	35,861.00	14	118.2	9,757.50	52	431.9	45,618.50
64	24	208.2	25,749.00	6	35.4	3,539.00	30	243.6	29,288.00
65	27	201.6	24,913.00	7	45.4	4,094.50	34	247.0	29,007.50
66	26	254.2	22,784.00				26	254.2	22,784.00
67	26	181.1	26,843.00	2	25.0	1,737.00	28	206.1	28,580.00
68	23	245.1	25,001.00	2	8.4	985.00	25	253.5	25,986.00
69	14	106.1	11,265.00	3	15.1	1,813.00	17	121.2	13,078.00
70	7	51.5	4,897.00	1	8.9	776.00	8	60.4	5,673.00
TOTAL	390	2,737.7	\$382,261.00	123	840.4	\$79,561.50	513	3,578.1	\$461,822.50

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(b) Female	2
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(a) Male	3
(b) Female	4
5. Amount of Monthly "Cash Refund" Annuity Provided by \$1,000.00	
(a) Male	5
(b) Female	6
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TABLE A

Complete Expectation of Life
of Service Pensioners

<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Age</u>	<u>Male</u>	<u>Female</u>
55	19.60	24.69	85	4.75	6.40
56	18.95	23.90	86	4.46	6.03
57	18.32	23.13	87	4.19	5.67
58	17.69	22.36	88	3.92	5.33
59	17.06	21.59	89	3.67	5.00
60	16.45	20.84	90	3.43	4.69
61	15.84	20.10	91	3.21	4.40
62	15.24	19.37	92	3.00	4.12
63	14.65	18.65	93	2.80	3.85
64	14.07	17.95	94	2.61	3.60
65	13.50	17.25	95	2.43	3.36
66	12.94	16.57	96	2.26	3.14
67	12.40	15.90	97	2.11	2.92
68	11.86	15.24	98	1.96	2.72
69	11.33	14.60	99	1.82	2.54
70	10.82	13.97	100	1.70	2.36
71	10.32	13.35	101	1.58	2.20
72	9.83	12.75	102	1.47	2.04
73	9.36	12.17	103	1.36	1.90
74	8.90	11.60	104	1.27	1.76
75	8.45	11.05	105	1.17	1.64
76	8.01	10.51	106	1.08	1.52
77	7.60	9.99	107	1.00	1.41
78	7.19	9.48	108	.75	1.30
79	6.80	8.99	109	.50	1.19
80	6.42	8.52			
81	6.06	8.06			
82	5.71	7.62			
83	5.38	7.20			
84	5.06	6.79			

TABLE B

3-3/4% OPERATING TABLES

Actuarial Equivalent Factors for Members Retiring
Prior to Age 60

MALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
45	.330476	.335936	.341396	.346857
46	.352317	.358247	.364176	.370106
47	.376036	.382486	.388936	.395386
48	.401836	.408869	.415902	.422934
49	.429967	.437648	.445330	.453011
50	.460692	.469078	.477464	.485851
51	.494237	.503414	.512590	.521766
52	.530943	.541016	.551089	.561162
53	.571235	.582298	.593360	.604423
54	.615486	.627678	.639871	.652064
55	.664256	.677717	.691178	.704640
56	.718101	.733005	.747910	.762814
57	.777718	.794270	.810823	.827376
58	.843928	.862351	.880774	.899197
59	.917620	.938215	.958810	.979405
60	1.000000			

FEMALE

45	.387393	.393002	.398610	.404218
46	.409827	.415844	.421862	.427879
47	.433896	.440358	.446820	.453283
48	.459745	.466690	.473635	.480580
49	.487525	.495007	.502489	.509971
50	.517453	.525520	.533587	.541654
51	.549721	.558428	.567134	.575840
52	.584547	.593968	.603389	.612810
53	.622231	.632444	.642656	.652869
54	.663082	.674199	.685316	.696432
55	.707549	.719652	.731755	.743858
56	.755961	.769182	.782403	.795624
57	.808845	.823308	.837772	.852235
58	.866698	.882561	.898424	.914287
59	.930150	.947612	.965075	.982538
60	1.000000			

46(x-1)(y-3) 3-3/4%

TABLE 1

SERVICE RETIREMENT

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

MALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
19	261.468	260.991	260.514	260.037
20	259.560	259.185	258.810	258.435
21	258.060	257.556	257.052	256.548
22	256.044	255.525	255.006	254.487
23	253.968	253.434	252.900	252.366
24	251.832	251.274	250.716	250.158
25	249.600	249.024	248.448	247.872
26	247.296	246.696	246.096	245.496
27	244.896	244.275	243.654	243.033
28	242.412	241.767	241.122	240.477
29	239.832	239.160	238.488	237.816
30	237.144	236.451	235.758	235.065
31	234.372	233.652	232.932	232.212
32	231.492	230.751	230.010	229.269
33	228.528	227.760	226.992	226.224
34	225.456	224.667	223.878	223.089
35	222.300	221.490	220.680	219.870
36	219.060	218.241	217.422	216.603
37	215.784	214.959	214.134	213.309
38	212.484	211.653	210.822	209.991
39	209.160	208.329	207.498	206.667
40	205.836	205.005	204.174	203.343
41	202.512	201.681	200.850	200.019
42	199.188	198.357	197.526	196.695
43	195.864	195.033	194.202	193.371
44	192.540	191.706	190.872	190.038
45	189.204	188.370	187.536	186.702
46	185.868	185.016	184.164	183.312
47	182.460	181.608	180.756	179.904
48	179.052	178.209	177.366	176.523
49	175.680	174.849	174.018	173.187
50	172.356	171.540	170.724	169.908
51	169.092	168.279	167.466	166.653
52	165.840	165.009	164.178	163.347
53	162.516	161.673	160.830	159.987
54	159.144	158.286	157.428	156.570

46 (x-1) 3-3/4%

TABLE 1 (Continued)

SERVICE RETIREMENT

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

MALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
55	155.712	154.842	153.972	153.102
56	152.232	151.350	150.468	149.586
57	148.704	147.810	146.916	146.022
58	145.128	144.225	143.322	142.419
59	141.516	140.601	139.686	138.771
60	137.856	136.935	136.014	135.093
61	134.172	133.242	132.312	131.382
62	130.452	129.519	128.586	127.653
63	126.720	125.781	124.842	123.903
64	122.964	122.022	121.080	120.138
65	119.196	118.251	117.306	116.361
66	115.416	114.471	113.526	112.581
67	111.636	110.694	109.752	108.810
68	107.868	106.926	105.984	105.042
69	104.100	103.164	102.228	101.292
70	100.356	99.423	98.490	97.557
71	96.624	95.700	94.776	93.852
72	92.928	92.013	91.098	90.183
73	89.268	88.362	87.456	86.550
74	85.644	84.750	83.856	82.962
75	82.068	81.189	80.310	79.431
76	78.552	77.685	76.818	75.951
77	75.084	74.232	73.380	72.528
78	71.676	70.842	70.008	69.174
79	68.340	67.527	66.714	65.901
80	65.088	64.290	63.492	62.694
81	61.896	61.122	60.348	59.574
82	58.800	58.047	57.294	56.541
83	55.788	55.056	54.324	53.592
84	52.860	52.152	51.444	50.736
85	50.028	49.344	48.660	47.976
86	47.292	46.632	45.972	45.312
87	44.652	44.016	43.380	42.744
88	42.108	41.499	40.890	40.281
89	39.672	39.087	38.502	37.917

TABLE 1 (Continued)

SERVICE RETIREMENT

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

MALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
90	37.332	36.771	36.210	35.649
91	35.088	34.554	34.020	33.486
92	32.952	32.442	31.932	31.422
93	30.912	30.429	29.946	29.463
94	28.980	28.518	28.056	27.594
95	27.132	26.697	26.262	25.827
96	25.392	24.981	24.570	24.159
97	23.748	23.361	22.974	22.587
98	22.200	21.837	21.474	21.111
99	20.748	20.403	20.058	19.713
100	19.368	19.050	18.732	18.414
101	18.096	17.790	17.484	17.178
102	16.872	16.590	16.308	16.026
103	15.744	15.495	15.246	14.997
104	14.748	14.472	14.196	13.920
105	13.644			

TABLE 2

SERVICE RETIREMENT

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

FEMALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
20	272.004	271.611	271.218	270.825
21	270.432	270.027	269.622	269.217
22	268.812	268.395	267.978	267.561
23	267.144	266.712	266.280	265.848
24	265.416	264.975	264.534	264.093
25	263.652	263.193	262.734	262.275
26	261.816	261.345	260.874	260.403
27	259.932	259.449	258.966	258.483
28	258.000	257.502	257.004	256.506
29	256.008	255.489	254.970	254.451
30	253.932	253.398	252.864	252.330
31	251.796	251.241	250.686	250.131
32	249.576	249.000	248.424	247.848
33	247.272	246.675	246.078	245.481
34	244.884	244.263	243.642	243.021
35	242.400	241.755	241.110	240.465
36	239.820	239.151	238.482	237.813
37	237.144	236.460	235.776	235.092
38	234.408	233.715	233.022	232.329
39	231.636	230.937	230.238	229.539
40	228.840	228.141	227.442	226.743
41	226.044	225.339	224.634	223.929
42	223.224	222.513	221.802	221.091
43	220.380	219.666	218.952	218.238
44	217.524	216.807	216.090	215.373
45	214.656	213.933	213.210	212.487
46	211.764	211.035	210.306	209.577
47	208.848	208.113	207.378	206.643
48	205.908	205.173	204.438	203.703
49	202.968	202.224	201.480	200.736
50	199.992	199.230	198.468	197.706
51	196.944	196.155	195.366	194.577
52	193.788	192.960	192.132	191.304
53	190.476	189.570	188.664	187.758
54	186.852	185.928	185.004	184.080

TABLE 2 (Continued)

SERVICE RETIREMENT

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

FEMALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
55	183.156	182.220	181.284	180.348
56	179.412	178.461	177.510	176.559
57	175.608	174.645	173.682	172.719
58	171.756	170.781	169.806	168.831
59	167.856	166.866	165.876	164.886
60	163.896	162.900	161.904	160.908
61	159.912	158.904	157.896	156.888
62	155.880	154.863	153.846	152.829
63	151.812	150.789	149.766	148.743
64	147.720	146.691	145.662	144.633
65	143.604	142.569	141.534	140.499
66	139.464	138.429	137.394	136.359
67	135.324	134.283	133.242	132.201
68	131.160	130.119	129.078	128.037
69	126.996	125.958	124.920	123.882
70	122.844	121.806	120.768	119.730
71	118.692	117.660	116.628	115.596
72	114.564	113.535	112.506	111.477
73	110.448	109.428	108.408	107.388
74	106.368	105.354	104.340	103.326
75	102.312	101.310	100.308	99.306
76	98.304	97.311	96.318	95.325
77	94.332	93.354	92.376	91.398
78	90.420	89.457	88.494	87.531
79	86.568	85.623	84.678	83.733
80	82.788	81.858	80.928	79.998
81	79.068	78.156	77.244	76.332
82	75.420	74.529	73.638	72.747
83	71.856	70.983	70.110	69.237
84	68.364	67.518	66.672	65.826
85	64.980	64.155	63.330	62.505
86	61.680	60.879	60.078	59.277
87	58.476	57.699	56.922	56.145
88	55.368	54.618	53.868	53.118
89	52.368	51.645	50.922	50.199

TABLE 2 (Continued)

SERVICE RETIREMENT

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

FEMALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
90	49.476	48.777	48.078	47.379
91	46.680	46.008	45.336	44.664
92	43.992	43.350	42.708	42.066
93	41.424	40.806	40.188	39.570
94	38.952	38.364	37.776	37.188
95	36.600	36.036	35.472	34.908
96	34.344	33.810	33.276	32.742
97	32.208	31.701	31.194	30.687
98	30.180	29.697	29.214	28.731
99	28.248	27.792	27.336	26.880
100	26.424	25.992	25.560	25.128
101	24.696	24.288	23.880	23.472
102	23.064	22.683	22.302	21.921
103	21.540	21.180	20.820	20.460
104	20.100	19.764	19.428	19.092
105	18.756			

TABLE 3

SERVICE RETIREMENT

AMOUNT OF MONTHLY LIFE ANNUITY PROVIDED BY \$1,000.00

3-3/4%

MALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
35	4.498	4.515	4.532	4.548
36	4.565	4.582	4.600	4.617
37	4.634	4.652	4.670	4.688
38	4.706	4.725	4.744	4.762
39	4.781	4.800	4.820	4.839
40	4.858	4.878	4.898	4.918
41	4.938	4.958	4.979	5.000
42	5.020	5.042	5.063	5.084
43	5.106	5.128	5.150	5.172
44	5.194	5.217	5.240	5.262
45	5.285	5.309	5.332	5.356
46	5.380	5.405	5.430	5.456
47	5.481	5.507	5.533	5.559
48	5.585	5.612	5.638	5.665
49	5.692	5.720	5.747	5.774
50	5.802	5.830	5.858	5.886
51	5.914	5.943	5.972	6.001
52	6.030	6.061	6.092	6.122
53	6.153	6.186	6.218	6.251
54	6.284	6.318	6.353	6.388
55	6.422	6.459	6.496	6.532
56	6.569	6.608	6.647	6.686
57	6.725	6.766	6.808	6.849
58	6.890	6.934	6.978	7.022
59	7.066	7.113	7.160	7.207
60	7.254	7.304	7.354	7.403
61	7.453	7.506	7.560	7.613
62	7.666	7.722	7.778	7.835
63	7.891	7.951	8.012	8.072
64	8.132	8.196	8.261	8.326
65	8.390	8.458	8.527	8.596
66	8.664	8.738	8.811	8.884
67	8.958	9.036	9.114	9.193
68	9.271	9.355	9.438	9.522
69	9.606	9.693	9.782	9.872

46(x-1) 3-3/4%

TABLE 3 (Continued)

SERVICE RETIREMENT

AMOUNT OF MONTHLY LIFE ANNUITY PROVIDED BY \$1,000.00

3-3/4%

MALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
70	9.965	10.076	10.153	10.250
71	10.349	10.449	10.551	10.655
72	10.761	10.868	10.977	11.089
73	11.202	11.317	11.434	11.554
74	11.676	11.799	11.925	12.054
75	12.185	12.317	12.452	12.590
76	12.730	12.872	13.018	13.166
77	13.318	13.471	13.628	13.788
78	13.952	14.116	14.284	14.456
79	14.633	14.809	14.989	15.174

TABLE 4

SERVICE RETIREMENTAMOUNT OF MONTHLY LIFE ANNUITY PROVIDED BY \$1,000.003-3/4%FEMALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
35	4.125	4.136	4.148	4.159
36	4.170	4.182	4.194	4.205
37	4.217	4.229	4.242	4.254
38	4.266	4.279	4.292	4.304
39	4.317	4.330	4.344	4.357
40	4.370	4.384	4.397	4.410
41	4.424	4.438	4.452	4.466
42	4.480	4.494	4.509	4.524
43	4.538	4.553	4.568	4.582
44	4.597	4.612	4.628	4.644
45	4.659	4.675	4.690	4.706
46	4.722	4.738	4.755	4.772
47	4.788	4.805	4.822	4.840
48	4.857	4.874	4.892	4.910
49	4.927	4.945	4.964	4.982
50	5.000	5.020	5.039	5.058
51	5.078	5.098	5.119	5.140
52	5.160	5.182	5.205	5.228
53	5.250	5.276	5.301	5.326
54	5.352	5.379	5.406	5.433
55	5.460	5.488	5.517	5.546
56	5.574	5.604	5.634	5.665
57	5.695	5.728	5.758	5.790
58	5.822	5.856	5.890	5.923
59	5.957	5.993	6.029	6.065
60	6.101	6.139	6.177	6.215
61	6.253	6.294	6.334	6.374
62	6.415	6.458	6.501	6.544
63	6.587	6.633	6.678	6.724
64	6.770	6.818	6.867	6.916
65	6.964	7.016	7.067	7.118
66	7.170	7.225	7.280	7.335
67	7.390	7.448	7.507	7.566
68	7.624	7.686	7.749	7.812
69	7.874	7.940	8.007	8.074

46(y-3) 3-3/4%

TABLE 4 (Continued)

SERVICE RETIREMENT

AMOUNT OF MONTHLY LIFE ANNUITY PROVIDED BY \$1,000.00

3-3/4%

FEMALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
70	8.140	8.210	8.280	8.352
71	8.425	8.499	8.574	8.651
72	8.729	8.808	8.888	8.970
73	9.054	9.138	9.224	9.312
74	9.401	9.492	9.584	9.678
75	9.774	9.871	9.969	10.070
76	10.173	10.276	10.382	10.490
77	10.601	10.712	10.825	10.941
78	11.060	11.179	11.301	11.425
79	11.552	11.679	11.809	11.943
80	12.079	12.216	12.357	12.500

TABLE 5

SERVICE RETIREMENT

AMOUNT OF MONTHLY "CASH REFUND" ANNUITY PROVIDED BY \$1,000.00

3-3/4%

MALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
49	5.090	5.108	5.127	5.146
50	6.164	5.183	5.202	5.222
51	5.241	5.261	5.282	5.302
52	5.322	5.343	5.364	5.386
53	5.407	5.429	5.451	5.473
54	5.495	5.518	5.542	5.565
55	5.588	5.612	5.637	5.662
56	5.686	5.712	5.737	5.762
57	5.788	5.815	5.842	5.868
58	5.895	5.923	5.951	5.979
59	6.007	6.037	6.067	6.097
60	6.127	6.158	6.189	6.220
61	6.251	6.284	6.316	6.348
62	6.381	6.415	6.450	6.484
63	6.518	6.555	6.592	6.628
64	6.665	6.702	6.740	6.778
65	6.815	6.855	6.895	6.935
66	6.975	7.018	7.060	7.102
67	7.145	7.190	7.234	7.278
68	7.323	7.369	7.416	7.462
69	7.508	7.558	7.608	7.657
70	7.707	7.760	7.814	7.867
71	7.920	7.974	8.028	8.082
72	8.136	8.194	8.252	8.310
73	8.368	8.430	8.492	8.555
74	8.617	8.682	8.748	8.814
75	8.879	8.946	9.014	9.082
76	9.149	9.222	9.296	9.370
77	9.443			

TABLE 6

SERVICE RETIREMENT

AMOUNT OF MONTHLY "CASH REFUND" ANNUITY PROVIDED BY \$1,000.00

3-3/4%

FEMALE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
50	4.673	4.689	4.705	4.721
51	4.737	4.754	4.770	4.787
52	4.803	4.820	4.838	4.856
53	4.873	4.892	4.910	4.928
54	4.947	4.966	4.986	5.005
55	5.024	5.044	5.064	5.085
56	5.105	5.126	5.147	5.168
57	5.189	5.211	5.233	5.255
58	5.277	5.300	5.324	5.347
59	5.370	5.394	5.418	5.442
60	5.466	5.492	5.517	5.543
61	5.568	5.595	5.622	5.648
62	5.675	5.703	5.731	5.759
63	5.787	5.816	5.845	5.874
64	5.903	5.934	5.965	5.995
65	6.026	6.059	6.091	6.124
66	6.156	6.190	6.224	6.257
67	6.291	6.326	6.362	6.398
68	6.433	6.471	6.508	6.546
69	6.584	6.624	6.663	6.702
70	6.742	6.783	6.825	6.866
71	6.907	6.951	6.994	7.038
72	7.082	7.129	7.176	7.222
73	7.269	7.317	7.364	7.412
74	7.460	7.511	7.562	7.614
75	7.665	7.720	7.775	7.829
76	7.884	7.940	7.997	8.054
77	8.110	8.170	8.230	8.289
78	8.349	8.414	8.478	8.543
79	8.608			

46(y-3) 3-3/4%

TABLE 7

TWO MALE LIVES OR TWO FEMALE LIVES

Number Of Years To Be Added To The Younger Age To Determine
The Joint Equal Ages Corresponding To Two Joint Lives

Difference of Age, Years	Addition to Younger Age, Years	Difference of Age, Years	Addition to Younger Age, Years
1	.511	25	18.298
2	1.044	26	19.201
3	1.598	27	20.112
4	2.174	28	21.029
		29	21.953
5	2.772		
6	3.390	30	22.883
7	4.028	31	23.818
8	4.687	32	24.759
9	5.365	33	25.704
		34	26.653
10	6.062		
11	6.777	35	27.607
12	7.509	36	28.564
13	8.258	37	29.525
14	9.024	38	30.489
		39	31.456
15	9.804		
16	10.600	40	32.425
17	11.409	41	33.397
18	12.231	42	34.371
19	13.066	43	35.348
		44	36.326
20	13.913		
21	14.770	45	37.306
22	15.638	46	38.288
23	16.516	47	39.271
24	17.403	48	40.256
		49	41.242
		50	42.229

TABLE 8

ONE MALE LIFE AND ONE FEMALE LIFE, WITH THE MALE THE OLDER

Number Of Years To Be Added To The Younger Age To Determine
The Joint Equal Ages Corresponding To Two Joint Lives

<u>Difference of Age, Years</u>	<u>Addition to Younger Age, Years</u>	<u>Difference of Age, Years</u>	<u>Addition to Younger Age, Years</u>
0	-1.852	25	18.068
1	-1.245	26	19.001
2	-.619	27	19.938
3	.029	28	20.880
4	.695	29	21.828
5	1.381	30	22.779
6	2.085	31	23.734
7	2.808	32	24.693
8	3.547	33	25.655
9	4.304	34	26.620
10	5.076	35	27.588
11	5.862	36	28.558
12	6.663	37	29.531
13	7.479	38	30.507
14	8.306	39	31.484
15	9.146	40	32.463
16	9.997	41	33.444
17	10.859	42	34.426
18	11.731	43	35.410
19	12.613	44	36.395
20	13.503	45	37.382
21	14.402	46	38.369
22	15.308	47	39.358
23	16.222	48	40.347
24	17.142		

TABLE 8(a)

ONE MALE LIFE AND ONE FEMALE LIFE, WITH THE MALE THE OLDER

Number of Years To Be Added To The Younger Age To Determine
The Joint Equal Ages Corresponding To Two Joint Lives

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
0	-1.852	-1.700	-1.548	-1.397
1	-1.245	-1.089	-.932	-.776
2	-.619	-.457	-.295	-.133
3	.029	.196	.362	.528
4	.695	.866	1.038	1.210
5	1.381	1.557	1.733	1.909
6	2.085	2.266	2.446	2.627
7	2.808	2.993	3.178	3.362
8	3.547	3.736	3.926	4.115
9	4.304	4.497	4.690	4.883
10	5.076	5.272	5.469	5.666
11	5.862	6.062	6.262	6.463
12	6.663	6.867	7.071	7.275
13	7.479	7.686	7.892	8.099
14	8.306	8.516	8.726	8.936
15	9.146	9.359	9.572	9.784
16	9.997	10.212	10.428	10.644
17	10.859	11.077	11.295	11.513
18	11.731	11.952	12.172	12.392
19	12.613	12.836	13.058	13.280
20	13.503	13.728	13.952	14.177
21	14.402	14.628	14.855	15.082
22	15.308	15.536	15.765	15.994
23	16.222	16.452	16.682	16.912
24	17.142	17.374	17.605	17.836
25	18.068	18.301	18.534	18.768
26	19.001	19.235	19.470	19.704
27	19.938	20.174	20.409	20.644
28	20.880	21.117	21.354	21.591
29	21.828	22.066	22.304	22.541
30	22.779	23.018	23.256	23.495

TABLE 9

ONE MALE LIFE AND ONE FEMALE LIFE, WITH THE FEMALE THE OLDER

Number Of Years To Be Added To The Younger Age To Determine
The Joint Equal Ages Corresponding To Two Joint Lives

<u>Difference of Age, Years</u>	<u>Addition to Younger Age, Years</u>	<u>Difference of Age, Years</u>	<u>Addition to Younger Age, Years</u>
0	-1.852	25	14.555
1	-1.436	26	15.419
2	-1.000	27	16.293
3	- .542	28	17.176
4	- .062	29	18.068
5	.440	30	18.968
6	.964	31	19.875
7	1.509	32	20.790
8	2.076	33	21.711
9	2.664	34	22.638
10	3.274	35	23.572
11	3.904	36	24.510
12	4.554	37	25.453
13	5.224	38	26.401
14	5.913	39	27.353
15	6.621	40	28.308
16	7.345	41	29.268
17	8.088	42	30.230
18	8.847	43	31.196
19	9.621	44	32.164
20	10.410	45	33.135
21	11.214	46	34.109
22	12.031	47	35.084
23	12.861	48	36.062
24	13.703	49	37.041
		50	38.022
		51	39.005
		52	39.989

TABLE 9(a)

ONE MALE LIFE AND ONE FEMALE LIFE, WITH THE FEMALE THE OLDER

Number of Years To Be Added To The Younger Age To Determine
The Joint Equal Ages Corresponding To Two Joint Lives

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
0	-1.852	-1.748	-1.644	-1.540
1	-1.436	-1.327	-1.218	-1.109
2	-1.000	- .886	- .771	- .656
3	- .542	- .422	- .302	- .182
4	- .062	.064	.189	.314
5	.440	.571	.702	.833
6	.964	1.100	1.236	1.373
7	1.509	1.651	1.792	1.934
8	2.076	2.223	2.370	2.517
9	2.664	2.816	2.969	3.122
10	3.274	3.432	3.589	3.746
11	3.904	4.066	4.229	4.392
12	4.554	4.722	4.889	5.056
13	5.224	5.396	5.568	5.741
14	5.913	6.090	6.267	6.444
15	6.621	6.802	6.983	7.164
16	7.345	7.531	7.716	7.902
17	8.088	8.278	8.468	8.657
18	8.847	9.040	9.234	9.428
19	9.621	9.818	10.016	10.213
20	10.410	10.611	10.812	11.013
21	11.214	11.418	11.622	11.827
22	12.031	12.238	12.446	12.654
23	12.861	13.072	13.282	13.492
24	13.703	13.916	14.129	14.342
25	14.555	14.771	14.987	15.203
26	15.419	15.638	15.856	16.074
27	16.293	16.514	16.734	16.955
28	17.176	17.399	17.622	17.845
29	18.068	18.293	18.518	18.743
30	18.968	19.195	19.422	19.648

46(x-1)(y-3)

TABLE 10

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

2 MALE LIVES

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
21	234.888	234.276	233.664	233.052
22	232.440	231.813	231.186	230.559
23	229.932	229.281	228.630	227.979
24	227.328	226.653	225.978	225.303
25	224.628	223.929	223.230	222.531
26	221.832	221.106	220.380	219.654
27	218.928	218.169	217.410	216.651
28	215.892	215.106	214.320	213.534
29	212.748	211.929	211.110	210.291
30	209.472	208.626	207.780	206.934
31	206.088	205.209	204.330	203.451
32	202.572	201.666	200.760	199.854
33	198.948	198.012	197.076	196.140
34	195.204	194.241	193.278	192.315
35	191.352	190.368	189.384	188.400
36	187.416	186.429	185.442	184.455
37	183.468	182.484	181.500	180.516
38	179.532	178.554	177.576	176.598
39	175.620	174.651	173.682	172.713
40	171.744	170.790	169.836	168.882
41	167.928	166.986	166.044	165.102
42	164.160	163.230	162.300	161.370
43	160.440	159.525	158.610	157.695
44	156.780	155.871	154.962	154.053
45	153.144	152.250	151.356	150.462
46	149.568	148.653	147.738	146.823
47	145.908	145.002	144.096	143.190
48	142.284	141.411	140.538	139.665
49	138.792	137.949	137.106	136.263
50	135.420	134.613	133.806	132.999
51	132.192	131.397	130.602	129.807
52	129.012	128.211	127.410	126.609
53	125.808	124.995	124.182	123.369
54	122.556	121.734	120.912	120.090

46(x-1) 3-3/4%

TABLE 10 (Continued)

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

2 MALE LIVES

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
55	119.268	118.437	117.606	116.775
56	115.944	115.110	114.276	113.442
57	112.608	111.765	110.922	110.079
58	109.236	108.393	107.550	106.707
59	105.864	105.018	104.172	103.326
60	102.480	101.631	100.782	99.933
61	99.084	98.235	97.386	96.537
62	95.688	94.845	94.002	93.159
63	92.316	91.473	90.630	89.787
64	88.944	88.107	87.270	86.433
65	85.596	84.762	83.928	83.094
66	82.260	81.438	80.616	79.794
67	78.972	78.156	77.340	76.524
68	75.708	74.907	74.106	73.305
69	72.504	71.712	70.920	70.128
70	69.336	68.556	67.776	66.996
71	66.216	65.454	64.692	63.930
72	63.168	62.418	61.668	60.918
73	60.168	59.439	58.710	57.981
74	57.252	56.538	55.824	55.110
75	54.396	53.703	53.010	52.317
76	51.624	50.952	50.280	49.608
77	48.936	48.282	47.628	46.974
78	46.320	45.690	45.060	44.430
79	43.800	43.191	42.582	41.973
80	41.364	40.776	40.188	39.600
81	39.012	38.448	37.884	37.320
82	36.756	36.216	35.676	35.136
83	34.596	34.080	33.564	33.048
84	32.532	32.037	31.542	31.047
85	30.552	30.081	29.610	29.139
86	28.668	28.221	27.774	27.327
87	26.880	26.457	26.034	25.611
88	25.188	24.786	24.384	23.982
89	23.580	23.199	22.818	22.437
90	22.056	21.699	21.342	20.985
91	20.628			

TABLE 11
PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

2 FEMALES

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
23	245.880	245.352	244.824	244.296
24	243.768	243.225	242.682	242.139
25	241.596	241.041	240.486	239.931
26	239.376	238.803	238.230	237.657
27	237.084	236.496	235.908	235.320
28	234.732	234.126	233.520	232.914
29	232.308	231.684	231.060	230.436
30	229.812	229.164	228.516	227.868
31	227.220	226.548	225.876	225.204
32	224.532	223.833	223.134	222.435
33	221.736	221.010	220.284	219.558
34	218.832	218.073	217.314	216.555
35	215.796	215.013	214.230	213.447
36	212.664	211.848	211.032	210.216
37	209.400	208.566	207.732	206.898
38	206.064	205.233	204.402	203.571
39	202.740	201.912	201.084	200.256
40	199.428	198.606	197.784	196.962
41	196.140	195.324	194.508	193.692
42	192.876	192.066	191.256	190.446
43	189.636	188.832	188.028	187.224
44	186.420	185.625	184.830	184.035
45	183.240	182.448	181.656	180.864
46	180.072	179.283	178.494	177.705
47	176.916	176.133	175.350	174.567
48	173.784	173.013	172.242	171.471
49	170.700	169.932	169.164	168.396
50	167.628	166.848	166.068	165.288
51	164.508	163.695	162.882	162.069
52	161.256	160.395	159.534	158.673
53	157.812	156.834	155.856	154.878
54	153.900	152.916	151.932	150.948

46(y-3) 3-3/4%

TABLE 11 (Continued)

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

2 FEMALES

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
55	149.964	148.971	147.978	146.985
56	145.992	144.990	143.988	142.986
57	141.984	140.979	139.974	138.969
58	137.964	136.953	135.942	134.931
59	133.920	132.906	131.892	130.878
60	129.864	128.850	127.836	126.822
61	125.808	124.791	123.774	122.757
62	121.740	120.726	119.712	118.698
63	117.684	116.673	115.662	114.651
64	113.640	112.632	111.624	110.616
65	109.608	108.609	107.610	106.611
66	105.612	104.619	103.626	102.633
67	101.640	100.653	99.666	98.679
68	97.692	96.720	95.748	94.776
69	93.804	92.841	91.878	90.915
70	89.952	89.004	88.056	87.108
71	86.160	85.224	84.288	83.352
72	82.416	81.501	80.586	79.671
73	78.756	77.856	76.956	76.056
74	75.156	74.274	73.392	72.510
75	71.628	70.770	69.912	69.054
76	68.196	67.356	66.516	65.676
77	64.836	64.020	63.204	62.388
78	61.572	60.777	59.982	59.187
79	58.392	57.624	56.856	56.088
80	55.320	54.573	53.826	53.079
81	52.332	51.615	50.898	50.181
82	49.464	48.771	48.078	47.385
83	46.692	46.023	45.354	44.685
84	44.016	43.377	42.738	42.099
85	41.460	40.845	40.230	39.615
86	39.000	38.412	37.824	37.236
87	36.648	36.090	35.532	34.974
88	34.416	33.882	33.348	32.814
89	32.280	31.773	31.266	30.759
90	30.252	29.769	29.286	28.803
91	28.320	27.864	27.408	26.952
92	26.496	26.067	25.638	25.209
93:	24.780			

TABLE 12

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%1 MALE LIFE, 1 FEMALE LIFE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
20	239.952	239.379	238.806	238.233
21	237.660	237.072	236.484	235.896
22	235.308	234.699	234.090	233.481
23	232.872	232.245	231.618	230.991
24	230.364	229.713	229.062	228.411
25	227.760	227.091	226.422	225.753
26	225.084	224.388	223.692	222.996
27	222.300	221.574	220.848	220.122
28	219.396	218.646	217.896	217.146
29	216.396	215.616	214.836	214.056
30	213.276	212.469	211.662	210.855
31	210.048	209.208	208.368	207.528
32	206.688	205.821	204.954	204.087
33	203.220	202.326	201.432	200.538
34	199.644	198.729	197.814	196.899
35	195.984	195.066	194.148	193.230
36	192.312	191.400	190.488	189.576
37	188.664	187.755	186.846	185.937
38	185.028	184.128	183.228	182.328
39	181.428	180.540	179.652	178.764
40	177.876	176.994	176.112	175.230
41	174.348	173.478	172.608	171.738
42	170.868	170.007	169.146	168.285
43	167.424	166.572	165.720	164.868
44	164.016	163.170	162.324	161.478
45	160.632	159.780	158.928	158.076
46	157.224	156.384	155.544	154.704
47	153.864	153.030	152.196	151.362
48	150.528	149.700	148.872	148.044
49	147.216	146.382	145.548	144.714
50	143.880	143.004	142.128	141.252
51	140.376	139.491	138.606	137.721
52	136.836	135.939	135.042	134.145
53	133.248	132.345	131.442	130.539
54	129.636	128.727	127.818	126.909
55	126.000	125.085	124.170	123.255
56	122.340	121.419	120.498	119.577
57	118.656	117.735	116.814	115.893
58	114.972	114.048	113.124	112.200
59	111.276	110.352	109.428	108.504

46(x-0)(y-0) 3-3/4%

TABLE 12 (Continued)

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

1 MALE LIFE, 1 FEMALE LIFE

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
60	107.580	106.656	105.732	104.808
61	103.884	102.966	102.048	101.130
62	100.212	99.297	98.382	97.467
63	96.552	95.643	94.734	93.825
64	92.916	92.013	91.110	90.207
65	89.304	88.413	87.522	86.631
66	85.740	84.858	83.976	83.094
67	82.212	81.339	80.466	79.593
68	78.720	77.865	77.010	76.155
69	75.300	74.457	73.614	72.771
70	71.928	71.103	70.278	69.453
71	68.628	67.818	67.008	66.198
72	65.388	64.599	63.810	63.021
73	62.232	61.461	60.690	59.919
74	59.148	58.398	57.648	56.898
75	56.148	55.419	54.690	53.961
76	53.232	52.527	51.822	51.117
77	50.412	49.728	49.044	48.360
78	47.676	47.016	46.356	45.696
79	45.036	44.400	43.764	43.128
80	42.492	41.883	41.274	40.665
81	40.056	39.468	38.880	38.292
82	37.704	37.143	36.582	36.021
83	35.460	34.923	34.386	33.849
84	33.312	32.802	32.292	31.782
85	31.272	30.786	30.300	29.814
86	29.328	28.863	28.398	27.933
87	27.468	27.030	26.592	26.154
88	25.716	25.302	24.888	24.474
89	24.060	23.670	23.280	22.890
90	22.500	22.131	21.762	21.393
91	21.024	20.679	20.334	19.989
92	19.644	19.320	18.996	18.672
93	18.348	18.045	17.742	17.439
94	17.136	16.854	16.572	16.290
95	16.008	15.744	15.480	15.216
96	14.952	14.709	14.466	14.223
97	13.980	13.752	13.524	13.296
98	13.068	12.861	12.654	12.447
99	12.240	12.048	11.856	11.664
100	11.472			

TABLE 13

SERVICE RETIREMENT

100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES

3-3/4%

Age of Female

<u>Age of Male</u>	<u>35</u>	<u>36</u>	<u>37</u>	<u>38</u>	<u>39</u>
55	251.2092	249.2434	247.2775	245.3117	243.3458
56		248.9496	246.8534	244.7573	242.6611
57			246.1128	244.0855	242.0582
58				244.3032	242.1314
59					241.9380
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					

TABLE 13 (Continued)

SERVICE RETIREMENT

100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES

3-3/4%

Age of Female

<u>Age of Male</u>	<u>40</u>	<u>41</u>	<u>42</u>	<u>43</u>	<u>44</u>
55	241.3800	239.2850	237.1901	235.0951	233.0002
56	240.5650	238.4688	236.4319	234.3950	232.3582
57	240.0310	238.0037	235.9764	233.7907	231.6050
58	239.9597	237.7879	235.6162	233.4444	231.2174
59	239.7281	237.5182	235.3082	233.0983	230.8884
60	239.0352	236.8901	234.7450	232.5998	230.4547
61		236.5812	234.2765	231.9718	229.6670
62			234.1128	231.7654	229.4179
63				231.6204	229.2300
64					229.1076
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					

TABLE 13 (Continued)

SERVICE RETIREMENT

100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES

<u>Age of Male</u>	<u>Age of Female</u>				
	<u>45</u>	<u>46</u>	<u>47</u>	<u>48</u>	<u>49</u>
55	230.9052	228.8026	226.6999	224.5973	222.4964
56	230.3213	228.2844	226.1366	223.9889	221.8411
57	229.4194	227.2337	225.0480	222.8374	220.6267
58	228.9905	226.7635	224.5366	222.3096	220.0421
59	228.6204	226.3524	224.0844	221.8164	219.5484
60	228.3096	225.9979	223.6862	221.3746	219.0629
61	227.3623	225.0576	222.6809	220.3042	217.9274
62	227.0705	224.7230	222.3756	219.9463	217.5170
63	226.8396	224.4492	222.0588	219.6684	217.1827
64	226.6774	224.2471	221.8169	219.3866	216.9564
65	225.8604	223.3642	220.8679	218.3717	215.8754
66		223.2588	220.7153	218.1718	215.6282
67			220.6428	218.0484	215.4540
68				218.0100	215.1595
69					214.4484
70					
71					
72					
73					
74					

TABLE 13 (Continued)

SERVICE RETIREMENT

100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES

3-3/4%

Age of Female

<u>Age of Male</u>	<u>50</u>	<u>51</u>	<u>52</u>	<u>53</u>	<u>54</u>
55	220.3920	218.2603	216.1286	213.9970	211.8653
56	219.6934	217.5456	215.3539	213.1622	210.9706
57	218.4161	216.2054	213.9948	211.7213	209.4478
58	217.7746	215.5070	213.2395	210.9720	208.6507
59	217.2094	214.8703	212.5313	210.1922	207.8532
60	216.7512	214.3459	211.9406	209.5354	207.1301
61	215.5507	213.1740	210.6746	208.1753	205.6759
62	215.0878	212.6585	210.2292	207.6701	205.1110
63	214.6970	212.2114	209.7257	207.2400	204.6317
64	214.2166	211.4767	208.7369	205.9970	203.2572
65	213.3792	210.7198	208.0603	205.4009	202.7414
66	213.0847	210.5412	207.8155	205.0898	202.3642
67	212.8596	210.2652	207.6708	204.8880	202.1052
68	212.3090	209.4586	206.6081	203.7576	200.8771
69	211.6944	208.9404	206.1864	203.4324	200.6784
70	211.7292	208.9044	206.0796	203.2548	200.4300
71		208.9812	206.0952	203.2092	200.3232
72			206.2116	202.9987	199.7858
73				202.2240	199.1810
74					199.2540

TABLE 13 (Continued)

SERVICE RETIREMENT100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES3-3/4%Age of Female

<u>Age of Male</u>	<u>55</u>	<u>56</u>	<u>57</u>	<u>58</u>	<u>59</u>
55	209.7336	207.6720	205.6104	203.5488	201.4872
56	208.7789	206.5872	204.5038	202.4203	200.3369
57	207.1742	204.9007	202.6272	200.6854	198.7435
58	206.3294	204.0082	201.6869	199.3656	197.2073
59	205.5010	203.1487	200.7965	198.4442	196.0920
60	204.7248	202.3454	199.9661	197.5867	195.2074
61	203.1766	200.6772	198.2318	195.7865	193.3411
62	202.5518	199.9927	197.4336	194.9640	192.4944
63	202.0234	199.4150	196.8067	194.1984	191.7084
64	200.5735	197.8898	195.2062	192.5225	189.8388
65	200.0820	197.3674	194.6527	191.9381	189.2234
66	199.6385	196.9128	194.1706	191.4283	188.6861
67	199.3224	196.5396	193.7568	190.7105	187.6642
68	197.9966	195.1162	192.2357	189.3552	186.5131
69	197.7653	194.8522	191.9390	189.0259	186.1128
70	197.6052	194.6652	191.7252	188.7852	185.8452
71	197.4372	194.5512	191.2776	188.0040	184.7304
72	196.5730	193.3601	190.1472	187.0999	184.0526
73	196.1381	193.0951	190.0522	187.0092	183.9461
74	196.1856	193.1172	190.0488	186.9804	183.9120

TABLE 13 (Continued)

SERVICE RETIREMENT

100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES

3-3/4%

Age of Female

<u>Age of Male</u>	<u>60</u>	<u>61</u>	<u>62</u>	<u>63</u>	<u>64</u>
55	199.4256	197.5915	195.7574	193.9234	192.0893
56	198.2534	196.1700	194.3287	192.4874	190.6462
57	196.8017	194.8599	192.9180	191.0731	189.2282
58	195.0490	192.8906	190.7323	188.5740	186.9490
59	193.9186	191.7451	189.5717	187.3982	185.2248
60	192.8280	190.6426	188.4571	186.2717	184.0862
61	190.8958	188.4504	186.2086	183.9667	181.7249
62	190.0248	187.5552	185.0856	182.8361	180.5866
63	189.2184	186.7284	184.2384	181.7484	179.4943
64	187.2821	184.7254	182.1686	179.6119	177.0552
65	186.5088	183.9358	181.3627	178.7897	176.2166
66	185.9438	183.2016	180.6197	178.0378	175.4558
67	184.6178	181.5715	178.5252	175.8761	173.2270
68	183.6710	180.8290	177.9869	175.1448	172.4890
69	183.2542	180.3955	177.5369	174.6782	171.8196
70	182.9052	179.6887	176.4722	173.2558	170.0393
71	181.4568	178.1832	175.2350	172.2869	169.3387
72	181.0054	177.9581	174.9108	171.9581	169.0054
73	180.8830	177.8198	174.7567	171.6936	168.3204
74	180.4594	177.0067	173.5541	170.1014	166.6488

TABLE 13 (Continued)

SERVICE RETIREMENT100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES3-3/4%Age of Female

<u>Age of Male</u>	<u>65</u>	<u>66</u>	<u>67</u>	<u>68</u>	<u>69</u>
55	190.2552				
56	188.8049	186.9636			
57	187.3834	185.5385	183.6936		
58	185.3239	183.6989	182.0738	180.4488	
59	183.3338	181.4429	179.5519	177.6610	175.7700
60	181.9008	180.0106	178.1203	176.2301	174.3398
61	179.4830	177.2412	175.6303	174.0194	172.4086
62	178.3370	176.0875	173.8380	171.9094	169.9807
63	177.2402	174.9862	172.7321	170.4780	168.5590
64	174.7454	172.4357	170.1259	167.8162	165.5064
65	173.6436	171.3331	169.0226	166.7122	164.4017
66	172.8739	170.2920	167.9832	165.6744	163.3656
67	170.5778	167.9287	165.2796	162.9151	160.5506
68	169.8331	167.1773	164.5214	161.8656	159.5102
69	169.1626	166.5055	163.8485	161.1914	158.5344
70	166.8228	164.0988	161.3748	158.6508	155.9268
71	166.3906	163.4424	160.7227	158.0030	155.2834
72	166.0526	163.0999	160.1472	157.4364	154.7256
73	164.9472	161.5740	158.2008	154.8276	152.0508
74	163.6188	160.5888	157.5588	154.5288	151.4988

TABLE 13 (Continued)

SERVICE RETIREMENT

100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES

3-3/4%

Age of Female

<u>Age of Male</u>	<u>70</u>	<u>71</u>	<u>72</u>	<u>73</u>	<u>74</u>
55					
56					
57					
58					
59					
60	172.4496				
61	170.7977	169.1868			
62	168.0521	166.1234	164.1948		
63	166.6399	164.7209	162.8018	160.8828	
64	163.9349	162.3634	160.7918	159.2203	157.6488
65	162.0912	160.1395	158.1878	156.2362	154.2845
66	161.0568	158.7480	156.8114	154.8749	152.9383
67	158.1862	155.8217	153.4572	151.9476	150.4380
68	157.1549	154.7995	152.4442	150.0888	148.1263
69	156.1918	153.8491	151.5065	149.1638	146.8212
70	153.2028	150.8054	148.4081	146.0107	143.6134
71	152.5637	149.8440	147.4637	145.0834	142.7030
72	152.0148	149.3040	146.5932	144.2345	141.8758
73	149.2740	146.4972	143.7204	140.9436	138.5316
74	148.7374	145.9759	143.2145	140.4530	137.6916

46(x-1)(y-3) 3-3/4%

TABLE 13 (Continued)

SERVICE RETIREMENT

100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES

3-3/4%

Age of Female

<u>Age of Male</u>	<u>75</u>	<u>76</u>	<u>77</u>	<u>78</u>	<u>79</u>
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65	152.3328				
66	151.0018	149.0652			
67	148.9284	147.4188	145.9092		
68	146.1638	144.2014	142.2389	140.2764	
69	144.8801	142.9390	140.9978	139.0567	137.1156
70	141.2160	139.2338	137.2517	135.2695	133.2874
71	140.3227	137.9424	135.9806	134.0189	132.0571
72	139.5170	137.1583	134.7996	132.8621	130.9246
73	136.1196	133.7076	131.2956	128.8836	127.5576
74	135.3034	132.9151	130.5269	128.1386	125.7504

TABLE 13 (Continued)

SERVICE RETIREMENT

100% JOINT AND SURVIVOR CASH REFUND ANNUITY VALUES

3-3/4%

Age of Female

<u>Age of Male</u>	<u>80</u>	<u>81</u>	<u>82</u>	<u>83</u>	<u>84</u>
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70	131.3052				
71	130.0954	128.1336			
72	128.9870	127.0495	125.1120		
73	126.2316	124.9056	123.5796	122.2536	
74	123.7992	121.8480	119.8968	117.9456	115.9944

TABLE 14

DISABILITY RETIREMENT - MALE OR FEMALE

PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
25	163.728	163.869	164.010	164.151
26	164.292	164.277	164.262	164.247
27	164.232	164.112	163.992	163.872
28	163.752	163.578	163.404	163.230
29	163.056	162.852	162.648	162.444
30	162.240	162.021	161.802	161.583
31	161.364	161.133	160.902	160.671
32	160.440	160.197	159.954	159.711
33	159.468	159.210	158.952	158.694
34	158.436	158.169	157.902	157.635
35	157.368	157.089	156.810	156.531
36	156.252	155.958	155.664	155.370
37	155.076	154.773	154.470	154.167
38	153.864	153.546	153.228	152.910
39	152.592	152.259	151.926	151.593
40	151.260	150.915	150.570	150.225
41	149.880	149.520	149.160	148.800
42	148.440	148.068	147.696	147.324
43	146.952	146.565	146.178	145.791
44	145.404	145.002	144.600	144.198
45	143.796	143.379	142.962	142.545
46	142.128	141.699	141.270	140.841
47	140.412	139.968	139.524	139.080
48	138.636	138.180	137.724	137.268
49	136.812	136.344	135.876	135.408
50	134.940	134.454	133.968	133.482
51	132.996	132.501	132.006	131.511
52	131.016	130.503	129.990	129.477
53	128.964	128.439	127.914	127.389
54	126.864	126.324	125.784	125.244
55	124.704	124.152	123.600	123.048
56	122.496	121.932	121.368	120.804
57	120.240	119.661	119.082	118.503
58	117.924	117.336	116.748	116.160
59	115.572	114.975	114.378	113.781
60	113.184	112.578	111.972	111.366
61	110.760	110.145	109.530	108.915
62	108.300	107.676	107.052	106.428
63	105.804	105.171	104.538	103.905
64	103.272	102.636	102.000	101.364
65	100.728			

TABLE 14(a)

DISABILITY RETIREMENT - MALE OR FEMALE
PRESENT VALUE OF \$1.00 PER MONTH FOR LIFE

3-3/4%

<u>Age</u>	
66	98.148
67	95.556
68	92.964
69	90.348
70	87.732
71	85.116
72	82.512
73	79.896
74	77.304
75	74.724
76	72.180
77	69.660
78	67.188
79	64.764
80	62.376
81	60.024
82	57.732
83	55.476
84	53.304
85	51.204
86	49.128
87	47.136
88	45.228
89	43.428
90	41.640
91	39.924
92	38.292
93	36.720
94	35.184
95	33.648
96	32.076
97	30.480
98	28.716
99	26.724
100	24.336

TABLE 15

DISABILITY RETIREMENT - MALE OR FEMALE

AMOUNT OF MONTHLY LIFE ANNUITY PROVIDED BY \$1,000.00

3-3/4%

<u>Age</u>	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
25	6.108	6.103	6.098	6.092
26	6.087	6.088	6.088	6.088
27	6.089	6.094	6.098	6.102
28	6.107	6.114	6.120	6.126
29	6.133	6.141	6.148	6.156
30	6.164	6.172	6.180	6.189
31	6.197	6.206	6.215	6.224
32	6.233	6.242	6.252	6.262
33	6.271	6.281	6.292	6.302
34	6.312	6.323	6.334	6.344
35	6.355	6.366	6.378	6.389
36	6.400	6.412	6.424	6.436
37	6.448	6.461	6.474	6.486
38	6.499	6.512	6.526	6.540
39	6.553	6.568	6.582	6.596
40	6.611	6.626	6.642	6.657
41	6.672	6.688	6.704	6.721
42	6.737	6.754	6.771	6.788
43	6.805	6.823	6.841	6.859
44	6.877	6.896	6.916	6.935
45	6.954	6.974	6.995	7.016
46	7.036	7.058	7.079	7.100
47	7.122	7.145	7.168	7.190
48	7.213	7.237	7.261	7.285
49	7.309	7.334	7.360	7.386
50	7.411	7.438	7.465	7.492
51	7.519	7.548	7.576	7.604
52	7.633	7.663	7.694	7.724
53	7.754	7.786	7.818	7.850
54	7.882	7.916	7.951	7.985
55	8.019	8.055	8.092	8.128
56	8.164	8.202	8.240	8.279
57	8.317	8.358	8.398	8.439
58	8.480	8.523	8.566	8.610
59	8.653	8.698	8.744	8.790
60	8.835	8.884	8.932	8.980
61	9.029	9.080	9.132	9.183
62	9.234	9.288	9.342	9.397
63	9.451	9.509	9.567	9.625
64	9.683	9.744	9.806	9.867
65	9.928			

TABLE 16

DISABILITY RETIREMENT - MALE OR FEMALE

AMOUNT OF MONTHLY "CASH REFUND" ANNUITY PROVIDED BY \$1,000.00

Age	<u>3-3/4%</u>			
	<u>Exact</u>	<u>1/4</u>	<u>1/2</u>	<u>3/4</u>
25	4.902	4.906	4.910	4.914
26	4.918	4.923	4.928	4.933
27	4.938	4.944	4.949	4.954
28	4.960	4.966	4.972	4.977
29	4.983	4.989	4.996	5.002
30	5.008	5.015	5.022	5.028
31	5.035	5.042	5.048	5.055
32	5.062	5.069	5.076	5.084
33	5.091	5.099	5.106	5.114
34	5.122	5.130	5.138	5.146
35	5.154	5.162	5.171	5.180
36	5.188	5.197	5.206	5.214
37	5.223	5.232	5.242	5.252
38	5.261	5.271	5.281	5.291
39	5.301	5.311	5.322	5.332
40	5.342	5.353	5.364	5.375
41	5.386	5.397	5.408	5.420
42	5.431	5.443	5.455	5.467
43	5.479	5.492	5.504	5.516
44	5.529	5.542	5.556	5.569
45	5.582	5.596	5.610	5.623
46	5.637	5.652	5.666	5.681
47	5.696	5.711	5.726	5.742
48	5.757	5.773	5.789	5.805
49	5.821	5.838	5.854	5.871
50	5.888	5.906	5.923	5.940
51	5.958	5.976	5.995	6.014
52	6.032	6.052	6.071	6.090
53	6.110	6.130	6.151	6.172
54	6.192	6.213	6.234	6.255
55	6.276	6.298	6.320	6.343
56	6.365	6.388	6.412	6.436
57	6.459	6.484	6.508	6.532
58	6.557	6.583	6.610	6.636
59	6.662	6.688	6.715	6.742
60	6.768	6.796	6.824	6.852
61	6.880	6.910	6.939	6.968
62	6.998	7.030	7.061	7.092
63	7.124	7.157	7.190	7.223
64	7.256	7.290	7.323	7.356
65	7.390			

TABLE 17

DISABILITY RETIREMENT

JOINT ANNUITY VALUES FOR \$1.00 PER MONTH

DISABLED MEMBER WITH FEMALE BENEFICIARY

3-3/4%

Female Beneficiary is

<u>Age of Member</u>	<u>Same Age</u>	<u>5 Years Younger</u>	<u>10 Years Younger</u>	<u>15 Years Younger</u>	<u>20 Years Younger</u>	<u>25 Years Younger</u>
25	156.444					
26	156.756					
27	156.432					
28	155.724					
29	154.788					
30	153.732	155.652				
31	152.592	154.608				
32	151.392	153.516				
33	150.108	152.364	153.912			
34	148.764	151.176	152.772			
35	147.348	149.916	151.584			
36	145.848	148.596	150.348			
37	144.276	147.216	149.064			
38	142.644	145.764	147.720	149.040		
39	140.964	144.240	146.328	147.696		
40	139.260	142.632	144.864	146.292		
41	137.520	140.952	143.340	144.840		
42	135.744	139.200	141.756	143.316		
43	133.944	137.376	140.088	141.756	142.848	
44	132.120	135.504	138.360	140.124	141.264	
45	130.260	133.608	136.548	138.444	139.620	
46	128.376	131.688	134.652	136.692	137.916	
47	126.468	129.732	132.696	134.868	136.164	
48	124.524	127.740	130.668	132.984	134.352	135.240
49	122.568	125.736	128.604	131.028	132.492	133.392

43-46(y-3) 3-3/4%

TABLE 17 (Continued)

DISABILITY RETIREMENT

JOINT ANNUITY VALUES FOR \$1.00 PER MONTH

DISABLED MEMBER WITH FEMALE BENEFICIARY

3-3/4%

Female Beneficiary is

<u>Age of Member</u>	<u>Same Age</u>	<u>5 Years Younger</u>	<u>10 Years Younger</u>	<u>15 Years Younger</u>	<u>20 Years Younger</u>	<u>25 Years Younger</u>
50	120.600	123.696	126.516	129.000	130.560	131.508
51	118.572	121.644	124.404	126.912	128.580	129.564
52	116.484	119.556	122.256	124.740	126.540	127.572
53	114.288	117.444	120.072	122.508	124.428	125.508
54	111.888	115.320	117.864	120.240	122.244	123.408
55	109.452	113.160	115.632	117.936	119.988	121.236
56	106.956	110.976	113.388	115.608	117.672	119.016
57	104.436	108.720	111.108	113.268	115.296	116.748
58	101.868	106.380	108.816	110.880	112.860	114.408
59	99.264	103.848	106.512	108.492	110.388	112.008
60	96.636	101.304	104.196	106.080	107.904	109.560
61	93.996	98.724	101.868	103.668	105.420	107.076
62	91.332	96.120	99.480	101.244	102.912	104.532
63	88.644	93.492	97.032	98.808	100.392	101.952
64	85.956	90.840	94.428	96.384	97.860	99.348
65	83.256	88.188	91.824	93.972	95.352	96.756

TABLE 17 (Continued)

DISABILITY RETIREMENT

JOINT ANNUITY VALUES FOR \$1.00 PER MONTH

DISABLED MEMBER WITH FEMALE BENEFICIARY

3-3/4%

Female Beneficiary is

<u>Age of Member</u>	<u>Same Age</u>	<u>5 Years Older</u>	<u>10 Years Older</u>
50	120.600	116.052	109.332
51	118.572	113.688	106.824
52	116.484	111.264	104.268
53	114.288	108.792	101.664
54	111.888	106.284	99.036
55	109.452	103.728	96.372
56	106.956	101.136	93.672
57	104.436	98.520	90.960
58	101.868	95.856	88.224
59	99.264	93.180	85.476
60	96.636	90.480	82.716
61	93.996	87.768	79.968
62	91.332	85.044	77.208
63	88.644	82.308	74.460
64	85.956	79.584	71.736
65	83.256	76.860	69.024

43-46(y-3) 3-3/4%

TABLE 18

DISABILITY RETIREMENT

JOINT ANNUITY VALUES FOR \$1.00 PER MONTH

DISABLED MEMBER WITH MALE BENEFICIARY

3-3/4%

Male Beneficiary is

<u>Age of Member</u>	<u>Same Age</u>	<u>5 Years Older</u>
25	153.492	149.916
26	153.612	149.748
27	153.084	148.944
28	152.148	147.732
29	150.972	146.280
30	149.652	144.684
31	148.236	142.980
32	146.736	141.228
33	145.152	139.428
34	143.484	137.604
35	141.732	135.744
36	139.920	133.860
37	138.048	131.964
38	136.128	130.032
39	134.184	128.076
40	132.204	126.096
41	130.200	124.092
42	128.172	122.016
43	126.120	119.916
44	124.044	117.816
45	121.944	115.740
46	119.820	113.676
47	117.624	111.612
48	115.416	109.488
49	113.208	107.316

TABLE 18 (Continued)

DISABILITY RETIREMENT

JOINT ANNUITY VALUES FOR \$1.00 PER MONTH

DISABLED MEMBER WITH MALE BENEFICIARY

3-3/4%

Male Beneficiary is

<u>Age of Member</u>	<u>Same Age</u>	<u>5 Years Older</u>
50	111.024	105.096
51	108.864	102.840
52	106.692	100.524
53	104.472	98.160
54	102.204	95.772
55	99.888	93.336
56	97.536	90.864
57	95.148	88.368
58	92.712	85.848
59	90.252	83.304
60	87.768	80.748
61	85.260	78.180
62	82.740	75.612
63	80.208	73.032
64	77.664	70.464
65	75.120	67.908