

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
1968 REPORTS**

**REPORT OF THE COMMITTEE ON  
GROUP ANNUITIES**

**GROUP ANNUITY MORTALITY**

**T**HE current report is limited to a study of the experience of single life matured annuities under Group Annuity contracts. For males the mortality experience is compared with the *Ga*-1951 Male Table (without Projection), and in Tables 1, 2, and 3 it is also compared with the *Ga*-1951 Male Table (with Projection C) to 1967. The Committee believes that few, if any, companies are using the *Ga*-1951 Female Table. Accordingly, the first set of female statistics for each table is on the same basis as for males except that ages have been set back five years. The second set of statistics for females in each table is related to the *Ga*-1951 Female Table (without Projection), which is the basis that has been used in prior years. No statistics with Projection are shown as part of the second set, since in prior years these portions of Tables 1, 2, and 3 have always been based on the Male Table with ages set back five years. The female statistics are shown on the two bases this year for comparative purposes only. In the future, experience for females will be shown only on the basis of the appropriate male table with ages set back five years.

Any experience reported in 1967 which actually occurred in 1966 and prior years is reflected in the tables in the appropriate years.

Tables 1, 2, and 3 show the experience for the year 1967 by attained five-year age groups for lives retiring on or after normal retirement date, for lives retiring prior to normal retirement date, and for lives retiring under plans having no stated normal retirement date, respectively.

Tables 4, 5, and 6 compare the experience for the year 1967 with corresponding experience for other periods for categories analogous to those shown in Tables 1, 2 and 3, respectively.

Please note that, for purposes of better comparison, in Tables 4, 5, and 6 experience for 1961-65 is shown on a combined basis as well as separately by years.

Tables 7, 8, and 9 show the experience for successive five-year periods and by age groups for categories analogous to those shown in Tables 1, 2, and 3, respectively.

It will be noted in Tables 7, 8, and 9 that the distribution by age groups has changed perceptibly over the years. To minimize any bias that this may cause, there is shown at the bottom of each page of these tables an adjusted aggregate rate. To obtain the adjusted rates, the ratios of expected deaths for each age group to total expected deaths for the years 1963-67 were first computed. These ratios were then multiplied by the expected ratio for the corresponding age group in each prior year. The sum of these products is the adjusted aggregate rate. These adjusted ratios represent essentially what the mortality ratios for all ages combined would have been if the distribution of exposures by attained age groups in each of the earlier periods had been the same as that in the 1963-67 period.

It was noted in last year's report that male mortality, as measured by the *Ga-1951* Table (without Projection) and as shown in Tables 1 and 4, showed a significant decrease for the first time in several years. However, the current corrected figures indicate that there again was no significant change for 1966 experience, and it appears quite possible that the 1967 figures will show no significant change after corrections and adjustments are made in preparing next year's report. Female mortality experience in Tables 1 and 4 has shown some tendency to stabilize in the last few years after a prolonged period of rather substantial reductions.

Male mortality, as shown in Table 1 when compared with the *Ga-1951* Table (with Projection C) to the pertinent year of the study, continues to be remarkably consistent from year to year. The comparable female mortality experience has shown some tendency to fluctuate from year to year, with no detectable pattern. It should be noted that this comparison has been made only during the four years from 1964 to 1967. Furthermore, unlike the comparisons with the *Ga-1951* Table (without Projection), the comparisons with the Table (with Projection) have not been corrected for errors reported in subsequent years.

Tables 2 and 5 indicate continuing improvement in mortality experience, as has been noted in previous reports. The increased liberality in early retirement provisions of more and more plans is leading to an increase in the proportion of healthy lives who are retiring early.

TABLE 1

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE FOR 1967  
RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)	
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives	
					Expected Deaths	Ratio† Act./Exp.
Males						
50 and under	84.00	11	\$ 66,535	\$ 4,431	0.35	* (*)
51-55	324.43	11	490,584	4,226	3.15	* (*)
56-60	1,714.76	53	2,799,676	45,614	24.17	219.3% (257.0%)
61-65	25,714.84	663	35,581,474	919,797	601.13	110.3 (114.1)
66-70	106,068.93	3,619	128,005,054	3,990,428	3,500.24	103.4 (108.7)
71-75	87,054.07	4,751	89,002,340	4,502,423	4,498.92	105.6 (105.1)
76-80	48,322.40	3,996	41,466,887	3,141,975	3,915.77	102.0 (104.5)
81-85	18,798.37	2,219	13,205,468	1,519,030	2,318.39	95.7 (98.7)
86-90	4,259.37	736	2,916,823	498,009	730.04	100.8 (106.4)
91-95	695.16	148	532,596	104,384	159.27	92.9 (101.2)
96 and over	87.32	23	85,512	15,369	28.67	80.2 (49.3)
All ages	293,123.65	16,230	\$314,152,949	\$14,745,686	15,780.10	102.9% (105.5%)
Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years						
50 and under	42.24	4	\$ 23,796	\$ 2,587	0.06	* (*)
51-55	330.31	5	187,075	1,255	1.95	* (*)
56-60	2,896.15	41	1,947,156	26,041	27.57	148.7% (79.9%)
61-65	14,581.22	168	10,198,683	107,444	205.14	81.9 (64.6)
66-70	30,175.67	445	17,643,418	260,685	607.06	73.3 (77.9)
71-75	20,560.56	598	9,882,547	257,348	668.97	89.4 (86.2)
76-80	10,377.11	456	4,340,755	211,650	525.44	86.8 (92.4)
81-85	3,497.42	286	1,399,032	112,155	277.37	103.1 (110.5)
86-90	737.00	104	336,758	56,440	89.50	116.2 (129.0)
91-95	158.00	26	73,855	8,412	26.70	97.4 (111.2)
96 and over	19.17	7	10,617	3,920	4.60	* (*)
All ages	83,374.85	2,140	\$ 46,043,692	\$ 1,047,937	2,434.36	87.9% (87.5%)
Female Experience Related to the 1951 Group Annuity Mortality Female Table						
50 and under	42.24	4	\$ 23,796	\$ 2,587	0.06	* (*)
51-55	330.31	5	187,075	1,255	1.40	* (*)
56-60	2,896.15	41	1,947,156	26,041	20.34	201.6% (108.0%)
61-65	14,581.22	168	10,198,683	107,444	173.46	96.9 (78.4)
66-70	30,175.67	445	17,643,418	260,685	554.15	80.3 (85.2)
71-75	20,560.56	598	9,882,547	257,348	704.21	84.9 (83.2)
76-80	10,377.11	456	4,340,755	211,650	613.76	74.3 (81.9)
81-85	3,497.42	286	1,399,032	112,155	322.70	88.6 (90.2)
86-90	737.00	104	336,758	56,440	99.52	104.5 (120.6)
91-95	158.00	26	73,855	8,412	30.64	84.9 (95.8)
96 and over	19.17	7	10,617	3,920	5.93	* (*)
All ages	83,374.85	2,140	\$ 46,043,692	\$ 1,047,937	2,526.17	84.7% (85.6%)

\* Less than ten deaths (actual or expected).

† Percentages in parentheses are for the year 1966 as adjusted in 1967.

TABLE 1—Continued

COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)			COMPARISON WITH GA-1951 TABLE (WITH PROJECTION C TO 1967)				ATTAINED AGES
By Amount of Annual Income			By Number of Lives		By Amount of Annual Income		
Expected Deaths	Ratio† Act./Exp.		Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.	
Males							
\$ 332	*	(*)	0.28	*	\$ 271	*	... 50 and under
4,660	*	(*)	2.56	*	3,806	*	... 51-55
39,933	114.2%	(173.0%)	19.74	268.5%	32,646	139.7%	... 56-60
825,266	111.5	(98.4)	491.63	134.9	674,826	136.3	... 61-65
4,198,566	95.0	(100.6)	2,862.27	126.4	3,433,340	116.2	... 66-70
4,568,709	98.5	(102.2)	3,766.04	126.2	3,821,962	117.8	... 71-75
3,330,677	94.3	(96.0)	3,439.65	116.2	2,922,734	107.5	... 76-80
1,626,827	93.4	(98.7)	2,144.38	103.5	1,504,467	101.0	... 81-85
502,670	99.1	(102.0)	710.62	103.6	489,838	101.7	... 86-90
122,142	85.5	(127.6)	159.27	92.9	122,142	85.5	... 91-95
29,595	51.9	(36.7)	28.66	80.3	29,594	51.9	... 96 and over
\$15,249,377	96.7%	(100.1%)	13,625.10	119.1%	\$13,035,626	113.1%	... All ages
Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years							
\$ 63	*	(*)	0.06	*	\$ 51	*	... 50 and under
1,119	*	(*)	1.57	*	917	*	... 51-55
18,726	139.1%	(80.7%)	22.48	182.4%	15,312	170.1%	... 56-60
142,576	75.4	(62.6)	167.72	100.2	116,571	92.2	... 61-65
351,766	74.1	(73.1)	496.38	89.6	287,617	90.6	... 66-70
319,073	80.7	(88.0)	547.01	109.3	260,914	98.6	... 71-75
218,927	96.7	(91.6)	439.07	103.9	182,841	115.8	... 76-80
110,676	101.3	(98.6)	243.02	117.7	96,951	115.7	... 81-85
40,831	138.2	(118.7)	82.63	125.9	37,676	149.8	... 86-90
12,495	67.3	(147.8)	25.86	100.5	12,136	69.3	... 91-95
2,728	*	(*)	4.60	*	2,728	*	... 96 and over
\$ 1,218,980	86.0%	(83.5%)	2,030.40	105.4%	\$ 1,013,714	103.4%	... All ages
Female Experience Related to the 1951 Group Annuity Mortality Female Table							
\$ 56	*	(*)					... 50 and under
820	*	(*)					... 51-55
13,840	188.2%	(101.5%)					... 56-60
120,251	89.3	(76.7)					... 61-65
320,643	81.3	(80.7)					... 66-70
334,869	76.9	(85.8)					... 71-75
255,599	82.8	(81.2)					... 76-80
128,851	87.0	(88.3)					... 81-85
45,440	124.2	(110.4)					... 86-90
14,379	58.5	(126.9)					... 91-95
3,653	*	(*)					... 96 and over
\$ 1,238,401	84.6%	(84.4%)					... All ages

TABLE 2  
 INTERCOMPANY GROUP ANNUITY MORTALITY—  
 MATURED LIFE EXPERIENCE FOR 1967  
 RETIREMENT PRIOR TO NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GQ-1951 TABLE (WITHOUT PROJECTION)	
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives	
					Expected Deaths	Ratio† Act./Exp.
Males						
50 and under..	1,144.36	18	\$ 215,402	\$ 2,381	4.50	* (*)
51-55 .....	2,382.68	52	1,884,353	30,773	22.98	226.3% (320.9%)
56-60 .....	17,403.61	499	15,331,071	395,547	241.37	206.7 (207.0)
61-65 .....	52,264.44	1,587	56,061,981	1,531,552	1,086.94	146.0 (162.3)
66-70 .....	39,870.14	1,602	39,143,734	1,343,873	1,283.70	124.8 (129.9)
71-75 .....	16,819.33	1,025	13,951,110	792,062	851.31	120.4 (121.0)
76-80 .....	6,280.38	521	4,243,993	291,012	506.31	102.9 (105.2)
81-85 .....	2,160.91	279	1,256,853	153,265	264.37	105.5 (100.2)
86 and over..	457.50	87	277,086	56,924	83.35	104.4 (114.4)
All ages....	138,783.35	5,670	\$132,365,583	\$4,597,389	4,344.83	130.5% (137.8%)
Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years						
50 and under..	212.50	2	\$ 65,059	\$ 431	0.57	* (*)
51-55 .....	1,295.40	19	555,038	7,667	7.24	* (*)
56-60 .....	5,729.24	78	2,572,161	32,566	51.99	150.0% (134.8%)
61-65 .....	13,502.06	222	6,606,553	100,683	183.61	120.9 (108.4)
66-70 .....	10,049.66	206	4,181,609	74,939	198.57	103.7 (108.2)
71-75 .....	3,963.83	134	1,527,150	50,655	125.67	106.6 (121.0)
76-80 .....	1,395.42	85	480,963	27,439	70.83	120.0 (79.5)
81-85 .....	430.00	38	164,250	11,611	33.99	111.8 (132.8)
86 and over..	100.25	15	50,151	4,404	12.83	116.9 (*)
All ages....	36,678.36	799	\$ 16,202,934	\$ 310,395	685.30	116.6% (113.0%)
Female Experience Related to the 1951 Group Annuity Mortality Female Table						
50 and under..	212.50	2	\$ 65,059	\$ 431	0.47	* (*)
51-55 .....	1,295.40	19	555,038	7,667	5.31	* (*)
56-60 .....	5,729.24	78	2,572,161	32,566	37.98	205.4% (179.0%)
61-65 .....	13,502.06	222	6,606,553	100,683	153.36	144.8 (127.4)
66-70 .....	10,049.66	206	4,181,609	74,939	180.68	114.0 (120.8)
71-75 .....	3,963.83	134	1,527,150	50,655	130.88	102.4 (121.1)
76-80 .....	1,395.42	85	480,963	27,439	82.74	102.7 (70.3)
81-85 .....	430.00	38	164,250	11,611	39.54	96.1 (118.2)
86 and over..	100.25	15	50,151	4,404	14.35	104.5 (135.3)
All ages....	36,678.36	799	\$ 16,202,934	\$ 310,395	645.31	123.8% (121.7%)

\* Less than ten deaths (actual or expected).

† Percentages in parentheses are for the year 1966 as adjusted in 1967.

TABLE 2—Continued

COMPARISON WITH GQ-1951 TABLE (WITHOUT PROJECTION)		COMPARISON WITH GQ-1951 TABLE (WITH PROJECTION C TO 1967)				ATTAINED AGES
By Amount of Annual Income		By Number of Lives		By Amount of Annual Income		
Expected Deaths	Ratio† Act./Exp.	Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.	
Males						
\$ 1,024	* (*)	3.65	*	\$ 840	*	... 50 and under
18,039	170.6% (246.3%)	18.74	277.5%	14,747	208.7%	... 51-55
214,369	184.5 (157.0)	197.33	252.9	175,292	225.7	... 56-60
1,166,176	131.3 (141.7)	888.70	178.6	953,512	160.6	... 61-65
1,257,178	106.9 (116.3)	1,049.79	152.6	1,028,045	130.7	... 66-70
701,888	112.8 (104.4)	711.31	144.1	586,060	135.2	... 71-75
339,764	85.7 (89.4)	444.49	117.2	298,034	97.6	... 76-80
154,151	99.4 (111.4)	244.23	114.2	142,472	107.6	... 81-85
51,841	109.8 (99.7)	81.53	106.7	50,874	111.9	... 86 and over
\$3,904,430	117.7% (122.5%)	3,639.77	155.8%	\$3,249,876	141.5%	... All ages
Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years						
\$ 190	* (*)	0.44	*	\$ 155	*	... 50 and under
3,131	* (*)	5.91	*	2,563	*	... 51-55
23,415	139.1% (111.1%)	42.48	183.6%	19,145	170.1%	... 56-60
89,885	112.0 (103.9)	150.17	147.8	73,509	137.0	... 61-65
81,969	91.4 (106.6)	162.40	126.8	67,024	111.8	... 66-70
48,217	105.1 (101.5)	102.76	130.4	39,432	128.5	... 71-75
24,342	112.7 (77.7)	59.19	143.6	20,332	135.0	... 76-80
13,005	89.3 (112.3)	29.74	127.8	11,389	101.9	... 81-85
6,589	66.8 (*)	11.95	125.5	6,164	71.4	... 86 and over
\$ 290,743	106.8% (104.3%)	565.04	141.4%	\$ 239,713	129.5%	... All ages
Female Experience Related to the 1951 Group Annuity Mortality Female Table						
\$ 170	* (*)					... 50 and under
2,320	* (*)					... 51-55
17,106	190.4% (147.1%)					... 56-60
75,067	134.1 (122.3)					... 61-65
74,505	100.6 (119.6)					... 66-70
50,139	101.0 (102.2)					... 71-75
28,425	96.5 (68.6)					... 76-80
15,132	76.7 (100.2)					... 81-85
7,390	59.6 (80.8)					... 86 and over
\$ 270,254	114.9% (113.5%)					... All ages

TABLE 3

INTERCOMPANY GROUP ANNUITY MORTALITY—  
MATURED LIFE EXPERIENCE FOR 1967  
RETIREMENT UNDER A PLAN HAVING NO STATED NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)	
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives	
					Expected Deaths	Ratio† Act./Exp.
Males						
50 and under...	79.50	2	\$ 168,800	\$ 4,088	0.30	* (*)
51-55 .....	225.41	4	224,866	4,291	2.17	* (*)
56-60 .....	1,788.37	55	1,878,079	50,890	25.04	219.6% (185.8%)
61-65 .....	11,454.11	379	14,306,019	483,423	251.03	151.0 (138.4)
66-70 .....	29,770.01	1,132	32,024,272	1,099,407	989.95	114.3 (111.5)
71-75 .....	26,796.06	1,582	21,544,237	1,178,074	1,384.65	114.3 (109.2)
76-80 .....	14,203.99	1,173	9,256,150	757,506	1,142.01	102.7 (104.5)
81-85 .....	4,787.20	552	2,750,998	305,500	588.30	93.8 (98.0)
86-90 .....	1,077.43	165	619,665	92,010	184.17	89.6 (101.9)
91 and over...	163.09	42	87,517	22,295	39.37	106.7 (108.1)
All ages .....	90,345.17	5,086	\$82,860,603	\$3,997,484	4,606.99	110.4% (109.0%)
Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years						
50 and under...	76.58		\$ 88,443		0.09	* (*)
51-55 .....	158.41	1	119,356	\$ 136	0.86	* (*)
56-60 .....	827.27	17	572,407	11,326	7.51	* (*)
61-65 .....	3,475.47	65	2,588,210	43,775	48.79	133.2% (110.7%)
66-70 .....	6,855.82	103	4,570,905	65,845	138.11	74.6 (75.1)
71-75 .....	4,412.08	125	2,548,367	67,693	142.11	88.0 (94.2)
76-80 .....	1,674.17	83	862,358	37,822	83.82	99.0 (98.7)
81-85 .....	499.77	44	272,939	20,444	39.93	110.2 (110.8)
86-90 .....	95.59	8	55,284	6,674	11.63	* (*)
91 and over...	16.09	2	3,534	750	3.11	* (*)
All ages .....	18,091.25	448	\$11,681,803	\$ 254,465	475.96	94.1% (94.4%)
Female Experience Related to the 1951 Group Annuity Mortality Female Table						
50 and under...	76.58		\$ 88,443		0.09	* (*)
51-55 .....	158.41	1	119,356	\$ 136	0.64	* (*)
56-60 .....	827.27	17	572,407	11,326	5.58	* (*)
61-65 .....	3,475.47	65	2,588,210	43,775	41.25	157.6% (133.3%)
66-70 .....	6,855.82	103	4,570,905	65,845	126.10	81.7 (81.6)
71-75 .....	4,412.08	125	2,548,367	67,693	148.96	83.9 (92.4)
76-80 .....	1,674.17	83	862,358	37,822	97.82	84.8 (87.7)
81-85 .....	499.77	44	272,939	20,444	46.39	94.8 (99.3)
86-90 .....	95.59	8	55,284	6,674	12.79	* (*)
91 and over...	16.09	2	3,534	750	3.81	* (*)
All ages .....	18,091.25	448	\$11,681,803	\$ 254,465	483.43	92.7% (95.1%)

\* Less than ten deaths (actual or expected).

† Percentages in parentheses are for the year 1966 as adjusted in 1967.

TABLE 3—Continued

COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)			COMPARISON WITH GA-1951 TABLE (WITH PROJECTION C TO 1967)				ATTAINED AGES
By Amount of Annual Income			By Number of Lives		By Amount of Annual Income		
Expected Deaths	Ratio† Act./Exp.		Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.	
Males							
\$ 626	*	(*)	0.20	*	\$ 509	*	..... 50 and under
2,078	*	(*)	1.77	*	1,701	*	..... 51-55
26,556	191.6%	(188.8%)	20.47	268.7%	21,709	234.4%	..... 56-60
314,229	153.8	(118.4)	205.22	184.7	256,939	188.1	..... 61-65
1,053,339	104.4	(110.5)	809.53	139.8	861,359	127.6	..... 66-70
1,104,028	106.7	(102.9)	1,159.07	136.5	923,433	127.6	..... 71-75
737,277	102.7	(95.7)	1,002.28	117.0	646,379	117.2	..... 76-80
336,850	90.7	(94.0)	543.88	101.5	311,263	98.1	..... 81-85
105,489	87.2	(98.8)	179.22	92.1	102,571	89.7	..... 86-90
21,000	106.2	(146.1)	39.37	106.7	21,000	106.2	..... 91 and over
\$3,701,472	108.0%	(105.1%)	3,961.01	128.4%	\$3,146,863	127.0%	..... All ages
Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years							
\$ 160	*	(*)	0.07	*	\$ 131	*	..... 50 and under
663	*	(*)	0.71	*	542	*	..... 51-55
5,264	*	(*)	6.17	*	4,300	*	..... 56-60
36,370	120.4%	(92.2%)	39.93	162.8%	29,738	147.2%	..... 61-65
91,648	71.8	(84.4)	112.96	91.2	74,938	87.9	..... 66-70
82,033	82.5	(96.1)	116.17	107.6	67,073	100.9	..... 71-75
43,243	87.5	(103.4)	70.02	118.5	36,094	104.8	..... 76-80
21,683	94.3	(115.6)	35.03	125.6	19,008	107.6	..... 81-85
6,810	*	(*)	10.70	*	6,304	*	..... 86-90
705	*	(*)	3.00	*	697	*	..... 91 and over
\$ 288,579	88.2%	(96.8%)	394.76	113.5%	\$ 238,825	106.5%	..... All ages
Female Experience Related to the 1951 Group Annuity Mortality Female Table							
\$ 151	*	(*)					..... 50 and under
494	*	(*)					..... 51-55
3,858	*	(*)					..... 56-60
30,740	142.4%	(110.9%)					..... 61-65
83,630	78.7	(92.5)					..... 66-70
86,000	78.7	(94.4)					..... 71-75
50,453	75.0	(91.5)					..... 76-80
25,230	81.0	(94.5)					..... 81-85
7,590	*	(*)					..... 86-90
876	*	(*)					..... 91 and over
\$ 289,022	88.0%	(98.2%)					..... All ages



**TABLE 4**  
**INTERCOMPANY GROUP ANNUITY MORTALITY—**  
**MATURED LIFE EXPERIENCE TO DECEMBER 31, 1967**  
**RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE**

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
<b>Males</b>								
1924-40..	56,543 18	2,928	\$ 59,690,365	\$ 2,967,078	2,297 10	127.5%	\$ 2,493,658	119.0%
1941-45..	115,226 82	5,951	87,836,115	4,821,971	4,795 09	124 1	3,895,626	123 8
1946-50..	258,745 66	12,104	173,285,005	8,332,368	10,628 91	113 9	7,451,111	111 8
1951-55..	520,707 77	24,366	360,013,800	16,325,072	21,868 14	111 4	15,137,276	107 8
1956-60..	873,680 65	41,901	708,885,875	30,801,038	39,132 80	107 1	29,983,705	102 7
1961-65..	1,233,502 79	64,967	1,185,704,009	53,839,380	60,794 44	106 9	53,540,851	100 6
1961.....	221,589 17	11,233	197,831,716	8,683,045	10,391 46	108 1	8,549,695	101 6
1962.....	233,024 74	11,758	217,698,433	9,469,644	11,194 69	105 0	9,569,122	99 0
1963.....	246,215 19	13,210	237,059,692	10,770,634	12,097 38	109 2	10,674,552	100 9
1964.....	259,707 04	13,869	255,972,663	11,891,934	13,053 49	106 2	11,779,793	101 0
1965.....	272,966 65	14,897	277,141,503	13,024,123	14,057 42	106 0	12,967,689	100 4
1966.....	282,011 41	15,643	295,469,194	14,080,061	14,828 86	105 5	14,061,173	100 1
1967.....	293,123 65	16,230	314,152,949	14,745,686	15,780 10	102 9	15,249,377	96 7
<b>Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years</b>								
1924-40..	9,902 88	278	\$ 5,854,718	\$ 154,398	192 80	144.2%	\$ 111,591	138.4%
1941-45..	17,737 66	497	8,987,802	242,094	368 26	135 0	190,358	127 2
1946-50..	39,363 01	918	17,274,454	428,881	843 44	108 8	386,999	110 8
1951-55..	88,095 28	1,995	36,343,090	864,757	1,989 25	100 3	843,033	102 6
1956-60..	173,544 26	3,943	75,771,906	1,699,794	4,213 78	93 6	1,806,722	94 1
1961-65..	296,760 74	7,518	147,387,078	3,391,970	7,977 66	94 2	3,718,835	91 2
1961.....	48,408 03	1,191	22,537,095	510,841	1,240 68	96 0	550,323	92 8
1962.....	53,577 92	1,316	25,660,234	600,931	1,403 45	93 8	636,454	94 4
1963.....	58,880 09	1,614	29,271,764	728,166	1,576 31	102 4	733,520	99 3
1964.....	64,483 89	1,581	32,604,922	712,925	1,763 72	89 6	832,855	85 6
1965.....	71,410 81	1,816	37,313,063	839,107	1,993 50	91 1	965,683	86 9
1966.....	77,633 77	1,947	41,731,705	923,240	2,224 44	87 5	1,105,673	83 5
1967.....	83,374 85	2,140	46,043,692	1,047,937	2,434 36	87 9	1,218,980	86 0
<b>Female Experience Related to the 1951 Group Annuity Mortality Female Table</b>								
1924-40..	9,902 88	278	\$ 5,854,718	\$ 154,398	175 09	158.8%	\$ 99,855	154.6%
1941-45..	17,737 66	497	8,987,802	242,094	341 36	145 6	176,628	137 1
1946-50..	39,363 01	918	17,274,454	428,881	791 02	116 1	366,840	116 9
1951-55..	88,095 28	1,995	36,343,090	864,757	1,894 69	105 3	805,672	107 3
1956-60..	173,544 26	3,943	75,771,906	1,699,794	4,103 26	96 1	1,737,059	97 9
1961-65..	296,760 74	7,518	147,387,078	3,391,970	8,013 51	93 8	3,636,130	93 3
1961.....	48,408 03	1,191	22,537,095	510,841	1,227 64	97 0	532,947	95 9
1962.....	53,577 92	1,316	25,660,234	600,931	1,397 12	94 2	616,945	97 4
1963.....	58,880 09	1,614	29,271,764	728,166	1,580 88	102 1	715,704	101 7
1964.....	64,483 89	1,581	32,604,922	712,925	1,782 14	88 7	819,200	87 0
1965.....	71,410 81	1,816	37,313,063	839,107	2,025 73	89 6	951,334	88 2
1966.....	77,633 77	1,947	41,731,705	923,240	2,273 55	85 6	1,093,999	84 4
1967.....	83,374 85	2,140	46,043,692	1,047,937	2,526 17	84 7	1,238,401	84 6

TABLE 5

INTERCOMPANY GROUP ANNUITY MORTALITY—  
MATURED LIFE EXPERIENCE TO DECEMBER 31, 1967  
RETIREMENT PRIOR TO NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GQ-1951 TABLE (WITHOUT PROJECTION)			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
Males								
1924-40.....	16,778.02	740	\$ 14,785,704	\$ 606,943	405.75	182.4%	\$ 354,243	171.3%
1941-45.....	26,196.85	1,460	18,005,321	776,627	725.90	201.1	527,590	147.2
1946-50.....	65,020.83	3,461	37,490,411	1,796,531	1,767.10	195.9	1,123,878	159.9
1951-55.....	133,836.47	6,794	78,361,826	3,672,214	3,804.81	178.6	2,345,657	156.6
1956-60.....	251,005.54	12,048	173,120,178	7,219,517	7,475.30	161.2	5,056,562	142.8
1961-65.....	463,387.90	20,669	385,222,440	14,829,757	13,998.89	147.6	11,100,608	133.6
1961.....	71,746.65	3,182	54,983,046	2,178,757	2,146.58	148.2	1,582,021	137.7
1962.....	83,345.85	3,690	66,823,234	2,585,895	2,499.18	147.6	1,913,226	135.2
1963.....	91,650.58	4,267	75,652,221	3,033,786	2,756.20	154.8	2,172,165	139.7
1964.....	102,528.47	4,529	87,122,778	3,297,178	3,103.13	145.9	2,512,611	131.2
1965.....	114,116.35	5,001	100,641,161	3,734,141	3,493.80	143.1	2,920,585	127.9
1966.....	127,874.23	5,411	117,470,826	4,170,514	3,927.18	137.8	3,404,390	122.5
1967.....	138,783.35	5,670	132,365,583	4,597,389	4,344.83	130.5	3,904,430	117.7
Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years								
1924-40.....	1,938.83	44	\$ 815,994	\$ 20,273	21.71	202.7%	\$ 9,612	210.9%
1941-45.....	3,848.90	103	1,466,550	38,755	52.77	195.2	21,816	177.6
1946-50.....	10,162.24	231	3,390,207	80,824	147.32	156.8	55,067	146.8
1951-55.....	23,085.01	527	7,422,029	191,059	359.69	146.5	127,609	149.7
1956-60.....	50,837.26	1,151	17,527,182	394,109	848.67	135.6	303,394	129.9
1961-65.....	108,860.43	2,278	42,352,267	811,221	1,922.41	118.5	740,609	109.5
1961.....	15,914.34	339	5,798,200	117,206	272.05	124.6	100,113	117.1
1962.....	18,497.82	403	6,944,723	136,641	321.35	125.4	120,797	113.1
1963.....	21,341.98	468	8,394,308	181,039	374.64	124.9	146,069	123.9
1964.....	24,448.36	463	9,522,657	152,987	436.57	106.1	168,051	91.0
1965.....	28,657.93	605	11,692,379	223,348	517.80	116.8	205,579	108.6
1966.....	32,795.67	683	13,979,442	259,255	604.22	113.0	248,461	104.3
1967.....	36,678.36	799	16,202,934	310,395	685.30	116.6	290,743	106.8
Female Experience Related to the 1951 Group Annuity Mortality Female Table								
1924-40.....	1,938.83	44	\$ 815,994	\$ 20,273	17.54	250.9%	\$ 7,847	258.4%
1941-45.....	3,848.90	103	1,466,550	38,755	45.30	227.4	19,236	201.5
1946-50.....	10,162.24	231	3,390,207	80,824	129.43	178.5	50,007	161.6
1951-55.....	23,085.01	527	7,422,029	191,059	322.51	163.4	117,507	162.6
1956-60.....	50,837.26	1,151	17,527,182	394,109	773.69	148.8	279,308	141.1
1961-65.....	108,860.43	2,278	42,352,267	811,221	1,774.50	128.4	680,670	119.2
1961.....	15,914.34	339	5,798,200	117,206	249.54	135.8	91,848	127.6
1962.....	18,497.82	403	6,944,723	136,641	295.13	136.5	110,467	123.7
1963.....	21,341.98	468	8,394,308	181,039	345.49	135.5	134,297	134.8
1964.....	24,448.36	463	9,522,657	152,987	403.54	114.7	154,513	99.0
1965.....	28,657.93	605	11,692,379	223,348	480.80	125.8	189,545	117.8
1966.....	32,795.67	683	13,979,442	259,255	561.29	121.7	228,433	113.5
1967.....	36,678.36	799	16,202,934	310,395	645.31	123.8	270,254	114.9

**TABLE 6**  
**INTERCOMPANY GROUP ANNUITY MORTALITY—**  
**MATURED LIFE EXPERIENCE TO DECEMBER 31, 1967**  
**RETIREMENT UNDER A PLAN HAVING NO STATED NORMAL RETIREMENT DATE**

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GQ-1951 TABLE (WITHOUT PROJECTION)			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		By Amount of Annual Income	
					Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
Males								
1956-60.....	127,650.65	6,208	\$ 79,467,402	\$ 3,547,647	5,522.49	112.4%	\$3,247,141	109.3%
1961-65.....	303,192.01	16,022	239,918,192	11,108,690	13,928.66	115.0	9,957,543	111.6
1961.....	45,970.73	2,354	32,448,356	1,497,642	2,043.11	115.2	1,328,338	112.7
1962.....	54,618.69	2,877	40,924,152	1,908,010	2,430.56	118.4	1,662,014	114.8
1963.....	61,449.83	3,355	48,666,272	2,390,372	2,766.76	121.3	1,983,036	120.5
1964.....	68,017.22	3,578	55,722,503	2,481,192	3,153.61	113.5	2,317,171	107.1
1965.....	73,135.54	3,858	62,156,909	2,831,474	3,534.62	109.1	2,666,984	106.2
1966.....	82,451.80	4,502	72,090,540	3,339,071	4,130.71	109.0	3,177,563	105.1
1967.....	90,345.17	5,086	82,860,603	3,997,484	4,606.99	110.4	3,701,472	108.0
Female Experience Related to the Pertinent Male Table with Ages Set Back Five Years								
1956-60.....	13,876.27	276	\$ 6,743,741	\$ 130,228	319.26	86.4%	\$ 152,262	85.5%
1961-65.....	46,994.47	1,116	26,379,957	591,960	1,157.45	96.4	627,489	94.3
1961.....	6,128.38	107	3,123,921	47,788	144.40	74.1	72,305	66.1
1962.....	7,602.83	190	4,095,225	91,987	181.50	104.7	94,856	97.0
1963.....	9,297.56	249	5,169,748	139,412	224.69	110.8	121,199	115.0
1964.....	11,199.87	267	6,407,230	137,721	278.29	95.9	153,097	90.0
1965.....	12,765.83	303	7,583,833	175,052	328.57	92.2	186,032	94.1
1966.....	15,327.64	381	9,590,077	229,660	403.75	94.4	237,178	96.8
1967.....	18,091.25	448	11,681,803	254,465	475.96	94.1	288,579	88.2
Female Experience Related to the 1951 Group Annuity Mortality Female Table								
1956-60.....	13,876.27	276	\$ 6,743,741	\$ 130,228	303.74	90.9%	\$ 144,355	90.2%
1961-65.....	46,994.47	1,116	26,379,957	591,960	1,128.66	98.9	607,808	97.4
1961.....	6,128.38	107	3,123,921	47,788	138.67	77.2	69,255	69.0
1962.....	7,602.83	190	4,095,225	91,987	175.05	108.5	91,392	100.7
1963.....	9,297.56	249	5,169,748	139,412	218.89	113.8	116,471	119.7
1964.....	11,199.87	267	6,407,230	137,721	271.26	98.4	147,849	93.1
1965.....	12,765.83	303	7,583,833	175,052	324.79	93.3	182,841	95.7
1966.....	15,327.64	381	9,590,077	229,660	400.68	95.1	233,922	98.2
1967.....	18,091.25	448	11,681,803	254,465	483.43	92.7	289,022	88.0

TABLE 7  
 INTERCOMPANY GROUP ANNUITY MORTALITY—  
 MATURED LIFE EXPERIENCE TO DECEMBER 31, 1967  
 RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE  
 COMPARISON WITH Ga-1951 TABLE (WITHOUT PROJECTION)

MALE

Attained Ages	1946-50	1951-55	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
Actual Deaths—by Number of Lives								
60 and under....	46	51	96	180	202	235	266	294
61-65.....	1,213	2,145	2,869	3,158	3,204	3,306	3,360	3,350
66-70.....	4,792	9,665	14,431	17,029	17,719	18,149	18,504	18,583
71-75.....	3,169	6,774	12,689	17,136	18,413	19,597	20,663	21,860
76-80.....	1,731	3,554	7,482	11,276	12,712	14,242	15,712	17,277
81-85.....	855	1,568	3,142	5,011	5,815	6,839	7,831	8,957
86-90.....	232	494	957	1,566	1,825	2,112	2,468	2,871
91-95.....	60	104	214	305	362	444	522	590
96 and over.....	6	11	21	33	41	43	51	67
Total.....	12,104	24,366	41,901	55,694	60,293	64,967	69,377	73,849
Ratio: Actual/Expected—by Number of Lives								
60 and under....	189.4%	182.0%	153.0%	166.4%	174.8%	196.9%	213.7%	228.4%
61-65.....	118.1	117.1	112.8	111.9	112.8	114.7	115.7	114.6
66-70.....	113.3	115.1	107.2	107.5	107.9	107.7	107.9	107.0
71-75.....	113.5	110.3	107.7	110.0	109.3	108.5	107.6	107.4
76-80.....	113.0	106.6	105.7	104.4	104.3	104.2	103.9	104.1
81-85.....	118.6	107.7	102.3	103.2	102.4	102.5	101.0	99.8
86-90.....	108.0	110.6	103.5	103.8	103.6	103.0	103.5	103.4
91-95.....	153.9	133.8	122.2	106.3	103.5	104.3	103.6	98.9
96 and over.....	*	103.9	79.0	71.9	76.6	68.3	66.0	70.1
Total.....	113.9%	111.4%	107.1%	107.4%	107.2%	106.9%	106.4%	105.8%
Ratio: Actual/Expected—by Amount of Annual Income								
60 and under....	199.0%	157.9%	124.8%	120.0%	112.7%	116.1%	131.4%	126.7%
61-65.....	114.4	115.9	109.3	101.5	103.3	100.2	100.5	103.4
66-70.....	114.1	108.0	101.1	100.5	100.5	101.0	101.0	99.5
71-75.....	112.2	108.0	103.7	102.2	101.4	100.7	101.1	100.8
76-80.....	100.5	104.2	101.2	99.5	100.8	100.3	98.5	98.3
81-85.....	121.1	99.1	101.5	101.2	100.9	101.2	99.8	97.9
86-90.....	90.3	108.4	105.1	104.9	101.2	97.4	96.4	96.7
91-95.....	169.1	157.2	108.2	86.2	84.0	89.7	101.4	99.0
96 and over.....	*	92.3	62.8	39.6	87.2	78.4	70.9	69.2
Total.....	111.8%	107.8%	102.7%	101.0%	101.0%	100.6%	100.3%	99.7%
Adjusted Aggregate Ratio								
By lives.....	113.7%	110.4%	106.6%	107.0%	106.8%	106.6%	106.2%	105.8%
By income.....	111.3	107.3	102.6	100.9	100.9	100.5	100.3	99.7

\* Less than ten deaths (actual or expected).

TABLE 7—Continued  
 FEMALE EXPERIENCE RELATED TO THE PERTINENT MALE TABLE  
 WITH AGES SET BACK FIVE YEARS

Attained Ages	1946-50	1951-55	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
Actual Deaths—by Number of Lives								
60 and under.....	42	69	77	108	121	145	153	179
61-65.....	164	325	461	611	615	675	679	706
66-70.....	259	647	1,257	1,753	1,857	1,964	2,066	2,143
71-75.....	233	424	1,007	1,639	1,853	2,124	2,309	2,531
76-80.....	128	292	666	1,113	1,308	1,492	1,734	1,956
81-85.....	63	173	312	543	608	764	895	1,073
86-90.....	25	53	127	216	244	270	338	389
91-95.....	4	12	29	51	62	75	88	103
96 and over.....			7	6	10	9	12	18
Total.....	918	1,995	3,943	6,040	6,678	7,518	8,274	9,098
Ratio: Actual/Expected—by Number of Lives								
60 and under.....	90.0%	94.4%	73.9%	82.6%	86.9%	98.7%	99.8%	115.5%
61-65.....	90.1	88.6	79.7	84.7	79.8	81.2	76.5	75.2
66-70.....	97.0	93.4	85.8	88.9	87.0	85.5	83.5	80.8
71-75.....	127.2	96.6	91.3	93.2	91.7	92.4	89.8	89.1
76-80.....	119.4	115.8	114.5	106.6	105.0	101.2	99.4	96.6
81-85.....	163.7	155.3	123.4	130.6	122.3	125.1	119.6	115.1
86-90.....	151.7	122.0	126.3	117.9	113.4	107.2	113.4	113.1
91-95.....	*	*	120.8	126.1	127.9	133.4	127.6	119.3
96 and over.....	*	*	*	*	*	*	80.2	102.0
Total.....	108.8%	100.3%	93.6%	96.3%	94.3%	94.2%	92.3%	91.0%
Ratio: Actual/Expected—by Amount of Annual Income								
60 and under.....	78.9%	84.2%	80.8%	83.9%	91.6%	102.3%	105.6%	119.6%
61-65.....	96.5	92.1	84.7	86.9	82.2	81.5	75.1	72.4
66-70.....	96.3	97.8	86.4	87.7	84.7	84.7	82.1	79.5
71-75.....	127.5	94.0	87.8	90.3	89.0	87.7	86.7	85.1
76-80.....	113.2	122.0	119.8	106.1	105.0	99.4	98.0	97.2
81-85.....	164.9	138.6	113.7	119.9	109.0	113.4	108.2	106.2
86-90.....	162.6	112.4	123.3	130.5	123.2	113.0	113.3	111.7
91-95.....	*	*	121.3	138.5	140.3	143.6	145.6	126.2
96 and over.....	*	*	*	*	*	*	63.5	87.2
Total.....	110.8%	102.6%	94.1%	94.8%	92.1%	91.2%	89.0%	87.5%
Adjusted Aggregate Ratio								
By lives.....	118.1%	105.4%	97.8%	98.4%	95.9%	95.3%	92.9%	91.0%
By income.....	115.4	103.8	96.0	95.7	92.8	91.7	89.2	87.5

\* Less than ten deaths (actual or expected).

TABLE 7—Continued  
FEMALE EXPERIENCE RELATED TO THE 1951 GROUP  
ANNUITY MORTALITY FEMALE TABLE

Attained Ages	1946-50	1951-55	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
Actual Deaths—by Number of Lives								
60 and under . . . . .	42	69	77	108	121	145	153	179
61-65 . . . . .	164	325	461	611	615	675	679	706
66-70 . . . . .	259	647	1,257	1,753	1,857	1,964	2,066	2,143
71-75 . . . . .	233	424	1,007	1,639	1,853	2,124	2,309	2,531
76-80 . . . . .	128	292	666	1,113	1,308	1,492	1,734	1,956
81-85 . . . . .	63	173	312	543	608	764	895	1,073
86-90 . . . . .	25	53	127	216	244	270	338	389
91-95 . . . . .	4	12	29	51	62	75	88	103
96 and over . . . . .	*	*	7	6	10	9	12	18
Total . . . . .	918	1,995	3,943	6,040	6,678	7,518	8,274	9,098
Ratio: Actual/Expected—by Number of Lives								
60 and under . . . . .	121.1%	127.2%	99.3%	111.4%	117.3%	133.3%	134.9%	156.3%
61-65 . . . . .	113.7	109.2	96.7	102.5	96.7	98.3	92.7	90.7
66-70 . . . . .	108.8	104.2	94.8	97.4	95.2	93.5	91.2	88.3
71-75 . . . . .	124.9	95.8	89.9	91.5	89.8	90.1	87.2	86.0
76-80 . . . . .	106.4	102.4	102.2	94.9	93.2	89.7	88.0	84.8
81-85 . . . . .	134.4	126.8	100.0	106.0	99.5	102.1	97.8	95.5
86-90 . . . . .	144.0	115.5	118.9	111.1	106.6	100.5	106.1	104.6
91-95 . . . . .	*	*	102.7	107.4	109.4	114.0	109.2	102.6
96 and over . . . . .	*	*	*	*	83.2	*	64.1	80.7
Total . . . . .	116.1%	105.3%	96.1%	97.1%	94.5%	93.8%	91.3%	89.3%
Ratio: Actual/Expected—by Amount of Annual Income								
60 and under . . . . .	105.8%	113.5%	108.6%	112.5%	122.7%	136.9%	140.9%	159.8%
61-65 . . . . .	122.7	115.2	104.3	106.6	101.0	100.1	92.2	88.1
66-70 . . . . .	107.5	109.0	96.1	97.0	93.5	93.4	90.5	87.5
71-75 . . . . .	123.6	92.8	86.5	89.0	87.6	86.1	85.0	82.6
76-80 . . . . .	100.9	106.4	106.4	94.1	92.8	87.8	86.6	85.2
81-85 . . . . .	148.9	124.7	100.7	106.7	97.3	101.5	97.1	94.1
86-90 . . . . .	158.0	106.5	115.7	122.7	115.4	105.4	105.6	102.8
91-95 . . . . .	*	*	104.9	117.4	119.4	122.7	124.8	108.7
96 and over . . . . .	*	*	*	*	92.6	*	48.5	65.8
Total . . . . .	116.9%	107.3%	97.9%	97.7%	94.6%	93.3%	90.6%	88.2%
Adjusted Aggregate Ratio								
By lives . . . . .	117.8%	104.9%	96.9%	97.2%	94.6%	93.8%	91.3%	89.3%
By income . . . . .	117.9	105.9	97.8	97.4	94.4	93.1	90.6	88.2

**TABLE 8**  
**INTERCOMPANY GROUP ANNUITY MORTALITY—**  
**MATURED LIFE EXPERIENCE TO DECEMBER 31, 1967**  
**RETIREMENT PRIOR TO NORMAL RETIREMENT DATE**  
**COMPARISON WITH G<sub>a</sub>-1951 TABLE (WITHOUT PROJECTION)**

**MALE**

Attained Ages	1946-50	1951-55	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
<b>Actual Deaths—by Number of Lives</b>								
60 and under	651	1,135	1,543	2,069	2,281	2,422	2,632	2,732
61-65	1,239	2,311	3,858	5,213	5,692	6,283	6,958	7,472
66-70	843	1,856	3,220	4,535	5,062	5,719	6,342	6,881
71-75	470	886	2,015	2,817	3,043	3,378	3,707	4,126
76-80	218	422	905	1,432	1,691	1,895	2,108	2,303
81-85	36	160	389	538	609	713	836	1,007
86-90	4	22	103	164	183	215	256	292
91-95		2	14	26	32	42	54	60
96 and over			1			2	5	5
Total	3,461	6,794	12,048	16,794	18,593	20,669	22,898	24,878
<b>Ratio: Actual/Expected—by Number of Lives</b>								
60 and under	333.9%	309.2%	252.1%	236.7%	239.6%	234.9%	234.4%	227.2%
61-65	243.3	229.0	198.5	180.0	174.7	171.4	168.9	163.8
66-70	166.1	156.4	151.0	145.2	142.4	141.7	138.6	134.6
71-75	138.0	129.3	127.9	129.9	127.8	127.4	125.0	123.3
76-80	126.4	111.1	117.9	113.1	114.6	112.4	111.0	109.1
81-85	94.4	108.5	113.6	110.0	107.5	106.1	104.3	105.1
86-90	*	82.3	113.3	106.0	103.2	105.2	109.5	110.9
91-95	*	*	124.2	94.0	91.7	100.4	107.9	103.1
96 and over	*	*	*	*	*	*	*	*
Total	195.9%	178.6%	161.2%	152.6%	149.9%	147.6%	145.1%	141.2%
<b>Ratio: Actual/Expected—by Amount of Annual Income</b>								
60 and under	251.2%	248.9%	194.7%	199.9%	199.1%	196.5%	189.1%	181.4%
61-65	206.9	207.9	164.6	147.6	147.5	145.4	144.9	142.6
66-70	144.4	140.7	137.1	135.1	130.3	126.5	122.7	116.6
71-75	130.9	120.0	121.7	119.4	118.2	117.7	112.6	113.0
76-80	115.0	102.1	118.2	111.7	115.2	111.7	106.1	100.9
81-85	78.3	93.6	104.7	119.2	115.5	117.4	112.5	107.2
86-90	*	150.1	93.1	104.2	100.3	102.4	101.9	107.1
91-95	*	*	105.8	38.5	36.7	88.5	100.0	113.7
96 and over	*	*	*	*	*	*	*	*
Total	159.9%	156.6%	142.8%	137.4%	135.7%	133.6%	130.2%	126.3%
<b>Adjusted Aggregate Ratio</b>								
By lives	181.8%	171.0%	159.2%	150.9%	148.5%	146.8%	144.6%	141.2%
By income	162.4	159.5	143.2	137.0	135.3	133.2	129.9	126.3

\* Less than ten deaths (actual or expected).

TABLE 8—Continued  
FEMALE EXPERIENCE RELATED TO THE PERTINENT MALE TABLE  
WITH AGES SET BACK FIVE YEARS

Attained Ages	1946-50	1951-55	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
Actual Deaths—by Number of Lives								
60 and under.....	64	117	193	273	304	333	361	403
61-65.....	59	155	327	544	596	672	735	837
66-70.....	54	126	292	454	497	567	673	779
71-75.....	34	71	186	299	327	373	461	516
76-80.....	16	40	99	158	182	225	244	300
81-85.....	3	13	47	64	65	71	100	128
86-90.....	1	4	6	7	20	29	41	49
91-95.....		1	1	7	6	8	7	6
96 and over.....								
Total.....	231	527	1,151	1,816	1,997	2,278	2,622	3,018
Ratio: Actual/Expected—by Number of Lives								
60 and under.....	192.2%	188.5%	163.3%	160.0%	160.8%	159.0%	156.7%	159.6%
61-65.....	142.8	154.5	139.3	136.9	129.0	124.9	118.0	116.9
66-70.....	154.5	131.6	129.5	121.8	111.6	106.3	105.6	104.0
71-75.....	139.1	120.1	120.2	120.1	113.3	111.0	117.2	111.7
76-80.....	*	132.0	128.9	116.7	112.5	115.5	104.8	110.2
81-85.....	*	*	152.1	116.6	97.4	86.4	97.9	103.6
86-90.....	*	*	*	119.1	104.1	114.5	128.2	128.0
91-95.....	*	*	*	*	*	*	*	*
96 and over.....	*	*	*	*	*	*	*	*
Total.....	156.8%	146.5%	135.6%	129.9%	122.1%	118.5%	116.3%	115.3%
Ratio: Actual/Expected—by Amount of Annual Income								
60 and under.....	194.2%	191.7%	170.6%	154.1%	154.0%	138.5%	137.5%	143.8%
61-65.....	136.5	181.1	124.2	127.7	112.9	114.9	108.8	108.1
66-70.....	164.5	134.7	132.0	119.5	107.1	102.5	102.8	99.7
71-75.....	115.5	103.2	107.1	115.3	107.9	104.3	104.7	101.5
76-80.....	*	119.1	124.9	107.8	98.6	94.4	89.6	98.0
81-85.....	*	*	152.1	125.4	108.1	96.5	100.5	96.2
86-90.....	*	*	*	61.5	72.2	84.6	92.4	88.8
91-95.....	*	*	*	*	*	*	*	*
96 and over.....	*	*	*	*	*	*	*	*
Total.....	146.8%	149.7%	129.9%	123.9%	113.1%	109.5%	107.2%	106.4%
Adjusted Aggregate Ratio								
By lives.....	150.9%	143.0%	134.1%	128.7%	120.9%	117.7%	116.0%	115.3%
By income.....	143.7	151.5	128.4	123.4	112.6	109.5	107.3	106.4



TABLE 8—Continued  
FEMALE EXPERIENCE RELATED TO THE 1951 GROUP  
ANNUITY MORTALITY FEMALE TABLE

Attained Ages	1946-50	1951-55	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
Actual Deaths—by Number of Lives								
60 and under.....	64	117	193	273	304	333	361	403
61-65.....	59	155	327	544	596	672	735	837
66-70.....	54	126	292	454	497	567	673	779
71-75.....	34	71	186	299	327	373	461	516
76-80.....	16	40	99	158	182	225	244	300
81-85.....	3	13	47	64	65	71	100	128
86-90.....	1	4	6	17	20	29	41	49
91-95.....	*	1	1	7	6	8	7	6
96 and over.....								
Total.....	231	527	1,151	1,816	1,997	2,278	2,622	3,018
Ratio: Actual/Expected—by Number of Lives								
60 and under.....	259.5%	254.2%	218.9%	213.5%	214.3%	211.5%	208.4%	213.4%
61-65.....	173.0	185.5	165.4	161.6	152.1	147.0	138.8	138.1
66-70.....	171.9	147.0	144.1	136.7	125.3	119.2	118.2	115.8
71-75.....	138.9	118.5	119.1	118.1	111.3	109.2	115.7	109.5
76-80.....	*	118.2	114.8	103.9	100.0	102.6	93.0	96.8
81-85.....	*	125.5	138.3	104.9	87.8	77.8	88.0	92.0
86-90.....	*	*	*	115.5	100.5	109.4	121.1	118.8
91-95.....	*	*	*	*	*	*	*	*
96 and over.....	*	*	*	*	*	*	*	*
Total.....	178.5%	163.4%	148.8%	141.5%	132.6%	128.4%	125.7%	123.9%
Ratio: Actual/Expected—by Amount of Annual Income								
60 and under.....	259.1%	254.9%	227.7%	205.3%	204.8%	183.8%	182.3%	191.9%
61-65.....	165.7	216.7	147.2	150.5	133.1	135.4	128.1	127.9
66-70.....	182.0	150.6	147.3	134.7	120.7	115.3	115.4	111.2
71-75.....	113.0	100.7	105.6	113.5	106.2	103.0	104.0	100.0
76-80.....	*	105.3	110.2	95.7	87.5	83.6	79.3	85.8
81-85.....	*	136.4	137.3	111.8	96.6	86.4	90.1	85.2
86-90.....	*	*	*	59.0	68.8	79.4	85.5	81.1
91-95.....	*	*	*	*	*	*	*	*
96 and over.....	*	*	*	*	*	*	*	*
Total.....	161.6%	162.6%	141.1%	135.0%	123.1%	119.2%	116.6%	115.4%
Adjusted Aggregate Ratio								
By lives.....	164.4%	155.2%	145.0%	138.9%	130.3%	126.8%	125.0%	123.9%
By income.....	157.1	164.8	139.5	134.1	122.4	118.9	116.5	115.4

\* Less than ten deaths (actual or expected).

**TABLE 9**  
**INTERCOMPANY GROUP ANNUITY MORTALITY—**  
**MATURED LIFE EXPERIENCE TO DECEMBER 31, 1967**  
**RETIREMENT UNDER A PLAN HAVING NO STATED RETIREMENT DATE**  
**COMPARISON WITH G<sub>a</sub>-1951 TABLE (WITHOUT PROJECTION)**

MALE

Attained Ages	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
Actual Deaths—by Number of Lives						
60 and under.	60	139	165	190	204	232
61-65.....	526	1,022	1,208	1,400	1,560	1,683
66-70.....	2,411	4,234	4,716	4,992	5,203	5,378
71-75.....	1,802	3,637	4,283	4,813	5,440	6,180
76-80.....	943	2,051	2,486	2,934	3,602	4,263
81-85.....	342	808	994	1,236	1,572	1,923
86-90.....	104	267	331	385	492	588
91-95.....	15	40	52	65	88	124
96 and over..	5	7	8	7	9	8
Total.....	6,208	12,205	14,243	16,022	18,170	20,379
Ratio: Actual/Expected—by Number of Lives						
60 and under.	302.3%	268.2%	250.5%	241.2%	227.0%	221.5%
61-65.....	148.0	146.1	149.7	154.6	155.7	155.6
66-70.....	117.8	121.5	122.4	121.5	118.9	117.4
71-75.....	107.8	113.2	113.3	110.6	109.3	110.0
76-80.....	101.7	108.5	108.4	105.8	105.9	104.1
81-85.....	92.8	98.7	97.8	98.7	99.2	97.3
86-90.....	94.9	106.9	108.4	102.5	103.1	97.8
91-95.....	84.1	103.7	99.9	97.0	99.1	106.8
96 and over..	*	*	*	*	*	*
Total.....	112.4%	116.7%	116.9%	115.0%	113.4%	112.0%
Ratio: Actual/Expected—by Amount of Annual Income						
60 and under.	168.9%	233.7%	202.9%	196.7%	188.5%	183.1%
61-65.....	128.1	134.8	136.2	143.7	141.7	144.9
66-70.....	107.4	113.5	113.1	112.6	111.0	108.6
71-75.....	110.5	111.2	110.2	106.4	104.5	105.5
76-80.....	103.6	110.1	108.0	104.0	102.0	100.6
81-85.....	105.4	103.3	91.8	94.9	95.1	93.1
86-90.....	101.8	108.3	111.7	103.5	104.2	96.8
91-95.....	52.8	68.2	98.0	94.0	109.1	113.8
96 and over..	*	*	*	*	*	*
Total.....	109.3%	114.1%	112.8%	111.6%	109.7%	108.6%
Adjusted Aggregate Ratio						
By lives.....	110.2%	115.2%	115.5%	113.9%	113.0%	112.0%
By income...	109.4	113.8	112.3	110.9	109.4	108.6

\* Less than ten deaths (actual or expected).

TABLE 9—Continued  
FEMALE EXPERIENCE RELATED TO THE PERTINENT MALE TABLE  
WITH AGES SET BACK FIVE YEARS

Attained Ages	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
Actual Deaths—by Number of Lives						
60 and under.	11	24	31	37	45	56
61-65.....	50	96	119	135	170	211
66-70.....	119	268	297	349	395	443
71-75.....	54	175	240	309	397	468
76-80.....	22	99	141	184	241	287
81-85.....	15	47	63	77	103	138
86-90.....	5	14	19	23	34	38
91-95.....				2	4	6
96 and over..					1	1
Total.....	276	723	910	1,116	1,390	1,648
Ratio: Actual/Expected—by Number of Lives						
60 and under.	*	155.3 <sup>c</sup> %	158.8 <sup>c</sup> %	156.5 <sup>c</sup> %	160.1 <sup>c</sup> %	169.4 <sup>c</sup> %
61-65.....	101.3 <sup>c</sup> %	88.9	91.3	89.1	97.5	107.0
66-70.....	94.5	95.4	88.0	88.8	86.6	84.0
71-75.....	65.4	90.4	95.4	96.0	97.3	93.0
76-80.....	56.8	95.2	105.3	107.5	109.6	103.3
81-85.....	113.8	115.9	115.5	103.9	103.7	106.8
86-90.....	*	*	134.4	122.9	133.2	109.2
91-95.....	*	*	*	*	*	*
96 and over..	*	*	*	*	*	*
Total.....	86.4 <sup>c</sup> %	96.0 <sup>c</sup> %	96.5 <sup>c</sup> %	96.4 <sup>c</sup> %	98.1 <sup>c</sup> %	96.3 <sup>c</sup> %
Ratio: Actual/Expected—by Amount of Annual Income						
60 and under.	*	144.6 <sup>c</sup> %	152.4 <sup>c</sup> %	140.1 <sup>c</sup> %	145.4 <sup>c</sup> %	159.1 <sup>c</sup> %
61-65.....	79.3 <sup>c</sup> %	78.0	85.9	89.1	92.2	102.6
66-70.....	94.1	97.1	83.4	89.6	89.1	85.4
71-75.....	64.4	83.7	85.8	86.2	92.4	88.3
76-80.....	65.5	93.8	108.8	108.6	112.3	101.6
81-85.....	156.9	135.5	133.3	119.9	119.1	110.6
86-90.....	*	*	163.9	112.8	129.4	117.2
91-95.....	*	*	*	*	*	*
96 and over..	*	*	*	*	*	*
Total.....	85.5 <sup>c</sup> %	94.2 <sup>c</sup> %	92.8 <sup>c</sup> %	94.3 <sup>c</sup> %	97.7 <sup>c</sup> %	95.0 <sup>c</sup> %
Adjusted Aggregate Ratio						
By lives.....	84.3 <sup>c</sup> %	96.3 <sup>c</sup> %	97.3 <sup>c</sup> %	97.0 <sup>c</sup> %	98.4 <sup>c</sup> %	96.3 <sup>c</sup> %
By income...	86.1	95.0	94.2	94.8	98.0	95.0

\* Less than ten deaths (actual or expected).

TABLE 9—Continued  
FEMALE EXPERIENCE RELATED TO THE 1951 GROUP ANNUITY  
MORTALITY FEMALE TABLE

Attained Ages	1956-60	1959-63	1960-64	1961-65	1962-66	1963-67
Actual Deaths—by Number of Lives						
60 and under.	11	24	31	37	45	56
61-65.....	50	96	119	135	170	211
66-70.....	119	268	297	349	395	443
71-75.....	54	175	240	309	397	468
76-80.....	22	99	141	184	241	287
81-85.....	15	47	63	77	103	138
86-90.....	5	14	19	23	34	38
91-95.....				2	4	6
96 and over..					1	1
Total.....	276	723	910	1,116	1,390	1,648
Ratio: Actual/Expected—by Number of Lives						
60 and under.	*	205.5%	212.3%	212.5%	220.9%	233.2%
61-65.....	120.2%	106.4	109.8	107.6	117.7	128.6
66-70.....	105.2	105.0	96.5	96.9	94.3	91.5
71-75.....	64.8	89.4	94.5	94.9	95.9	90.7
76-80.....	50.5	84.3	93.1	95.0	97.0	90.5
81-85.....	105.4	105.1	104.6	93.6	93.2	94.6
86-90.....	*	135.8	126.8	115.3	124.7	101.0
91-95.....	*	*	*	*	*	*
96 and over..	*	*	*	*	*	*
Total.....	90.9%	99.6%	99.6%	98.9%	100.0%	97.0%
Ratio: Actual/Expected—by Amount of Annual Income						
60 and under.	*	200.2%	212.7%	196.5%	203.6%	220.8%
61-65.....	93.2%	93.6	103.8	107.9	111.6	123.5
66-70.....	105.8	107.5	92.0	98.4	97.7	93.6
71-75.....	63.6	82.9	85.4	85.7	91.6	86.5
76-80.....	58.5	83.9	96.8	96.2	99.2	88.9
81-85.....	131.0	111.4	109.3	97.9	97.3	92.0
86-90.....	*	161.8	157.2	107.5	121.5	108.3
91-95.....	*	*	*	*	*	*
96 and over..	*	*	*	*	*	*
Total.....	90.2%	98.2%	96.5%	97.4%	100.2%	96.5%
Adjusted Aggregate Ratio						
By lives.....	86.4%	98.0%	98.9%	98.5%	99.8%	97.0%
By income...	88.7	97.4	96.7	97.1	100.1	96.5

The following companies have contributed experience for the investigation covered by this report:

Aetna Life Insurance Company  
Bankers Life Company  
Canada Life Assurance Company  
Confederation Life Association  
Connecticut General Life Insurance Company  
Equitable Life Assurance Society  
Great-West Life Assurance Company  
John Hancock Mutual Life Insurance Company  
Massachusetts Mutual Life Insurance Company  
Metropolitan Life Insurance Company  
North American Life Assurance Company  
Occidental Life Insurance Company  
Pacific Mutual Life Insurance Company  
Prudential Insurance Company of America  
Sun Life Assurance Company of Canada  
The Travelers Insurance Company

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