

**REPORT OF THE COMMITTEE ON GROUP
ANNUITY MORTALITY**

GROUP ANNUITY MORTALITY

THE current report is limited to a study of the experience of single life matured annuities under Group Annuity contracts. The mortality experience is compared with the *Ga*-1951 male and female tables (without projection) as in prior years. In addition, the mortality experience reported in Tables 1, 2, and 3 is for the first time compared with the *Ga*-1951 male table with Projection C to 1964, using ages set back five years in the case of female lives. Any experience reported in 1964 which actually occurred in 1963 and prior years is reflected in the tables in the appropriate years. The experience of one of the contributing companies is not included in the 1964 experience but is included in the prior years' experience.

Tables 1, 2, and 3 show the experience for the year 1964 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 on plans having no stated normal retirement date, respectively.

Tables 4, 5, and 6 compare the experience for the year 1964 with corresponding experience for other periods for categories analogous to those shown in Tables 1, 2, and 3, respectively.

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.

The ratios shown in Table 3 continue to indicate higher mortality under plans having no stated normal retirement date than during the period after normal retirement date under plans with a stated normal retirement date as shown in Table 1.

The report indicates a significant decline in mortality over last year's report, particularly in the experience on female lives for all three categories as shown in Tables 1, 2, and 3. The experience on females retired prior to normal retirement date is affected the most by this decrease. This reduction over 1963 is probably due in part to the fact that mortality rates in 1963 were generally higher than in preceding years and 1964 indicated a return to the level of previous years. It may also reflect the fact that more liberal early retirement provisions have resulted in a healthier group of lives in these categories and much better mortality

TABLE 1
INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE FOR 1964
RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GQ-1951 TABLE (WITHOUT PROJECTION)				COMPARISON WITH GQ-1951 TABLE (WITH PROJECTION C TO 1964)			
					By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
	Exposed	Actual Deaths	Exposed	Actual Deaths	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*
Males												
50 and under..	42.75	2	\$ 16,915	\$ 399	.18	(†) †	\$ 93	(†) †	.13	†	\$ 75	†
51-55.....	219.49	6	316,624	5,988	2.15	(†) †	3,034	(†) †	1.83	†	2,575	†
56-60.....	1,553.16	35	2,240,814	16,918	21.84	(152) 160%	31,831	(97) 53%	18.51	189%	27,028	63%
61-65.....	22,663.90	599	27,972,985	650,991	529.24	(116) 113	649,603	(104) 100	449.27	133	551,471	118
66-70.....	99,444.76	3,439	107,070,169	3,394,581	3,278.50	(108) 105	3,508,696	(99) 97	2,783.97	124	2,979,426	114
71-75.....	71,772.59	3,946	65,593,236	3,321,660	3,692.00	(113) 107	3,353,174	(102) 99	3,194.26	124	2,899,786	115
76-80.....	35,790.00	3,006	26,188,660	2,197,927	2,888.48	(105) 104	2,101,674	(102) 105	2,598.66	116	1,889,856	116
81-85.....	11,957.41	1,440	8,156,892	982,772	1,461.18	(105) 99	995,684	(101) 99	1,369.86	105	933,380	105
86-90.....	2,609.08	488	1,915,952	329,026	445.92	(104) 109	327,861	(90) 100	436.06	112	320,711	103
91-95.....	416.58	93	360,183	67,416	94.61	(91) 98	80,821	(91) 83	94.61	98	80,821	83
96 and over...	41.58	14	97,571	47,509	13.34	(†) 105	29,979	(†) 158	13.34	105	29,979	158
All ages..	246,511.30	13,068	\$239,930,001	\$11,015,187	12,427.44	(109) 105%	\$11,082,450	(100) 99%	10,960.50	119%	\$9,715,108	113%

* Percentages in parentheses are for the year 1963 as adjusted in 1964.

† Less than 10 deaths (actual or expected).

TABLE 1—Continued

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GQ-1951 TABLE (WITHOUT PROJECTION)				COMPARISON WITH GQ-1951 TABLE (WITH PROJECTION C TO 1964)			
					By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
	Exposed	Actual Deaths	Exposed	Actual Deaths	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*
Females												
50 and under..	23.65	5	\$ 19,789	2,832	.02	(†) †	\$ 47	(†) †	.02	†	\$ 43	†
51-55.....	327.55	5	177,578	2,832	1.44	(†) †	794	(†) †	1.72	†	931	†
56-60.....	2,911.66	27	1,899,816	20,125	20.42	(118) 132%	13,534	(113) 149%	23.45	115%	15,539	130%
61-65.....	11,475.89	103	7,090,675	63,068	134.95	(100) 76	82,312	(98) 77	135.92	76	83,201	76
66-70.....	23,254.86	358	11,894,245	172,741	426.96	(105) 84	217,042	(108) 80	397.08	90	202,015	86
71-75.....	15,019.03	442	6,364,375	188,243	510.65	(88) 87	215,369	(86) 87	412.68	107	174,313	108
76-80.....	6,228.84	335	2,466,652	134,241	368.66	(105) 91	146,788	(99) 91	272.70	123	108,598	124
81-85.....	1,826.01	147	731,416	53,981	167.64	(115) 88	67,609	(113) 80	129.24	114	52,196	103
86-90.....	409.66	46	188,913	21,902	55.90	(111) 82	25,897	(94) 85	47.12	98	21,854	100
91-95.....	80.50	15	33,216	7,009	15.67	(104) 96	6,373	(168) 110	13.24	113	5,416	129
96 and over...	13.08	4	6,046	2,419	3.83	(†) †	1,768	(†) †	3.00	†	1,389	†
All ages..	61,570.73	1,482	\$ 30,872,721	\$ 666,561	1,706.14	(101) 87%	\$ 777,533	(100) 86%	1,436.17	103%	\$ 665,495	100%

* Percentages in parentheses are for the year 1963 as adjusted in 1964.

† Less than 10 deaths (actual or expected).

TABLE 2
 INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE FOR 1964
 RETIREMENT PRIOR TO NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH G-1951 TABLE (WITHOUT PROJECTION)				COMPARISON WITH G-1951 TABLE (WITH PROJECTION C TO 1964)			
					By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
	Exposed	Actual Deaths	Exposed	Actual Deaths	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*
Males												
50 and under	1,138.90	9	\$ 220,944	\$ 2,245	4.04	(†) †	\$ 1,046	(†) †	3.46	†	\$ 888	†
51-55.....	2,004.31	59	1,291,645	25,423	19.30	(290) 306%	12,507	(232) 203%	16.34	361%	10,619	239%
56-60.....	13,967.23	437	10,734,389	265,269	193.47	(244) 226	150,036	(193) 177	164.19	266	127,383	208
61-65.....	37,723.57	1,292	35,931,601	1,105,137	781.79	(183) 165	747,421	(153) 148	663.81	195	634,559	174
66-70.....	26,831.91	1,190	23,233,326	864,950	864.42	(149) 138	742,894	(131) 116	734.03	162	630,835	137
71-75.....	10,939.65	680	7,943,237	469,171	556.01	(129) 122	401,265	(125) 117	480.62	141	346,687	135
76-80.....	4,650.30	435	2,710,040	261,082	373.45	(113) 116	216,522	(113) 121	335.81	130	194,615	134
81-85.....	1,230.56	155	733,592	91,506	149.53	(105) 104	89,116	(111) 103	140.06	111	83,491	110
86 and over..	302.92	54	230,396	27,279	54.94	(105) 98	44,533	(107) 61	54.02	100	43,958	62
All ages.	98,789.35	4,311	\$83,029,170	\$3,112,062	2,996.95	(154) 144%	\$2,405,340	(139) 129%	2,592.34	166%	\$2,073,035	150%

* Percentages in parentheses are for the year 1963 as adjusted in 1964.

† Less than 10 deaths (actual or expected).

TABLE 2—Continued

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)				COMPARISON WITH GA-1951 TABLE (WITH PROJECTION C TO 1964)			
					By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
	Exposed	Actual Deaths	Exposed	Actual Deaths	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*
Females												
50 and under	208.26	4	\$ 48,757	\$ 975	.48	(†) †	\$ 123	(†) †	.45	†	\$ 122	†
51-55.....	1,169.30	11	444,980	3,748	4.83	(†) †	1,854	(†) †	5.54	†	2,129	†
56-60.....	4,195.95	57	1,633,581	22,655	27.61	(219) 206%	10,750	(220) 211%	32.10	178%	12,503	181%
61-65.....	8,661.08	122	3,504,818	36,199	97.76	(159) 125	39,530	(142) 92	99.57	123	40,266	90
66-70.....	5,952.16	108	2,266,204	37,961	106.70	(114) 101	40,560	(132) 94	99.60	108	37,860	100
71-75.....	2,215.99	68	770,843	20,655	74.41	(125) 91	25,708	(122) 80	60.35	113	20,890	99
76-80.....	832.50	45	289,742	10,262	48.79	(106) 92	17,025	(105) 60	36.12	125	12,595	81
81-85.....	227.00	16	88,346	8,927	20.71	(90) 77	8,087	(79) 110	15.88	101	6,224	143
86 and over..	51.00	5	31,350	3,385	7.08	(†) †	4,366	(†) †	5.97	†	3,691	†
All ages.	23,513.24	436	\$ 9,078,621	\$ 144,767	388.37	(135) 112%	\$ 148,003	(132) 98%	355.58	123%	\$ 136,280	106%

* Percentages in parentheses are for the year 1963 as adjusted in 1964.

† Less than 10 deaths (actual or expected).

TABLE 3

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE FOR 1964
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)				COMPARISON WITH GA-1951 TABLE (WITH PROJECTION C TO 1964)			
					By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
	Exposed	Actual Deaths	Exposed	Actual Deaths	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*
Males												
50 and under	14.17	\$ 8,32306	(†) †	\$ 45	(†) †	.06	†	\$ 38	†
51-55.....	122.76	6	108,516	\$ 4,535	1.22	(†) †	1,073	(†) †	1.04	†	912	†
56-60.....	1,185.71	36	1,165,064	18,629	16.58	(233) 217%	16,362	(212) 114%	14.06	256%	13,886	134%
61-65.....	8,783.72	294	9,715,886	293,032	193.25	(172) 152	214,712	(162) 136	164.09	179	182,284	161
66-70.....	26,173.74	1,092	23,326.614	862,015	866.70	(125) 126	762,534	(120) 113	735.95	148	647,510	133
71-75.....	18,463.69	1,044	12,953,277	701,789	944.64	(113) 111	657,051	(117) 107	817.01	128	567,863	124
76-80.....	7,461.73	605	4,208,519	332,749	596.67	(115) 101	335,425	(114) 99	536.27	113	301,419	110
81-85.....	2,231.75	244	1,210,052	117,459	273.13	(109) 89	148,109	(98) 79	256.10	95	138,886	85
86-90.....	470.83	82	229,333	40,295	80.05	(121) 102	39,060	(135) 103	78.24	105	38,186	106
91 and over..	82.25	16	66,887	24,372	19.42	(86) 82	15,200	(53) 160	19.42	82	15,200	160
All ages.	64,990.35	3,419	\$2,992,471	\$2,394,875	2,991.72	(122) 114%	\$2,189,571	(122) 109%	2,622.24	130%	\$ 1,906,184	126%

* Percentages in parentheses are for the year 1963 as adjusted in 1964.

† Less than 10 deaths (actual or expected).

TABLE 3—Continued

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)				COMPARISON WITH GA-1951 TABLE (WITH PROJECTION C TO 1964)			
					By Number of Lives		By Amount of Annual Income		By Number of Lives		By Amount of Annual Income	
	Exposed	Actual Deaths	Exposed	Actual Deaths	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*	Expected Deaths	Ratio Act./Exp.*
Females												
50 and under	8.41	1	\$ 6,231	\$ 750		(†) †	\$ 15	(†) †		†	\$ 14	†
51-55	76.35		43,412		.30	(†) †	180	(†) †	.34	†	209	†
56-60	466.42	7	269,242	3,501	3.15	(†) †	1,793	(†) †	3.63	†	2,082	†
61-65	2,311.26	35	1,442,573	22,828	27.23	(93) 129%	17,006	(95) 134%	27.44	128%	17,119	133%
66-70	4,284.88	66	2,459,618	30,449	78.62	(126) 84	44,908	(136) 68	73.16	90	41,811	73
71-75	2,260.85	72	1,196,903	31,909	75.06	(103) 96	39,327	(109) 81	61.11	118	32,105	99
76-80	725.68	42	381,626	27,925	42.65	(109) 98	22,459	(94) 124	31.52	133	16,619	168
81-85	196.61	17	92,318	9,361	18.01	(108) 94	8,471	(131) 111	13.90	122	6,526	143
86-90	37.58	5	19,107	2,957	5.06	(†) †	2,493	(†) †	4.28	†	2,093	†
91 and over..	3.00		2,273		.54	(†) †	403	(†) †	.45	†	344	†
All ages.	10,371.04	245	\$ 5,913,303	\$ 129,680	250.62	(114) 98%	\$ 137,055	(121) 95%	215.83	114%	\$ 118,922	109%

* Percentages in parentheses are for the year 1963 as adjusted in 1964.

† Less than 10 deaths (actual or expected).

TABLE 4

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO DECEMBER 31, 1964
RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH G-1951 TABLE (WITHOUT PROJECTION)			
					By Number of Lives		By Amount of Annual Income	
	Exposed	Actual Deaths	Exposed	Actual Deaths	Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
Males								
1924-40.....	56,547.68	2,928	\$ 59,667,382	\$ 2,967,078	2,296.70	127%	\$ 2,493,121	119%
1941-45.....	115,189.82	5,929	87,634,915	4,808,062	4,791.95	124	3,888,430	124
1946-50.....	258,609.69	12,093	173,127,569	8,326,826	10,619.07	114	7,442,246	112
1951-55.....	520,401.86	24,336	359,681,656	16,285,292	21,847.90	111	15,118,161	108
1956-60.....	874,344.17	41,766	707,636,714	30,719,959	39,065.91	107	29,922,081	103
1961.....	220,555.39	11,179	197,010,977	8,642,502	10,350.21	108	8,516,313	101
1962.....	231,626.89	11,669	216,618,273	9,413,263	11,139.61	105	9,525,966	99
1963.....	244,436.22	13,062	235,780,444	10,668,104	12,028.46	109	10,624,945	100
1964.....	246,511.30	13,068	239,930,001	11,015,187	12,427.44	105	11,082,450	99
Females								
1924-40.....	9,855.07	275	\$ 5,814,703	\$ 153,541	174.37	158%	\$ 99,243	155%
1941-45.....	17,713.13	492	8,972,795	240,129	340.11	145	175,859	137
1946-50.....	39,326.77	915	17,240,527	427,282	788.45	116	365,316	117
1951-55.....	88,066.93	1,989	36,316,926	863,164	1,892.52	105	803,637	107
1956-60.....	173,384.27	3,934	75,870,070	1,692,139	4,097.89	96	1,735,527	98
1961.....	48,302.43	1,183	22,575,686	508,117	1,225.13	97	533,213	95
1962.....	53,439.45	1,307	25,678,829	595,444	1,394.18	94	617,091	96
1963.....	58,728.47	1,591	29,271,246	716,732	1,578.24	101	715,991	100
1964.....	61,570.73	1,482	30,872,721	666,561	1,706.14	87	777,533	86

TABLE 5

INTERCOMPANY GROUP ANNUITY MORTALITY-- MATURED LIFE EXPERIENCE TO DECEMBER 31, 1964
RETIREMENT PRIOR TO NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GG-1951 TABLE (WITHOUT PROJECTION)			
					By Number of Lives		By Amount of Annual Income	
	Exposed	Actual Deaths	Exposed	Actual Deaths	Expected Deaths	Ratio Act./Exp.	Expected Deaths	Ratio Act./Exp.
Males								
1924-40.....	16,787.10	740	\$ 14,787,792	\$ 606,943	405.78	182%	\$ 354,262	171%
1941-45.....	26,200.10	1,458	17,969,582	776,460	725.80	201	526,913	147
1946-50.....	65,025.59	3,460	37,474,445	1,794,647	1,766.66	196	1,122,985	160
1951-55.....	133,837.64	6,791	78,461,001	3,663,544	3,803.85	179	2,346,260	156
1956-60.....	250,886.90	12,034	173,550,502	7,222,016	7,468.06	161	5,063,227	143
1961.....	71,585.73	3,168	55,004,177	2,170,542	2,141.77	148	1,582,362	137
1962.....	83,073.27	3,675	66,812,581	2,577,257	2,491.87	147	1,913,154	135
1963.....	91,231.14	4,235	75,556,560	3,011,615	2,745.61	154	2,170,564	139
1964.....	98,789.35	4,311	83,029,170	3,112,062	2,996.95	144	2,405,340	129
Females								
1924-40.....	1,924.92	44	\$ 813,591	\$ 20,273	17.43	252%	\$ 7,834	259%
1941-45.....	3,852.98	102	1,448,280	38,267	45.23	226	18,969	202
1946-50.....	10,130.74	231	3,383,283	80,824	128.75	179	49,848	162
1951-55.....	23,041.76	527	7,421,411	191,059	321.22	164	117,223	163
1956-60.....	50,759.82	1,152	17,532,854	394,349	771.17	149	278,935	141
1961.....	15,868.66	340	5,786,594	117,521	248.51	137	91,585	128
1962.....	18,413.08	400	6,921,586	135,999	293.64	136	110,072	124
1963.....	21,229.06	465	8,364,512	177,213	343.45	135	133,785	132
1964.....	23,513.24	436	9,078,621	144,767	388.37	112	148,003	98

TABLE 6

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO DECEMBER 31, 1964
RETIREMENT UNDER A PLAN HAVING NO STATED NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH GG-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.....	127,309.45	6,257	\$ 78,642,120	\$ 3,581,407	5,514.05	113%	\$ 3,224,399	111%
1961.....	46,355.25	2,395	32,306,564	1,526,939	2,056.23	116	1,324,636	115
1962.....	55,213.68	2,955	40,896,349	1,949,516	2,450.34	121	1,660,700	117
1963.....	62,365.44	3,408	48,730,904	2,415,077	2,793.96	122	1,980,656	122
1964.....	64,990.35	3,419	52,992,471	2,394,875	2,991.72	114	2,189,571	109
Females								
1956-60.....	13,690.96	276	\$ 6,615,908	\$ 130,228	299.40	92%	\$ 141,760	92%
1961.....	6,098.65	109	3,081,955	47,920	137.27	79	68,180	70
1962.....	7,590.73	191	4,055,780	93,106	173.38	110	90,101	103
1963.....	9,272.76	247	5,126,275	138,538	216.22	114	114,609	121
1964.....	10,371.04	245	5,913,303	129,680	250.62	98	137,055	95

TABLE 7
 INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE
 TO DECEMBER 31, 1964
 RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE
 COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)
 MALES

Attained Ages	1946-1950	1951-1955	1956-1960	1957-1961	1958-1962	1959-1963	1960-1964
Actual Deaths—by Number of Lives							
60 and under.....	46	51	95	119	154	178	199
61-65.....	1,211	2,139	2,845	2,970	3,053	3,100	3,096
66-70.....	4,790	9,653	14,384	15,370	16,161	16,873	17,300
71-75.....	3,162	6,767	12,662	14,166	15,482	17,066	18,110
76-80.....	1,731	3,549	7,468	8,684	9,853	11,225	12,527
81-85.....	855	1,568	3,133	3,691	4,264	4,993	5,730
86-90.....	232	494	954	1,116	1,320	1,557	1,801
91-95.....	60	104	214	246	288	305	352
96 and over.....	6	11	21	23	26	33	41
Total.....	12,093	24,336	41,776	46,385	50,601	55,330	59,156
Ratio: Act./Exp.—by Number of Lives							
60 and under.....	189%	183%	152%	154%	165%	165%	174%
61-65.....	118	117	112	111	111	111	111
66-70.....	113	113	107	107	107	107	107
71-75.....	113	110	108	109	108	110	109
76-80.....	110	107	106	106	104	104	104
81-85.....	119	108	102	103	102	103	102
86-90.....	108	111	104	103	104	104	104
91-95.....	154	134	123	118	118	107	104
96 and over.....	*	104	79	73	69	72	78
Total.....	114%	111%	107%	107%	107%	107%	107%
Ratio: Act./Exp.—by Amount of Annual Income							
60 and under.....	198%	157%	124%	115%	113%	120%	113%
61-65.....	114	115	109	104	101	101	101
66-70.....	114	108	101	101	101	100	100
71-75.....	112	108	104	103	102	102	101
76-80.....	101	104	101	102	98	99	101
81-85.....	121	99	102	102	102	101	101
86-90.....	90	108	106	106	109	106	102
91-95.....	169	157	108	99	90	87	84
96 and over.....	*	92	63	58	45	40	88
Total.....	112%	108%	103%	102%	101%	101%	100%

* Less than 10 deaths (actual or expected).

TABLE 7—Continued

FEMALES

Attained Ages	1946-1950	1951-1955	1956-1960	1957-1961	1958-1962	1959-1963	1960-1964
Actual Deaths—by Number of Lives							
60 and under.....	41	67	76	77	88	105	117
61-65.....	163	324	459	493	556	595	584
66-70.....	258	645	1,253	1,388	1,547	1,737	1,815
71-75.....	233	424	1,006	1,217	1,417	1,634	1,820
76-80.....	128	291	666	759	881	1,110	1,296
81-85.....	63	173	311	374	440	540	598
86-90.....	25	53	127	145	180	216	238
91-95.....	4	12	29	37	44	51	60
96 and over.....			7	6	7	6	9
Total.....	915	1,989	3,934	4,496	5,160	5,994	6,537
Ratio: Act./Exp.—by Number of Lives							
60 and under.....	119%	124%	99%	94%	99%	109%	115%
61-65.....	113	109	97	96	101	100	93
66-70.....	109	104	95	94	94	97	94
71-75.....	125	96	90	92	92	91	89
76-80.....	108	102	102	96	91	95	93
81-85.....	135	127	100	101	102	105	99
86-90.....	144	116	120	112	112	111	106
91-95.....	*	*	103	114	113	109	108
96 and over.....	*	*	*	*	*	*	*
Total.....	116%	105%	96%	95%	95%	97%	94%
Ratio: Act./Exp.—by Amount of Annual Income							
60 and under.....	100%	108%	108%	101%	103%	110%	116%
61-65.....	122	115	102	101	104	104	97
66-70.....	108	109	96	94	94	96	92
71-75.....	124	93	86	89	89	89	88
76-80.....	102	106	107	97	94	94	93
81-85.....	150	126	100	96	101	106	97
86-90.....	158	108	118	116	129	123	116
91-95.....	*	*	107	118	114	125	127
96 and over.....	*	*	*	*	*	*	*
Total.....	117%	107%	98%	95%	96%	97%	94%

TABLE 8
 INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE
 TO DECEMBER 31, 1964
 RETIREMENT PRIOR TO NORMAL RETIREMENT DATE
 COMPARISON WITH Ga-1951 TABLE (WITHOUT PROJECTION)
 MALES

Attained Ages	1946-50	1951-55	1956-60	1957-61	1958-62	1959-63	1960-64
Actual Deaths—by Number of Lives							
60 and under.....	651	1,135	1,547	1,661	1,861	2,060	2,234
61-65.....	1,238	2,308	3,848	4,215	4,602	5,174	5,575
66-70.....	843	1,856	3,214	3,530	4,002	4,520	5,004
71-75.....	470	886	2,013	2,284	2,522	2,810	3,009
76-80.....	218	422	905	1,044	1,233	1,432	1,670
81-85.....	36	160	389	441	485	538	602
86-90.....	4	22	103	111	131	163	181
91-95.....		2	14	17	19	26	32
96 and over.....			1	1			
Total.....	3,460	6,791	12,034	13,304	14,855	16,723	18,307
Ratio: Act./Exp.—by Number of Lives							
60 and under.....	334%	310%	252%	238%	235%	236%	237%
61-65.....	243	229	198	190	181	180	174
66-70.....	166	156	151	148	145	145	142
71-75.....	138	129	128	129	129	130	127
76-80.....	126	111	118	115	115	113	114
81-85.....	94	108	114	114	112	110	107
86-90.....	*	82	113	103	100	105	102
91-95.....	*	*	124	111	95	94	92
96 and over.....	*	*	*	*	*	*	*
Total.....	196%	179%	161%	157%	153%	152%	149%
Ratio: Act./Exp.—by Amount of Annual Income							
60 and under.....	251%	249%	196%	190%	200%	199%	197%
61-65.....	206	206	164	157	147	147	147
66-70.....	145	141	137	135	137	134	130
71-75.....	131	121	122	122	115	118	117
76-80.....	115	102	119	116	114	112	115
81-85.....	78	94	105	112	116	120	117
86-90.....	*	150	93	88	87	104	100
91-95.....	*	*	106	62	45	38	37
96 and over.....	*	*	*	*	*	*	*
Total.....	160%	156%	143%	140%	137%	137%	135%

* Less than 10 deaths (actual or expected).

TABLE 8—Continued

FEMALES

Attained Ages	1946-50	1951-55	1956-60	1957-61	1958-62	1959-63	1960-64
Actual Deaths—by Number of Lives							
60 and under.....	64	117	194	223	239	273	299
61-65.....	59	155	327	397	466	543	589
66-70.....	54	126	292	339	394	453	489
71-75.....	34	71	186	203	257	297	322
76-80.....	16	40	99	114	128	158	178
81-85.....	3	13	47	52	56	64	63
86-90.....	1	4	6	8	13	17	20
91-95.....		1	1	2	5	7	6
96 and over.....							
Total.....	231	527	1,152	1,338	1,558	1,812	1,966
Ratio: Act./Exp.—by Number of Lives							
60 and under.....	260%	255%	220%	223%	211%	214%	213%
61-65.....	173	186	166	166	164	162	153
66-70.....	175	147	144	144	142	137	125
71-75.....	140	120	119	109	118	117	110
76-80.....	*	119	116	111	103	104	99
81-85.....	*	125	140	126	112	108	88
86-90.....	*	*	*	*	120	115	102
91-95.....	*	*	*	*	*	*	*
96 and over.....	*	*	*	*	*	*	*
Total.....	179%	164%	149%	146%	144%	142%	132%
Ratio: Act./Exp.—by Amount of Annual Income							
60 and under.....	259%	255%	229%	214%	196%	206%	206%
61-65.....	166	216	147	153	154	151	134
66-70.....	184	151	147	142	134	132	118
71-75.....	114	102	106	100	113	113	106
76-80.....	*	106	111	102	92	96	87
81-85.....	*	136	139	114	115	114	97
86-90.....	*	*	*	*	79	59	69
91-95.....	*	*	*	*	*	*	*
96 and over.....	*	*	*	*	*	*	*
Total.....	162%	163%	141%	137%	135%	135%	123%

TABLE 9
 INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE
 TO DECEMBER 31, 1964
 RETIREMENT UNDER A PLAN HAVING NO STATED NORMAL RETIREMENT DATE
 COMPARISON WITH G2-1951 TABLE (WITHOUT PROJECTION)

MALES

Attained Ages	1956-60	1957-61	1958-62	1959-63	1960-64
Actual Deaths—by Number of Lives					
60 and under.....	61	82	110	147	173
61-65.....	540	659	842	1,063	1,236
66-70.....	2,429	3,075	3,718	4,330	4,789
71-75.....	1,809	2,400	3,035	3,664	4,259
76-80.....	948	1,243	1,644	2,075	2,463
81-85.....	343	464	617	812	976
86-90.....	107	142	202	274	326
91-95.....	15	26	31	40	50
96 and over.....	5	5	6	7	7
Total.....	6,257	8,096	10,205	12,412	14,279
Ratio: Act./Exp.—by Number of Lives					
60 and under.....	306%	283%	277%	276%	262%
61-65.....	151	144	143	147	151
66-70.....	120	123	123	124	125
71-75.....	108	112	113	114	114
76-80.....	102	103	106	109	109
81-85.....	93	94	95	98	97
86-90.....	98	96	103	109	109
91-95.....	84	110	106	104	99
96 and over.....	*	*	*	*	*
Total.....	113%	115%	117%	118%	118%
Ratio: Act./Exp.—by Amount of Annual Income					
60 and under.....	169%	194%	220%	232%	207%
61-65.....	133	126	125	136	137
66-70.....	110	115	116	117	117
71-75.....	111	114	111	113	112
76-80.....	104	104	108	110	108
81-85.....	105	104	104	103	91
86-90.....	105	100	109	110	111
91-95.....	53	83	81	68	100
96 and over.....	*	*	*	*	*
Total.....	111%	113%	114%	116%	115%

* Less than 10 deaths (actual or expected).

TABLE 9—Continued

FEMALES

Attained Ages	1956-60	1957-61	1958-62	1959-63	1960-64
Actual Deaths—by Number of Lives					
60 and under.....	11	10	16	24	29
61-65.....	50	62	79	96	116
66-70.....	119	153	198	269	292
71-75.....	54	79	126	175	237
76-80.....	22	30	65	99	136
81-85.....	15	25	31	47	60
86-90.....	5	6	10	14	19
91-95.....					
96 and over.....					
Total.....	276	365	525	724	889
Ratio: Act./Exp.—by Number of Lives					
60 and under.....	*	*	*	200%	203%
61-65.....	122%	111%	108%	106	109
66-70.....	108	101	99	107	98
71-75.....	65	70	85	91	97
76-80.....	51	48	73	85	93
81-85.....	107	117	101	106	103
86-90.....	*	*	*	138	133
91-95.....	*	*	*	*	*
96 and over.....	*	*	*	*	*
Total.....	92%	88%	94%	101%	100%
Ratio: Act./Exp.—by Amount of Annual Income					
60 and under.....	*	*	*	188%	196%
61-65.....	95%	91%	88%	94	104
66-70.....	109	104	100	111	95
71-75.....	64	61	75	84	88
76-80.....	59	52	79	84	98
81-85.....	136	122	105	113	112
86-90.....	*	*	*	165	164
91-95.....	*	*	*	*	*
96 and over.....	*	*	*	*	*
Total.....	92%	85%	90%	100%	98%

experience than for the previous groups that had a larger percentage of disabled lives.

Table 7 shows that the actual-to-expected ratios for male lives by number of lives have continued to remain at 107 per cent for each consecutive five-year period since 1956, and the actual-to-expected ratios by amounts have decreased by 1 per cent since 1956 except for the periods 1958-62 and 1959-63, when it remained at 101 per cent.

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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