

**TRANSACTIONS OF SOCIETY OF ACTUARIES
1961 REPORTS**

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

GROUP ANNUITY MORTALITY

THE current report like the previous reports is limited to 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 well as with the 1937 Standard Annuity Table. There was a significant amount of experience reported in 1960 which actually occurred in 1959 and prior years, and all the ratios relating to those years shown in these tables have been adjusted to recognize this experience.

Tables 1, 2 and 3 show the experience for the year 1960 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.

The higher mortality ratios shown in Table 3 for men as compared with those in Table 1 again point to the possibility of inherently higher mortality under plans having no stated normal retirement date than under plans with a stated normal retirement date during the period after normal retirement date. However, the experience in Table 3 is relatively immature and the higher ratios may be due in part to this.

Tables 4 and 5 compare the experience for the year 1960 with corresponding experience for other periods for lives retiring on or after normal retirement date, and for lives retiring on plans having no stated normal retirement date, respectively. Experience under plans having no stated normal retirement date is not available for calendar years prior to 1956. This is the first time a table with the data shown in Table 5 has been prepared for the report.

Table 6 shows the experience since 1946 for male and female lives retiring on or after normal retirement date for successive five year periods compared with the *Ga*-1951 male and female tables (without projection). This table tends to smooth out the fluctuations in the experience for individual years and indicates a continued improvement in the mortality of male retired lives. Table 7 shows the corresponding experience for the one five year period for which experience is available, 1956-1960, for male and female lives retiring on plans having no stated normal retirement date.

The report indicates little change during 1960 in the mortality rates

TABLE 1

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE FOR THE YEAR 1960
RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE				COMPARISON WITH G4-1951 TABLE (WITHOUT PROJECTION)							
					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 & under	17.50	1	\$ 18,979	\$ 244	.14	(*)	*%	\$ 168	(*)	*%	.08	(*)	*%	\$ 116	(*)	*%
51-55	142.81	1	260,658	648	1.83	(*)	*	3,269	(*)	*	1.44	(*)	*	2,483	(*)	*
56-60	1,396.12	28	1,520,419	31,939	24.94	(78)	112	27,483	(28)	116	19.47	(100)	144	21,570	(36)	148
61-65	22,702.10	553	24,593,579	620,875	636.62	(93)	87	687,817	(82)	90	537.13	(111)	103	579,836	(97)	107
66-70	93,244.27	3,278	87,894,861	2,864,383	3,333.15	(94)	98	3,125,326	(88)	92	3,042.39	(103)	108	2,849,179	(97)	101
71-75	56,035.61	3,135	41,386,552	2,198,193	2,875.25	(111)	109	2,110,527	(105)	104	2,860.15	(111)	110	2,096,206	(106)	105
76-80	23,396.12	1,939	15,350,919	1,209,994	1,714.31	(114)	113	1,122,650	(107)	108	1,868.42	(105)	104	1,222,870	(98)	99
81-85	6,581.19	818	4,479,635	523,369	688.56	(117)	119	468,653	(118)	112	806.43	(100)	101	548,969	(100)	95
86-90	1,461.33	245	1,161,551	219,061	215.80	(131)	114	171,981	(139)	127	249.76	(114)	98	198,990	(120)	110
91-95	195.25	48	196,759	37,107	40.33	(126)	119	40,558	(113)	91	44.64	(114)	108	44,873	(102)	83
96 & over	20.92	8	17,876	3,524	7.07	(*)	*	5,577	(*)	*	7.16	(*)	*	5,761	(*)	*
All Ages	205,193.22	10,054	\$176,881,788	\$7,709,337	9,538.00	(105)	105%	\$7,764,009	(98)	99%	9,437.07	(107)	107%	\$7,570,853	(100)	102%

TABLE 1—Continued

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE				COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)							
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		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.	Expected Deaths	Ratio† Act./Exp.				
FEMALES																
50 & under	18.93	1	\$ 18,947	\$ 373	.08	(*)	* %	\$ 89	(*)	* %	.02	(*)	* %	\$ 41	(*)	* %
51-55....	265.61	3	127,447	2,570	2.39	(*)	* %	1,146	(*)	* %	1.16	(*)	* %	575	(*)	* %
56-60....	2,371.93	13	1,421,448	9,863	29.66	(71)	44	17,898	(69)	55	16.66	(126)	78	10,042	(124)	98
61-65....	9,115.98	87	4,914,678	48,109	162.94	(75)	53	87,142	(72)	55	107.98	(112)	81	57,528	(109)	84
66-70....	17,992.44	310	7,923,716	126,941	441.62	(69)	70	193,284	(70)	66	328.48	(93)	94	143,361	(94)	89
71-75....	8,999.24	232	3,505,230	95,229	316.62	(94)	73	123,178	(91)	77	300.99	(99)	77	117,036	(95)	81
76-80....	3,248.92	184	1,295,548	76,415	163.88	(113)	112	65,559	(111)	117	189.38	(98)	97	75,829	(96)	101
81-85....	898.16	70	381,206	30,704	66.15	(151)	106	28,227	(150)	109	83.76	(119)	84	35,830	(118)	86
86-90....	241.83	43	120,131	21,080	25.20	(127)	171	12,475	(139)	169	32.76	(97)	131	16,244	(107)	130
91-95....	38.00	11	20,097	5,342	5.60	(*)	*	2,990	(*)	*	7.50	(*)	*	3,996	(*)	*
96 & over.	5.67	3	1,550	891	1.18	(*)	*	336	(*)	*	1.64	(*)	*	479	(*)	*
All Ages	43,196.71	957	\$ 19,729,998	\$ 417,517	1,215.32	(87)	79%	\$ 532,324	(86)	78%	1,070.33	(100)	89%	\$ 460,961	(100)	91%

* Less than 10 deaths (actual or expected).

† Percentages in parentheses are for the year 1959 as adjusted in 1960.

TABLE 2

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE FOR THE YEAR 1960
RETIREMENT PRIOR TO NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE				COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)			
					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 & under..	357.24	6	\$ 99,136	\$ 1,196	2.52	(*) * %	\$ 790	(*) * %	1.53	(*) * %	\$ 521	(*) * %
51-55.....	1,264.80	33	753,948	9,529	16.15	(193) 204	9,591	(205) 99	12.30	(252) 268	7,301	(269) 131
56-60.....	10,409.11	337	6,718,066	177,507	184.11	(169) 183	119,934	(136) 148	144.43	(215) 233	94,090	(174) 189
61-65.....	24,076.77	917	20,173,379	633,903	605.68	(160) 151	508,377	(126) 125	496.57	(196) 185	416,862	(153) 152
66-70.....	16,358.19	732	12,170,374	524,420	577.25	(138) 127	426,512	(121) 123	525.23	(152) 139	387,491	(133) 135
71-75.....	7,642.11	483	4,563,055	234,511	391.85	(134) 123	232,510	(124) 101	389.82	(134) 124	230,892	(125) 102
76-80.....	2,646.67	251	1,555,916	150,236	192.61	(123) 130	113,396	(119) 132	209.52	(113) 120	123,392	(109) 122
81-85.....	683.50	107	474,256	64,729	72.16	(139) 148	50,636	(128) 128	84.61	(119) 126	59,366	(109) 109
86 & over...	159.08	27	142,908	19,165	24.53	(139) 110	22,873	(100) 84	28.26	(120) 96	26,184	(87) 73
All Ages	63,597.47	2,893	\$46,651,038	\$1,815,196	2,066.86	(146) 140%	\$1,484,619	(125) 122%	1,892.27	(160) 153%	\$1,346,099	(138) 135%

TABLE 2—Continued

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE				COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)			
					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 & under..	141.77	0	\$ 28,052	\$ 0	.74	(*) * %	\$ 156	(*) * %	.33	(*) * %	\$ 71	(*) * %
51-55.....	967.74	7	313,901	3,479	8.10	(*) *	2,630	(*) *	3.94	(*) *	1,303	(*) *
56-60.....	2,772.05	41	954,102	18,398	33.11	(133) 124	11,443	(141) 161	18.16	(242) 226	6,283	(256) 293
61-65.....	4,979.84	92	1,867,942	30,697	85.96	(104) 107	32,335	(106) 95	56.06	(160) 164	21,133	(162) 145
66-70.....	2,969.16	92	1,065,667	26,216	72.05	(114) 128	25,798	(119) 102	53.33	(154) 173	19,081	(161) 137
71-75.....	1,283.50	53	426,113	15,854	45.13	(111) 117	15,055	(87) 105	42.84	(117) 124	14,362	(91) 110
76-80.....	413.00	26	149,803	12,357	20.87	(145) 125	7,629	(110) 162	24.17	(126) 108	8,844	(95) 140
81-85.....	100.00	10	47,674	4,021	7.43	(*) *	3,564	(*) *	9.38	(*) *	4,528	(*) *
86 & over...	14.00	1	8,256	644	1.61	(*) *	937	(*) *	2.11	(*) *	1,227	(*) *
All Ages	13,641.06	322	\$ 4,861,510	\$ 111,666	275.00	(119) 117%	\$ 99,547	(117) 112%	210.32	(155) 153%	\$ 76,832	(151) 145%

*Less than 10 deaths (actual or expected).

† Percentages in parentheses are for the year 1959 as adjusted in 1960.

TABLE 3
 INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO 12-31-60
 RETIREMENT UNDER A PLAN HAVING NO STATED NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE				COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)			
					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 & under..	7.66	1	\$ 4,613	\$ 260	.07	(*) * %	35	(*) * %	.03	(*) * %	22	(*) * %
51-55.....	53.02	3	40,754	891	.67	(*) *	534	(*) *	52	(*) *	405	(*) *
56-60.....	470.56	18	335,428	8,911	8.47	(*) *	6,057	(*) *	6.58	(*) *	4,756	(*) *
61-65.....	4,821.29	146	3,990,302	98,914	131.17	(108) 111	108,604	(105) 91	109.79	(129) 133	90,926	(125) 109
66-70.....	19,065.98	746	13,773,646	463,536	685.19	(111) 109	492,069	(99) 94	626.20	(121) 119	449,099	(108) 103
71-75.....	10,858.86	635	6,200,759	373,463	555.25	(103) 114	315,550	(103) 118	551.90	(104) 115	313,243	(104) 119
76-80.....	3,877.86	343	1,949,094	172,397	284.04	(99) 121	142,603	(108) 121	309.60	(91) 111	155,356	(99) 111
81-85.....	1,052.24	116	535,842	57,688	109.76	(99) 106	56,131	(179) 103	128.55	(84) 90	65,755	(153) 88
86-90.....	226.50	41	124,587	21,763	33.39	(108) 123	18,364	(99) 119	38.65	(93) 106	21,264	(86) 102
91 & over...	37.00	9	24,116	3,203	8.57	(*) *	5,579	(*) *	9.27	(*) *	6,023	(*) *
All Ages	40,470.97	2,058	\$26,979,141	\$1,201,026	1,816.58	(107) 113%	\$1,145,526	(106) 105%	1,781.09	(109) 116%	\$1,106,849	(110) 109%

TABLE 3—Continued

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE				COMPARISON WITH G-1951 TABLE (WITHOUT PROJECTION)							
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		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.	Expected Deaths	Ratio† Act./Exp.				
FEMALES																
50 & under..	7.91	0	\$ 3,931	\$ 0	03	(*)	* %	\$ 21	(*)	* %	.01	(*)	* %	\$ 9	(*)	* %
51-55.....	45.08	0	32,444	0	.37	(*)	*	266	(*)	*	.18	(*)	*	132	(*)	*
56-60.....	236.46	2	120,377	1,492	2.89	(*)	*	1,475	(*)	*	1.62	(*)	*	819	(*)	*
61-65.....	1,156.33	18	554,711	7,383	20.96	(90)	86	10,102	(78)	73	13.95	(135)	129	6,742	(117)	110
66-70.....	2,187.20	36	1,118,384	16,202	53.28	(105)	68	27,116	(119)	60	39.50	(143)	91	20,049	(161)	81
71-75.....	834.28	22	391,950	10,403	29.45	(42)	75	13,898	(34)	75	28.07	(44)	78	13,296	(35)	78
76-80.....	288.08	8	132,476	3,335	14.52	(*)	*	6,680	(*)	*	16.87	(*)	*	7,715	(*)	*
81-85.....	60.75	7	24,390	2,778	4.42	(*)	*	1,782	(*)	*	5.55	(*)	*	2,254	(*)	*
86-90.....	9.67	3	5,476	2,545	.99	(*)	*	580	(*)	*	1.29	(*)	*	755	(*)	*
91 & over...	0.00	0	0	0	.00	(*)	*	0	(*)	*	.00	(*)	*	0	(*)	*
All Ages	4,825.76	96	\$ 2,384,139	\$ 44,138	126.91	(81)	76%	\$ 61,920	(86)	71%	107.04	(97)	90%	\$ 51,771	(103)	85%

* Less than 10 deaths (actual or expected).

† Percentages in parentheses are for the year 1959 as adjusted in 1960.

TABLE 4
 INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE: EXPERIENCE TO 12-31-60
 RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE				COMPARISON WITH GA-1951 TABLE (WITHOUT PROJECTION)			
	Exposed	Actual Deaths	Exposed	Actual Deaths	By Number of Lives		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.	Expected Deaths	Ratio Act./Exp.
MALES												
1924-1940...	56,297.34	2,923	\$ 59,377,823	\$ 2,964,846	2,369.53	123%	\$ 2,553,456	116%	2,289.45	128%	\$ 2,485,673	119%
1941-1945...	114,397.15	5,905	86,810,361	4,792,550	4,908.85	120	3,918,035	122	4,766.51	124	3,862,496	124
1946-1950...	258,414.37	12,085	172,910,252	8,323,428	10,974.82	110	7,597,534	110	10,611.40	114	7,435,125	112
1951-1955...	519,349.90	24,313	359,131,001	16,266,182	22,470.41	108	15,509,641	105	21,811.46	111	15,096,841	108
1956.....	143,800.20	6,552	107,475,704	4,645,450	6,375.18	103	4,646,174	100	6,226.63	105	4,514,114	103
1957.....	158,036.15	7,433	121,477,699	5,370,998	7,085.14	105	5,266,997	102	6,940.23	107	5,119,417	105
1958.....	173,846.34	8,314	140,628,722	6,005,083	7,881.26	105	6,681,983	99	7,743.36	107	5,907,322	102
1959.....	190,887.47	9,192	159,595,972	6,775,202	8,746.30	105	6,938,682	98	8,620.26	107	6,749,057	100
1960.....	205,193.22	10,054	176,881,788	7,709,337	9,538.00	105	7,764,009	99	9,437.07	107	7,570,853	102
FEMALES												
1924-1940...	9,852.36	275	\$ 5,823,610	\$ 153,541	219.79	125%	\$ 127,454	120%	174.83	157%	\$ 99,999	154%
1941-1945...	17,593.08	491	8,937,855	239,864	416.16	118	214,271	112	339.17	145	176,096	136
1946-1950...	39,302.42	915	17,244,237	427,282	954.42	96	431,897	99	787.99	116	365,421	117
1951-1955...	87,948.77	1,985	36,331,696	861,451	2,246.88	88	939,159	92	1,889.58	105	803,767	107
1956.....	26,679.01	620	11,236,700	279,598	701.94	88	293,434	95	596.53	104	250,924	111
1957.....	30,128.74	642	12,850,332	260,571	804.58	80	337,556	77	687.94	93	288,771	90
1958.....	34,104.88	755	14,826,148	331,215	925.28	82	393,228	84	797.67	95	337,670	98
1959.....	38,659.64	935	17,139,137	396,055	1,068.97	87	458,752	86	932.00	100	395,779	100
1960.....	43,196.71	957	19,729,998	417,517	1,215.32	79	532,324	78	1,070.33	89	460,961	91

TABLE 5

INTERCOMPANY GROUP ANNUITY MORTALITY—MATURED LIFE EXPERIENCE TO 12-31-60
RETIREMENT UNDER A PLAN HAVING NO STATED NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE				COMPARISON WITH Ga-1951 TABLE (WITHOUT PROJECTION)			
					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												
1956.....	12,874.28	556	\$ 6,350,459	\$ 259,684	567.80	98%	\$ 279,758	93%	553.89	100%	\$ 273,028	95%
1957.....	16,544.16	846	9,026,361	454,083	728.40	116	389,132	117	710.38	119	377,573	120
1958.....	23,963.52	1,200	14,750,524	697,865	1,050.45	114	619,164	113	1,023.10	117	596,572	117
1959.....	32,855.81	1,552	21,173,140	943,281	1,456.17	107	891,643	106	1,423.90	109	860,068	110
1960.....	40,470.97	2,058	26,979,141	1,201,026	1,816.58	113	1,145,526	105	1,781.09	116	1,106,849	109
FEMALES												
1956.....	931.80	20	\$ 409,334	\$ 6,652	24.49	82%	\$ 10,696	62%	20.49	98%	\$ 8,927	75%
1957.....	1,505.61	31	699,398	15,039	38.56	80	17,721	85	31.80	97	14,549	103
1958.....	2,596.54	48	1,244,762	23,940	66.85	72	31,480	76	55.47	87	25,868	93
1959.....	3,746.37	80	1,795,772	40,096	98.23	81	46,684	86	82.64	97	39,034	103
1960.....	4,825.76	96	2,384,139	44,138	126.91	76	61,920	71	107.04	90	51,771	85

TABLE 6
INTERCOMPANY GROUP ANNUITY MORTALITY--MATURED
LIFE EXPERIENCE TO 12-31-60
RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE
COMPARISON WITH Ga-1951 TABLE (WITHOUT PROJECTION)
MALES

Attained Ages	1946- 1950	1951- 1955	1952- 1956	1953- 1957	1954- 1958	1955- 1959	1956- 1960
Actual Deaths, by Number of Lives							
60 & under.....	46	49	50	53	55	65	90
61-75.....	1,208	2,130	2,279	2,443	2,605	2,684	2,801
66-70.....	4,788	9,647	10,556	11,518	12,495	13,371	14,311
71-75.....	3,159	6,765	7,660	8,743	9,944	11,305	12,614
76-80.....	1,731	3,546	4,123	4,815	5,545	6,432	7,434
81-85.....	855	1,567	1,776	2,032	2,351	2,696	3,115
86-90.....	232	494	577	622	685	825	947
91-95.....	60	104	115	139	172	189	212
96 & over.....	6	11	12	10	12	15	21
Total.....	12,085	24,313	27,148	30,375	33,864	37,582	41,545
Ratio Actual/Expected, by Number of Lives							
60 & under.....	190%	176%	170%	170%	159%	140%	146%
61-75.....	118	117	115	114	114	112	111
66-70.....	113	113	111	110	109	107	107
71-75.....	113	110	108	107	107	108	108
76-80.....	110	107	106	107	106	106	105
81-85.....	119	108	106	105	104	102	102
86-90.....	108	111	112	105	102	105	103
91-95.....	154	134	125	129	133	125	121
96 & over.....	*	104	106	75	68	69	79
Total.....	114%	111%	109%	108%	108%	107%	107%
Ratio Actual/Expected, by Amount of Annual Income							
60 & under.....	199%	150%	145%	147%	114%	91%	111%
61-65.....	114	115	113	109	108	104	106
66-70.....	114	108	106	104	103	101	100
71-75.....	112	108	105	104	104	104	104
76-80.....	101	104	104	106	103	102	101
81-85.....	121	99	98	101	103	102	102
86-90.....	90	108	113	103	97	103	105
91-95.....	169	157	164	136	129	121	108
96 & over.....	*	92	97	63	63	65	63
Total.....	112%	108%	106%	105%	104%	102%	102%

* Less than 10 deaths (actual or expected).

TABLE 6—Continued

FEMALES

Attained Ages	1946- 1950	1951- 1955	1952- 1956	1953- 1957	1954- 1958	1955- 1959	1956- 1960
Actual Deaths, by Number of Lives							
60 & under.....	41	67	71	75	68	77	76
61-65.....	163	324	350	359	389	450	457
66-70.....	258	644	753	841	973	1,107	1,246
71-75.....	233	421	494	594	716	878	995
76-80.....	128	291	356	416	462	558	664
81-85.....	63	173	193	207	233	286	308
86-90.....	25	53	64	72	86	98	127
91-95.....	4	12	11	13	18	20	29
96 & over.....	0	0	2	2	3	4	7
Total.....	915	1,985	2,294	2,579	2,948	3,478	3,909
Ratio Actual/Expected, by Number of Lives							
60 & under.....	119%	124%	122%	121%	104%	109%	100%
61-65.....	114	109	106	97	96	103	97
66-70.....	109	104	102	97	97	95	94
71-75.....	125	95	92	91	91	93	89
76-80.....	108	102	107	108	103	104	102
81-85.....	135	128	122	111	106	108	99
86-90.....	144	117	123	119	122	116	121
91-95.....	*	*	91	87	97	87	105
96 & over.....	*	*	*	*	*	*	*
Total.....	116%	105%	103%	99%	97%	99%	96%
Ratio Actual/Expected, by Amount of Annual Income							
60 & under.....	100%	108%	108%	105%	92%	103%	108%
61-65.....	122	115	113	109	104	108	102
66-70.....	107	109	105	99	99	99	96
71-75.....	123	92	89	85	85	88	86
76-80.....	102	106	113	115	109	110	106
81-85.....	150	126	129	112	104	110	99
86-90.....	158	108	111	105	109	111	119
91-95.....	*	*	84	85	106	96	109
96 & over.....	*	*	*	*	*	*	*
Total.....	117%	107%	106%	101%	98%	101%	97%

TABLE 7

INTERCOMPANY GROUP ANNUITY MORTALITY—
MATURED LIFE EXPERIENCE TO 12-31-60
RETIREMENT UNDER A PLAN HAVING NO
STATED NORMAL RETIREMENT DATE
COMPARISON WITH Ga-1951 TABLE
(WITHOUT PROJECTION)

Attained Ages	Males 1956-1960	Females 1956-1960
Actual Deaths, by Number of Lives		
60 & under.....	61	11
61-65.....	524	50
66-70.....	2,418	118
71-75.....	1,798	54
76-80.....	942	22
81-85.....	342	15
86-90.....	107	5
91-95.....	15	0
96 & over.....	5	0
Total.....	6,212	275
Ratio Actual/Expected, by Number of Lives		
60 & under.....	316%	242%
61-65.....	148	123
66-70.....	120	107
71-75.....	108	66
76-80.....	102	51
81-85.....	93	107
86-90.....	97	*
91-95.....	81	*
96 & over.....	*	*
Total.....	113%	92%
Ratio Actual/Expected, by Amount of Annual Income		
60 & under.....	174%	235%
61-65.....	131	96
66-70.....	110	111
71-75.....	111	64
76-80.....	103	59
81-85.....	105	136
86-90.....	103	*
91-95.....	46	*
96 & over.....	*	*
Total.....	111%	93%

* Less than 10 deaths (actual or expected).

for male lives retired on or after normal retirement date. Other categories tend to fluctuate more, probably because of the smaller amount of experience.

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
Pacific Mutual Life Insurance Company
Prudential Insurance Company of America
Sun Life Assurance Company of Canada
The Travelers Insurance Company

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