

TRANSACTIONS OF SOCIETY OF ACTUARIES 1952 REPORTS

SECTION III. GROUP ANNUITY MORTALITY

THE current study has been prepared on the same basis as the previous reports. Tables I and II show the experience for the year 1951 by attained age for lives retiring on and after normal retirement date, and for lives retiring prior to normal retirement date, respectively. Table III compares the experience for the year 1951 of lives

TABLE I
INTERCOMPANY GROUP ANNUITY MORTALITY
MATURED LIFE EXPERIENCE FOR THE YEAR 1951
RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE			
					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.
MEN								
50 and under..	4.92	1	\$ 1,220	\$ 360	.05	(*) * %	8	(*) * %
51-55.....	56.03	0	104,716	0	.69	(*) *	1,320	(*) *
56-60.....	335.70	11	424,439	9,296	6.04	(152) 182	7,549	(176) 123
61-65.....	12,102.34	308	8,623,561	247,681	340.86	(96) 90	241,440	(94) 103
66-70.....	39,871.68	1,413	25,253,770	822,325	1,410.90	(102) 100	892,507	(103) 92
71-75.....	17,218.98	958	11,059,128	603,449	875.91	(112) 109	565,894	(111) 107
76-80.....	5,873.40	484	4,169,567	318,385	429.78	(119) 113	306,736	(110) 104
81-85.....	1,774.33	226	1,620,192	242,552	185.44	(137) 122	170,577	(142) 142
86-90.....	374.08	68	297,853	45,110	55.47	(124) 123	44,100	(104) 102
91-95.....	47.42	15	78,720	10,337	9.56	(174) 157	15,396	(188) 67
96 and over..	8.00	0	7,232	0	2.64	(*) *	2,657	(*) *
All.....	77,666.88	3,484	\$51,640,398	\$2,299,495	3,317.34	(109) 105%	\$2,248,184	(109) 102%
WOMEN								
50 and under..	5.00	0	\$ 1,714	\$ 0	.02	(*) * %	9	(*) * %
51-55.....	151.41	2	76,695	597	1.37	(*) *	694	(*) *
56-60.....	1,174.25	10	535,626	4,516	14.68	(57) 68	6,750	(49) 67
61-65.....	3,847.76	57	1,619,079	27,270	67.33	(73) 85	28,059	(80) 97
66-70.....	4,602.89	91	1,762,248	41,307	111.32	(81) 82	42,764	(80) 97
71-75.....	1,737.57	63	742,941	26,050	61.38	(118) 103	26,432	(117) 99
76-80.....	666.00	37	363,517	20,908	33.88	(123) 109	18,631	(119) 112
81-85.....	209.00	26	105,054	14,240	15.17	(168) 171	7,668	(187) 186
86-90.....	51.25	8	24,502	3,804	5.26	(177) *	2,562	(174) *
91-95.....	7.00	2	2,866	547	.94	(*) *	386	(*) *
96 and over..	2.00	0	718	0	.53	(*) *	177	(*) *
All.....	12,454.13	296	\$ 5,234,960	\$ 139,239	311.88	(95) 95%	\$ 134,132	(98) 104%

† Percentages in parentheses are for the period 1946-1950.

* Fewer than 10 deaths.

retiring on and after normal retirement date with the experience of other periods. The expected deaths are calculated according to the 1937 Standard Annuity Table.

While the experience for the year 1951 shows no wide variation from the experience of 1950, it does show mortality rates which are for the most

TABLE II
INTERCOMPANY GROUP ANNUITY MORTALITY
MATURED LIFE EXPERIENCE FOR THE YEAR 1951
RETIREMENT PRIOR TO NORMAL RETIREMENT DATE

ATTAINED AGES	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE			
	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.
MEN								
50 and under	133 49	3	\$ 22,058	\$ 427	1 06	(323) * %	\$ 185	(135) * %
51-55	573 04	21	229,634	8,582	7 26	(311) 289	2,931	(201) 293
56-60	3,917 42	154	1,837,907	56,018	68 56	(248) 225	32,514	(194) 172
61-65	7,792 30	334	4,312,325	161,511	195 09	(197) 171	113,391	(169) 142
66-70	5,313 54	239	2,986,268	122,898	186 96	(149) 128	105,291	(130) 117
71-75	1,980 49	152	1,230,098	91,841	101 17	(136) 150	63,519	(128) 145
76-80	716 00	52	517,936	46,941	52 19	(137) 100	37,827	(125) 124
81-85	162 00	23	200,801	23,961	16 60	(113) 139	20,530	(94) 117
86 and over	15 00	2	11,577	1,391	2 17	(*) *	1,671	(*) *
All	20,603 28	980	\$11,548,604	\$513,570	631 06	(174) 155%	\$377,859	(145) 136%
WOMEN								
50 and under	77 80	1	\$ 14,238	\$ 13	.39	(*) * %	\$ 78	(*) * %
51-55	319 90	4	74,599	826	2 67	(177) *	624	(195) *
56-60	891 21	6	253,918	997	10 59	(124) *	3,047	(130) *
61-65	1,103 47	17	376,010	6,035	18 70	(108) 91	6,366	(92) 95
66-70	598 70	15	200,054	4,814	14 48	(128) 104	4,856	(135) 99
71-75	242 00	10	91,949	2,761	8 58	(132) 117	3,271	(113) 84
76-80	68 92	8	37,121	5,809	3 40	(179) *	1,840	(152) *
81-85	17 00	1	11,145	198	1 27	(*) *	827	(*) *
86 and over	3 00	1	2,296	841	.57	(*) *	402	(*) *
All	3,322 00	63	\$ 1,061,330	\$ 22,294	60 65	(126) 104%	\$ 21,311	(119) 105%

† Percentages in parentheses are for the period 1946-1950.

* Fewer than 10 deaths.

part lower than those for the years 1946-1950 combined. A comparison of the 1951 experience with that for years prior to 1946 indicates a continuation of the lower level of mortality that has been experienced since World War II.

TABLE III
 INTERCOMPANY GROUP ANNUITY MORTALITY
 MATURED LIFE EXPERIENCE TO DECEMBER 31, 1951
 RETIREMENT ON OR AFTER NORMAL RETIREMENT DATE

CALENDAR YEARS	NUMBER OF LIVES		AMOUNT OF ANNUAL INCOME		COMPARISON WITH 1937 STANDARD ANNUITY TABLE			
	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.
MEN								
1924-1940..	56,449.77	2,909	\$ 59,602,837	\$2,970,512	2,377.66	122%	\$2,563,378	116%
1941-1945..	114,011.55	5,830	86,617,580	4,763,390	4,903.63	119	3,918,008	122
1946-1950..	255,073.87	11,837	170,552,450	8,169,605	10,879.45	109	7,522,169	109
1951...	77,666.88	3,484	51,640,398	2,299,495	3,317.34	105	2,248,184	102
WOMEN								
1925-1940..	9,905.51	274	\$ 5,821,092	\$ 153,349	220.89	124%	\$ 127,330	120%
1941-1945..	17,451.84	480	8,915,053	234,277	413.97	116	213,750	110
1946-1950..	38,389.45	891	16,941,132	418,845	938.77	95	426,556	98
1951...	12,454.13	296	5,234,960	139,239	311.88	95	134,132	104

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

Aetna Life Insurance 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
 Metropolitan Life Insurance Company
 Prudential Insurance Company of America
 Sun Life Assurance Company of Canada
 The Travelers Insurance Company