APPENDIX A

IRISH LIFE TABLES

Nos. 7 and 7A 1965—7

Life Tables were constructed for males and females which are representative of the mortality experience in Ireland during the three years 1965 to 1967, using the statistics of ages from the 1966 Census of Population and deaths enumerated in the three years 1965, 1966 and 1967. Two tables were constructed, Number 7 relating to the entire State and Number 7A relating to the Urban Districts of the State.

The Urban Districts Table relates to the population residing within the boundaries of County and Municipal Boroughs and Urban Districts. This is a somewhat more limited coverage of areas than that of the "Aggregate Urban Areas" used throughout the Reports of the Census (cf. the Explanatory Notes to Volume I of the 1966 Census). This arises from the fact that deaths can be assigned to place of residence only by strict reference to legally defined boundaries.

COMPARISON WITH IRISH LIFE TABLES Nos. 6 and 6A 1960-62

Values of the rate of mortality (q_x) and of the expectation of life ($\mathring{e}_x$) at ages 0, 10, 20 . . . 90 are shown in Tables 1 and 2.

For females for the whole country and Urban Districts the values of the rate of mortality were lower in 1965–67 than in 1960–62 for all ages shown except for slight increases at age 60 in Table No. 7 and at age 10 in Table No. 7A.

For males for the whole country the values of the rate of mortality showed a decrease at age 0, were much the same between ages 10 and 50, showed an increase at ages 60 and 70 and a decrease afterwards. In the Urban Districts the 1965–67 rates were smaller than the 1960–62 rates apart from increases at ages 20 and 60.

Increases in expectation of life were shown at all ages for females in both life tables. For males in the whole country an increase was shown in expectation of life at age 0 and afterwards the expectation of life remained much the same, in the Urban Districts increases were shown at all ages except age 70. For both males and females the increases in expectation of life in the Urban Districts were greater than in the whole country.

COMPARISON WITH IRISH LIFE TABLES Nos. 1-6

The expectation of life at certain ages for Irish Life Tables 1-6 are given in Table 3.

Substantial increases occurred in the expectation of life at birth over the 40-year period shown in the table, with the male expectation at birth increasing from 57.4 years in 1925–27 to 68.6 years in 1965–67 and the female expectation increasing from 57.9 years in 1925–27 to 72.9 years 40-years later. The increases in the female expectation were greater than the increase in the male expectation at all ages with the excess in the female expectation at birth increasing from 0.5 years in 1925–27 to 4.3 years in 1965–67, and at age 75 years from 0.7 years in 1925–27 to 1.1 years 40 years later.

METHOD OF CONSTRUCTION

The method of construction of the present Life Tables was the same as that employed in preparing the corresponding Tables Nos. 6 and 6A based on the 1961 Census and deaths in the years 1960, 1961 and 1962. Although Census date was 17 April 1966, the population was not adjusted to bring it to the middle of the year because, as a result of the large seasonal passenger movement, there was no reason to believe that the population on 30 June 1966 was close than the population on census date to the average population for the three years 1965–67.

At ages 0–4 years the system adopted was similar to that used in Life Tables Nos. 6 and 6A and was as follows: The rate of mortality at age 0, q_x, was calculated simply from the population aged 0 and deaths under 1 year of age in 1965–67, the appropriate "exposure to risk" being allowed for deaths at ages under 1 week, 1 week and under 1 month, 1 and under 2 months, etc. The central rate for age 1, m_1, was calculated from the population aged 1 and deaths of children aged 1 in 1965–67 and q_1 derived from it. The rate for age 2, q_2 was obtained from the corresponding rate in the 1961 Table as follows:—

$$q_2(1966) = q_2(1961) \times \frac{\text{(Actual deaths at ages 1, 2 \& 3)}}{\text{(Expected deaths at ages 1, 2 \& 3)}}$$

The expected deaths in the denominator of this expression were calculated by applying the 1961 central mortality rates to the 1966 population aged 1, 2 and 3. Similarly q_3 (1966) was obtained from q_3 (1961) by multiplying by the ratio of actual to expected deaths for ages 1, 2, 3, 4 and 5. This procedure was applied also to obtain q_x for ages 4, 5, 6 and 7.

The main portion of the Life Tables was calculated using the method of osculatory interpolation between pivotal values, devised by Mr. George King, and described

TABLE 1.—RATE OF MORTALITY (q_x) 1960–62 AND 1965–67

Age	Ireland				Urban Districts			
	Males		Females		Males		Females	
	1960–62	1965–67	1960–62	1965–67	1960–62	1965–67	1960–62	1965–67
0	·03131	·02679	·02449	·02083	·03121	·02754	·02567	·02117
10	·00038	·00035	·00029	·00026	·00045	·00038	·00024	·00026
20	·00091	·00098	·00052	·00040	·00075	·00077	·00038	·00027
30	·00136	·00112	·00107	·00086	·00122	·00108	·00096	·00076
40	·00270	·00265	·00218	·00194	·00319	·00264	·00209	·00187
50	·00748	·00747	·00595	·00554	·00921	·00834	·00606	·00567
60	·01988	·02108	·01264	·01299	·02587	·02590	·01338	·01292
70	·04782	·05166	·03507	·03497.	·06118	·06545	·03808	·03618
80	·12499	·12068	·10393	·09984	·12097	·12056	·09930	·10079
90	·29651	·28540	·24256	·23355	·25369	·25035	·21747	·21297

in the Registrar General's Decennial Supplement, England and Wales, 1914. Deaths (for 1965, 1966 and 1967 combined) were added into five year groups, namely 5 to 9 years, 10 to 14 years, 15 to 19 years, 20 to 24 years, etc., and from these pivotal values were calculated for ages 12, 17, 22, 27 . . . up to 92 years, using the formula:—

$$V_x = 0.216W_x - 0.008\ (W_{x-5} + W_{x+5})$$

where V_x denotes the pivotal value, and W_x is the five-year group total centred at age x. Pivotal values of the population at ages 12, 17 . . . 92 years were obtained in the same way, and from these pivotal values, m_x and hence q_x were calculated at five year intervals.

At very old ages the method of pivotal values gave a series of q_x with decreasing first differences. This was unsatisfactory and was evidently due to mistatements of age both at the Census and at death. The method used in 1961 proved satisfactory from the point of view of equating actual and expected deaths. This method was as follows: A second degree curve was obtained, passing through the pivotal value of q_{72}, and determined in such a manner that the sum of the weighted squares of the differences between the later pivotal values and the corresponding values of q_x on this curve should be a minimum. For each weight the square of the number of deaths in the quinquennial interval containing the q_x was adopted. The values of q_x on this curve were taken as new pivotal values.

Osculatory interpolation was used to calculate the values of q_x from x=7 to x=87. The function log $(q_x + 0.1)$ was used in the interpolation. At ages above 87 years the values of q_x were obtained from the second

TABLE 2.—EXPECTATION OF LIFE ($\mathring{e}_x$) 1960–62 AND 1965–67

Age	Ireland				Urban Districts			
	Males		Females		Males		Females	
	1960–62	1965–67	1960–62	1965–67	1960–62	1965–67	1960–62	1965–67
0	68·13	68·58	71·86	72·85	66·52	67·23	71·18	72·78
10	60·83	60·84	64·11	64·75	59·18	59·52	64·11	64·71
20	51·14	51·15	54·31	54·93	49·46	49·82	54·28	54·88
30	41·66	41·65	44·65	45·21	39·88	40·23	44·53	45·15
40	32·35	32·24	35·28	35·68	30·51	30·78	35·12	35·55
50	23·50	23·35	26·28	26·64	21·81	21·92	26·11	26·54
60	15·83	15·63	18·10	18·37	14·55	14·48	18·00	18·32
70	9·70	9·65	11·00	11·18	9·29	9·10	11·05	11·11
80	5·06	5·23	5·87	6·06	5·44	5·49	6·23	6·24
90	2·47	2·56	3·03	3·13	2·92	2·94	3·38	3·48

TABLE 3.—EXPECTATION OF LIFE AT VARIOUS AGES, 1926 TO 1966

Irish Life Table No.	Period	Age in years										
		0	5	10	15	20	25	35	45	55	65	75
Males:												
1	1925–27	57·4	59·5	55·2	50·7	46·4	42·4	34·4	26·5	19·1	12·8	7·7
2	1935–37	58·2	60·1	55·8	51·2	46·8	42·7	34·4	26·3	18·8	12·5	7·9
3	1940–42	59·0	60·7	56·3	51·6	47·2	43·1	34·8	26·5	18·8	12·3	7·3
4	1945–47	60·5	61·5	56·9	52·2	47·8	43·5	34·9	26·4	18·6	12·0	6·9
5	1950–52	64·5	63·6	58·8	54·0	49·3	44·8	35·8	27·0	19·0	12·1	6·8
6	1960–62	68·1	65·7	60·8	56·0	51·1	46·4	37·0	27·8	19·5	12·6	7·1
7	1965–67	68·6	65·7	60·8	56·0	51·2	46·4	36·9	27·7	19·3	12·4	7·3
Females:												
1	1925–27	57·9	59·2	54·9	50·5	46·4	42·4	34·7	27·0	19·6	13·4	8·4
2	1935–37	59·6	60·4	56·1	51·6	47·3	43·2	35·2	27·2	19·6	13·1	8·4
3	1940–42	61·0	61·4	56·9	52·4	48·0	44·0	35·8	27·6	19·8	13·2	8·1
4	1945–47	62·4	62·5	57·9	53·2	48·8	44·7	36·3	28·0	20·1	13·1	7·7
5	1950–52	67·1	65·4	60·6	55·8	51·2	46·6	37·7	28·9	20·6	13·3	7·6
6	1960–62	71·9	69·0	64·1	59·2	54·3	49·5	39·9	30·7	22·1	14·4	8·1
7	1965–67	72·9	69·6	64·8	59·8	54·9	50·1	40·4	31·1	22·4	14·7	8·4

degree curve used to determine the pivotal values. Although nine places of decimals were retained in the calculation of the q's, the values were subsequently rounded off to five decimal places, and these values were used in the computation of the remaining columns of the Life Tables.

THE ACTUAL-EXPECTED TEST

A measure of the closeness with which the Life Table reflects the mortality in the population is obtained by comparing the actual numbers of deaths with those expected on the basis of Life Table death rates. This is done in Table 4.

TABLE 4.—THE ACTUAL—EXPECTED TEST

Ages	Males			Females		
	Deaths 1965–67 Annual Average		Deviation: Expected less actual	Deaths 1965–67 Annual Average		Deviation: Expected less actual
	Actual	Expected		Actual	Expected	
0— 4	1,012	996	—17	762	756	— 6
5— 9	71	66	— 5	53	49	— 4
10—14	56	57	+ 1	34	35	+ 1
15—19	94	95	+ 1	44	43	— 1
20—24	101	100	— 1	42	41	— 1
25—29	85	83	— 2	51	50	— 1
30—34	94	93	— 1	72	70	— 2
35—39	153	153	—	106	106	— 1
40—44	261	255	— 6	200	198	— 2
45—54	1,207	1,202	— 5	854	848	— 6
55—64	2,732	2,724	— 8	1,637	1,622	—15
65—74	4,859	4,833	—26	3,549	3,537	—12
75—84	5,099	5,126	+27	4,952	5,058	+106
85—94	2,119	2,078	—42	2,561	2,539	—22
95—99	104	167	+64	199	223	+24
Total 0—99 years	18,045	18,026	—19	15,116	15,174	+58

NOTATION

Standard Life Table notation is used in the Tables.

l_x=the number of persons surviving to exact age x out of 100,000 aged 0.

d_x=the number of deaths in the year of age x to x+1 out of l_x persons who enter that year.

p_x=the probability of living a year, or the ratio of the number completing the year of age x to x+1 to the number entering on the year.

q_x=the rate of mortality, or the probability of dying in a year. It is the ratio of the number of deaths in the year of age x to x+1 to the number entering on the year.

L_x=the population to be expected according to the Life Table aged between x and x+1 years, assuming that 100,000 births occurred each year.

T_x=the population to be expected according to the Life Table above age x, assuming that 100,000 births occurred each year.

$\mathring{e}_x$=the expectation of life in years, or the total future life time in years which will on average be passed through by persons aged exactly x.

The following relations hold between these quantities:—

$$p_x = 1 - q_x, \qquad l_x - l_{x+1} = d_x, \qquad L_x = \tfrac{1}{2}(l_x + l_{x+1}) \quad (x > 0),$$

$$T_x = \sum_{y \geqq x} L_y, \qquad \mathring{e}_x = T_x / l_x$$

IRISH LIFE TABLE NO. 7 1965–67 MALES

Age x	l_x	d_x	p_x	q_x	L_x	T_x	$\mathring{e}_x$	Age x
0	100,000	2,679	0·97321	0·02679	97,660	6,857,622	68·58	0
1	97,321	143	0·99853	0·00147	97,249	6,759,962	69·46	1
2	97,178	89	0·99908	0·00092	97,133	6,662,712	68·56	2
3	97,089	57	0·99941	0·00059	97,061	6,565,579	67·62	3
4	97,032	51	0·99947	0·00053	97,006	6,468,518	66·66	4
5	96,981	45	0·99954	0·00046	96,958	6,371,512	65·70	5
6	96,936	46	0·99953	0·00047	96,913	6,274,554	64·73	6
7	96,890	46	0·99953	0·00047	96,867	6,177,641	63·76	7
8	96,844	41	0·99958	0·00042	96,824	6,080,773	62·79	8
9	96,803	37	0·99962	0·00038	96,785	5,983,950	61·82	9
10	96,766	34	0·99965	0·00035	96,749	5,887,165	60·84	10
11	96,732	34	0·99965	0·00035	96,715	5,790,415	59·86	11
12	96,699	35	0·99963	0·00037	96,681	5,693,700	58·88	12
13	96,663	40	0·99959	0·00041	96,643	5,597,019	57·90	13
14	96,623	47	0·99951	0·00049	96,600	5,500,376	56·93	14
15	96,576	56	0·99943	0·00057	96,548	5,403,776	55·95	15
16	96,521	63	0·99935	0·00065	96,489	5,307,228	54·99	16
17	96,458	68	0·99929	0·00071	96,424	5,210,738	54·02	17
18	96,390	76	0·99921	0·00079	96,351	5,114,315	53·06	18
19	96,313	86	0·99911	0·00089	96,270	5,017,963	52·10	19
20	96,228	95	0·99902	0·00098	96,180	4,921,693	51·15	20
21	96,133	102	0·99894	0·00106	96,082	4,825,513	50·20	21
22	96,031	104	0·99891	0·00109	95,979	4,729,431	49·25	22
23	95,927	107	0·99889	0·00111	95,873	4,633,452	48·30	23
24	95,820	106	0·99889	0·00111	95,767	4,537,579	47·36	24
25	95,714	105	0·99891	0·00109	95,662	4,441,811	46·41	25
26	95,610	105	0·99890	0·00110	95,557	4,346,149	45·46	26
27	95,505	108	0·99887	0·00113	95,451	4,250,592	44·51	27
28	95,397	108	0·99887	0·00113	95,343	4,155,142	43·56	28
29	95,289	106	0·99888	0·00112	95 236	4,059,799	42·61	29
30	95,182	106	0·99888	0·00112	95,129	3,964,563	41·65	30
31	95,073	109	0·99885	0·00115	95,022	3,869,434	40·70	31
32	94,967	119	0·99875	0·00125	94,908	3,774,412	39·74	32
33	94,848	128	0·99865	0·00135	94,784	3,679,505	38·79	33
34	94,720	140	0·99852	0·00148	94,650	3,584,720	37·85	34
35	94,580	154	0·99837	0·00163	94,503	3,490,070	36·90	35
36	94,426	170	0·99820	0·00180	94,341	3,395,567	35·96	36
37	94,256	186	0·99802	0·00198	94,163	3,301,226	35·02	37
38	94,070	205	0·99782	0·00218	93,967	3,207,063	34·09	38
39	93,865	226	0·99759	0·00241	93,752	3,113,095	33·17	39
40	93,639	248	0·99735	0·00265	93,515	3,019,343	32·24	40
41	93,391	272	0·99709	0·00291	93,255	2,925,829	31·33	41
42	93,119	297	0·99681	0·00319	92,970	2,832,574	30·42	42
43	92,822	317	0·99659	0·00341	92,663	2,739,604	29·51	43
44	92,505	331	0·99642	0·00358	92,339	2,646,940	28·61	44
45	92,174	351	0·99619	0·00381	91,998	2,554,601	27·72	45
46	91,823	385	0·99581	0·00419	91,631	2,462,603	26·82	46
47	91,438	443	0·99515	0·00485	91,217	2,370,972	25·93	47
48	90,995	507	0·99443	0·00557	90,741	2,279,755	25·05	48
49	90,488	586	0·99352	0·00648	90,195	2,189,014	24·19	49
50	89,901	672	0·99253	0·00747	89,565	2,098,820	23·35	50
51	89,229	754	0·99155	0·00845	88,852	2,009,254	22·52	51
52	88,475	824	0·99069	0·00931	88,063	1,920,402	21·71	52
53	87,651	893	0·98982	0·01018	87,205	1,832,338	20·90	53
54	86,759	951	0·98904	0·01096	86,283	1,745,134	20·11	54

IRISH LIFE TABLES NO. 7 1965–67 MALES—*Contd.*

Age x	l_x	d_x	p_x	q_x	L_x	T_x	$\mathring{e}_x$	Age x
55	85,808	1,015	0·98817	0·01183	85,300	1,658,851	19·33	55
56	84,792	1,103	0·98699	0·01301	84,241	1,573,551	18·56	56
57	83,689	1,230	0·98530	0·01470	83,074	1,489,310	17·80	57
58	82,459	1,363	0·98347	0·01653	81,777	1,406,236	17·05	58
59	81,096	1,517	0·98129	0·01871	80,337	1,324,459	16·33	59
60	79,579	1,677	0·97892	0·02108	78,740	1,244,122	15·63	60
61	77,902	1,827	0·97654	0·02346	76,988	1,165,382	14·96	61
62	76,074	1,953	0·97433	0·02567	75,098	1,088,394	14·31	62
63	74,121	2,079	0·97195	0·02805	73,082	1,013,296	13·67	63
64	72,042	2,192	0·96958	0·03042	70,947	940,214	13·05	64
65	69,851	2,302	0·96704	0·03296	68,700	869,268	12·44	65
66	67,549	2,423	0·96413	0·03587	66,337	800,568	11·85	66
67	65,126	2,563	0·96064	0·03936	63,844	734,231	11·27	67
68	62,563	2,694	0·95694	0·04306	61,216	670,387	10·72	68
69	59,869	2,826	0·95280	0·04720	58,456	609,171	10·18	69
70	57,043	2,947	0·94834	0·05166	55,570	550,715	9·65	70
71	54,096	3,046	0·94368	0·05632	52,573	495,145	9·15	71
72	51,050	3,115	0·93898	0·06102	49,492	442,572	8·67	72
73	47,935	3,155	0·93418	0·06582	46,357	393,080	8·20	73
74	44,779	3,159	0·92945	0·07055	43,200	346,723	7·74	74
75	41,620	3,153	0·92424	0·07576	40,043	303,524	7·29	75
76	38,467	3,155	0·91797	0·08203	36,889	263,480	6·85	76
77	35,312	3,181	0·90992	0·09008	33,721	226,591	6·42	77
78	32,131	3,178	0·90109	0·09891	30,542	192,870	6·00	78
79	28,953	3,163	0 89076	0 10924	27,371	162,328	5·61	79
80	25,790	3,112	0·87932	0·12068	24,234	134,957	5·23	80
81	22,678	3,010	0·86728	0·13272	21,173	110,723	4·88	81
82	19,668	2,847	0·85527	0·14473	18,245	89,550	4·55	82
83	16,822	2,669	0·84136	0·15864	15,487	71,305	4·24	83
84	14,153	2,462	0·82603	0·17397	12,922	55,818	3·94	84
85	11,691	2,226	0·80959	0·19041	10,578	42,896	3·67	85
86	9,465	1,965	0·79243	0·20757	8,483	32,318	3·41	86
87	7,500	1,687	0·77503	0·22497	6,657	23,836	3·18	87
88	5,813	1,419	0·75591	0·24409	5,103	17,179	2·96	88
89	4,394	1,161	0·73577	0 26123	3,814	12,076	2·75	89
90	3,233	923	0·71460	0·28540	2,772	8,262	2·56	90
91	2,310	711	0·69241	0·30759	1,955	5,490	2·38	91
92	1,600	529	0·66920	0·33080	1,335	3,535	2·21	92
93	1,070	380	0·64496	0·35504	880	2,200	2·06	93
94	690	263	0·61970	0·38030	559	1,320	1·91	94
95	428	174	0·59341	0·40659	341	761	1·78	95
96	254	110	0·56610	0·43390	199	420	1·65	96
97	144	66	0·53777	0·46223	111	221	1·54	97
98	77	38	0·50842	0·49158	58	111	1·43	98
99	39	21	0·47804	0·52196	29	52	1·33	99
100	19	10	0·44663	0·55337	14	23	1·24	100
101	8	5	0·41421	0·58579	6	10	1·15	101
102	3	2	0·38075	0·61925	2	4	1·06	102
103	1	1	0·34628	0·65372	1	1	0·97	103

IRISH LIFE TABLES NO. 7 1965–67 FEMALES

Age x	l_x	d_x	p_x	q_x	L_x	T_x	$\mathring{e}_x$	Age x
0	100,000	2,083	0·97917	0·02083	98,185	7,284,753	72·85	0
1	97,917	125	0·99872	0·00128	97,854	7,186,568	73·39	1
2	97,791	84	0·99914	0·00086	97,749	7,088,714	72·49	2
3	97,707	60	0·99938	0·00062	97,677	6,990,964	71·55	3
4	97,647	54	0·99945	0·00055	97,620	6,893,288	70·59	4
5	97,593	37	0·99962	0·00038	97,574	6,795,668	69·63	5
6	97,556	33	0·99966	0·00034	97,539	6,698,093	68·66	6
7	97,522	36	0·99963	0·00037	97,504	6,600,555	67·68	7
8	97,486	31	0·99968	0·00032	97,471	6,503,050	66·71	8
9	97,456	27	0·99972	0·00028	97,442	6,405,579	65·73	9
10	97,428	25	0·99974	0·00026	97,415	6,308,137	64·75	10
11	97,403	24	0·99975	0·00025	97,391	6,210,722	63·76	11
12	97,379	23	0·99977	0·00023	97,367	6,113,331	62·78	12
13	97,356	24	0·99975	0·00025	97,344	6,015,964	61·79	13
14	97,332	27	0·99972	0·00028	97,319	5,918,620	60·81	14
15	97,305	30	0·99969	0·00031	97,290	5,821,301	59·83	15
16	97,275	33	0·99966	0·00034	97,258	5,724,012	58·84	16
17	97,241	34	0·99965	0·00035	97,224	5,626,754	57·86	17
18	97,207	36	0·99963	0·00037	97,189	5,529,530	56·88	18
19	97,171	38	0·99961	0·00039	97,152	5,432,341	55·91	19
20	97,133	39	0·99960	0·00040	97,114	5,335,189	54·93	20
21	97,094	41	0·99957	0·00043	97,073	5,238,075	53·95	21
22	97,053	45	0·99954	0·00046	97,030	5,141,002	52·97	22
23	97,008	48	0·99950	0·00050	96,983	5,043,972	52·00	23
24	96,959	52	0·99946	0·00054	96,933	4,946,988	51·02	24
25	96,907	57	0·99942	0·00058	96,879	4,850,055	50·05	25
26	96,851	61	0·99937	0·00063	96,820	4,753,176	49·08	26
27	96,789	66	0·99932	0·00068	96,757	4,656,356	48·11	27
28	96,724	71	0·99926	0·00074	96,688	4,559,600	47·14	28
29	96,652	77	0·99920	0·00080	96,614	4,462,912	46·17	29
30	96,576	83	0·99914	0·00086	96,534	4,366,298	45·21	30
31	96,493	89	0·99908	0·00092	96,448	4,269,764	44·25	31
32	96,404	95	0·99902	0·00098	96,356	4,173,315	43·29	32
33	96,309	99	0·99897	0·00103	96,259	4,076,959	42·33	33
34	96,210	101	0·99895	0·00105	96,159	3,980,700	41·38	34
35	96,108	105	0·99891	0·00109	96,056	3,884,541	40·42	35
36	96,003	113	0·99883	0·00117	95,947	3,788,485	39·46	36
37	95,891	128	0·99867	0·00133	95,827	3,692,538	38·51	37
38	95,763	144	0·99850	0·00150	95,691	3,596,711	37·56	38
39	95,619	164	0·99829	0·00171	95,537	3,501,021	36·61	39
40	95,455	185	0·99806	0·00194	95,362	3,405,484	35·68	40
41	95,270	208	0·99782	0·00218	95,166	3,310,121	34·74	41
42	95,062	229	0·99759	0·00241	94,948	3,214,955	33·82	42
43	94,833	251	0·99736	0·00264	94,708	3,120,008	32·90	43
44	94,582	271	0·99713	0·00287	94,447	3,025,300	31·99	44
45	94,311	295	0·99688	0·00312	94,164	2,930,854	31·08	45
46	94,016	324	0·99656	0·00344	93,854	2,836,690	30·17	46
47	93,692	363	0·99613	0·00387	93,511	2,742,836	29·27	47
48	93,330	406	0·99565	0·00435	93,127	2,649,325	28·39	48
49	92,923	458	0·99507	0·00493	92,694	2,556,198	27·51	49
50	92,465	512	0·99446	0·00554	92,209	2,463,504	26·64	50
51	91,952	561	0·99389	0·00611	91,672	2,371,295	25·79	51
52	91,391	599	0·99345	0·00655	91,092	2,279,623	24·94	52
53	90.792	629	0·99307	0·00693	90,477	2,188,532	24·10	53
54	90,163	646	0·99284	0·00716	89,840	2,098,054	23·27	54

IRISH LIFE TABLE NO. 7 1965–67 FEMALES—*Contd.*

Age x	l_x	d_x	p_x	q_x	L_x	T_x	$\mathring{e}_x$	Age x
55	89,517	667	0·99255	0·00745	89,184	2,008,214	22·43	55
56	88,850	711	0·99200	0·00800	88,495	1,919,031	21·60	56
57	88,139	795	0·99098	0·00902	87,742	1,830,536	20·77	57
58	87,345	883	0·98989	0·01011	86,903	1,742,794	19·95	58
59	86,462	993	0·98851	0·01149	85,965	1,655,891	19·15	59
60	85,469	1,110	0·98701	0·01299	84,914	1,569,925	18·37	60
61	84,358	1,219	0·98555	0·01445	83,749	1,485,012	17·60	61
62	83,140	1,304	0·98432	0·01568	82,488	1,401,263	16·85	62
63	81,836	1,375	0·98320	0·01680	81,149	1,318,775	16·11	63
64	80,461	1,419	0·98236	0·01764	79,752	1,237,626	15·38	64
65	79,042	1,475	0·98134	0·01866	78,305	1,157,874	14·65	65
66	77,567	1,580	0·97963	0·02037	76,777	1,079,570	13·92	66
67	75,987	1,771	0·97669	0·02331	75,102	1,002,792	13·20	67
68	74,216	1,967	0·97350	0·02650	73,233	927,691	12·50	68
69	72,249	2,203	0·96950	0·03050	71,148	854,458	11·83	69
70	70,046	2,450	0·96503	0·03497	68,821	783,310	11·18	70
71	67,596	2,675	0·96043	0·03957	66,259	714,489	10·57	71
72	64,921	2,848	0·95613	0·04387	63,497	648,230	9·98	72
73	62,073	3,028	0·95123	0·04877	60,560	584,733	9·42	73
74	59,046	3,182	0·94610	0·05390	57,455	524,173	8·88	74
75	55,864	3,321	0·94055	0·05945	54,203	466,719	8·35	75
76	52,542	3,452	0·93430	0·06570	50,816	412,516	7·85	76
77	49,090	3,580	0·92706	0·07294	47,300	361,700	7·37	77
78	45,510	3,681	0·91911	0·08089	43,669	314,400	6·91	78
79	41,829	3,759	0·91013	0·08987	39,949	270,730	6·47	79
80	38,069	3,793	0·90036	0·09964	36,173	230,781	6·06	80
81	34,276	3,766	0·89013	0·10987	32,393	194,609	5·68	81
82	30,510	3,667	0·87983	0·12017	28,677	162,216	5·32	82
83	26,844	3,537	0·86825	0·13175	25,075	133,539	4·97	83
84	23,307	3,363	0·85571	0·14429	21,625	108,464	4·65	84
85	19,944	3,143	0·84239	0·15761	18,372	86,838	4·35	85
86	16,801	2,881	0·82853	0·17147	15,360	68,466	4·08	86
87	13,920	2,583	0·81441	0·18559	12,628	53,105	3·82	87
88	11,337	2,277	0·79915	0·20085	10,198	40,477	3·57	88
89	9,060	1,964	0·78316	0·21684	8,077	30,279	3·34	89
90	7,095	1,657	0·76645	0·23355	6,267	22,202	3·13	90
91	5,438	1,365	0·74900	0·25100	4,756	15,935	2·93	91
92	4,073	1,096	0·73083	0·26917	3,525	11,179	2·74	92
93	2,977	858	0·71194	0·28806	2,548	7,655	2·57	93
94	2,119	652	0·69231	0·30769	1,793	5,106	2·41	94
95	1,467	481	0·67196	0·32804	1,227	3,313	2·26	95
96	986	344	0·65088	0·34912	814	2 087	2·12	96
97	642	238	0·62908	0·37092	523	1 273	1·98	97
98	404	159	0·60655	0·39345	324	750	1·86	98
99	245	102	0·58329	0·41671	194	426	1·74	99
100	143	63	0·55931	0·44069	111	232	1·62	100
101	80	37	0·53459	0·46541	61	121	1·51	101
102	43	21	0·50916	0·49084	32	59	1·39	102
103	22	11	0·48299	0·51701	16	27	1·25	103
104	11	6	0·45610	0·54390	8	11	1·05	104
105	5	3	0·42848	0·57152	3	3	0·71	105

URBAN DISTRICTS LIFE TABLE NO. 7A 1965–67 MALES

Age x	l_x	d_x	p_x	q_x	L_x	T_x	$\mathring{e}_x$	Age x
0	100,000	2,754	0·97246	0·02754	97,592	6,723,380	67·23	0
1	97,246	140	0·99856	0·00144	97,176	6,625,788	68·13	1
2	97,106	77	0·99921	0·00079	97,068	6,528,612	67·23	2
3	97,029	64	0·99934	0·00066	96,997	6,431,544	66·28	3
4	96,965	59	0·99939	0·00061	96,935	6,334,547	65·33	4
5	96,906	54	0·99945	0·00055	96,879	6,237,612	64·37	5
6	96,852	50	0·99948	0·00052	96.827	6,140,733	63·40	6
7	96,802	51	0·99947	0·00053	96,777	6,043,906	62·44	7
8	96,751	46	0·99952	0·00048	96,728	5,947,129	61·47	8
9	96,705	41	0·99957	0·00043	96,685	5,850,401	60·50	9
10	96,664	37	0·99962	0·00038	96,645	5,753,716	59·52	10
11	96,627	35	0·99963	0·00037	96,609	5,657,071	58·55	11
12	96,691	38	0·99961	0·00039	96,573	5,560,461	57·57	12
13	96,554	42	0·99957	0·00043	96,533	5,463,889	56·59	13
14	96,512	50	0·99948	0·00052	96,487	5,367,356	55·61	14
15	96,462	58	0·99939	0·00061	96,433	5,270,869	54·64	15
16	96,404	65	0·99932	0·00068	96,371	5,174,436	53·67	16
17	96,339	67	0·99931	0·00069	96,305	5,078,065	52·71	17
18	96,272	70	0·99927	0·00073	96,237	4,981,760	51·75	18
19	96,201	72	0·99925	0·00075	96,165	4,885,523	50·78	19
20	96,129	74	0·99923	0·00077	96,092	4,789,358	49·82	20
21	96,055	76	0·99921	0·00079	96,017	4,693,266	48·86	21
22	95,979	80	0·99917	0·00083	95,939	4,597,249	47·90	22
23	95,899	82	0·99914	0·00086	95,858	4,501,310	46·94	23
24	95,817	85	0·99912	0·00088	95,774	4,405,452	45·98	24
25	95,732	87	0·99909	0·00091	95,688	4,309,678	45 02	25
26	95,645	90	0·99906	0·00094	95,599	4,213,990	44·06	26
27	95,554	94	0·99901	0·00099	95,507	4,118,391	43·10	27
28	95,460	97	0·99898	0·00102	95,411	4,022,883	42·14	28
29	95,363	100	0·99896	0·00104	95,313	3,927,472	41·18	29
30	95,263	103	0·99892	0·00108	95,212	3,832,159	40·23	30
31	95,161	108	0·99886	0·00114	95,106	3,736,947	39·27	31
32	95,052	118	0·99876	0·00124	94,993	3,641,841	38·31	32
33	94,935	126	0·99867	0·00133	94,872	3,546,847	37·36	33
34	94,808	136	0·99857	0·00143	94,740	3,451,975	36·41	34
35	94,673	147	0·99844	0·00156	94,599	3,357,235	35·46	35
36	94,525	162	0·99829	0·00171	94,444	3,262,636	34·52	36
37	94,363	181	0·99808	0·00192	94,273	3,168,192	33·57	37
38	94,183	201	0·99787	0·00213	94,082	3,073,919	32·64	38
39	93,982	223	0·99763	0·00237	93,871	2,979,836	31·71	39
40	93,759	247	0·99736	0·00264	93,636	2,885,966	30·78	40
41	93,512	275	0·99706	0·00294	93,374	2,792,330	29·86	41
42	93,237	307	0·99671	0·00329	93,083	2,698,956	28·95	42
43	92,930	335	0·99640	0·00360	92,762	2,605,873	28·04	43
44	92,595	360	0·99611	0·00389	92,415	2,513,110	27·14	44
45	92,235	390	0·99577	0·00423	92,040	2,420,695	26·24	45
46	91,845	435	0·99526	0·00474	91,627	2,328,655	25·35	46
47	91,410	503	0·99450	0·00550	91,158	2,237,027	24·47	47
48	90,907	574	0·99368	0·00632	90,619	2,145,869	23·61	48
49	90,332	657	0·99273	0·00727	90,004	2,055,250	22·75	49
50	89,675	748	0·99166	0·00834	89,301	1,965,246	21·92	50
51	88,927	844	0·99051	0·00949	88,505	1,875,945	21·10	51
52	88,083	940	0·98933	0·01067	87,614	1,787,440	20·29	52
53	87,144	1,039	0·98808	0·01192	86,625	1,699,826	19·51	53
54	86,105	1,137	0·98680	0·01320	85,537	1,613,201	18·74	54

URBAN DISTRICTS LIFE TABLE NO. 7A 1965–67 MALES—*Contd.*

Age x	l_x	d_x	p_x	q_x	L_x	T_x	$\mathring{e}_x$	Age x
55	84,969	1,242	0·98538	0·01462	84,348	1,527,664	17·98	55
56	83,727	1,364	0·98371	0·01629	83,045	1,443,317	17·24	56
57	82,363	1,509	0·98167	0·01833	81,608	1,360,272	16·52	57
58	80,854	1,663	0·97943	0·02057	80,022	1,278,664	15·81	58
59	79,191	1,832	0·97687	0·02313	78,275	1,198,642	15·14	59
60	77,358	2,004	0·97410	0·02590	76,357	1,120,367	14·48	60
61	75,355	2,165	0·97127	0·02873	74,272	1,044,011	13·85	61
62	73,190	2,304	0·96853	0·03147	72,038	969,738	13·25	62
63	70,886	2,436	0·96564	0·03436	69,668	897,701	12·66	63
64	68,451	2,549	0·96276	0·03724	67,176	828,032	12·10	64
65	65,902	2,658	0·95967	0·04033	64,573	760,856	11·55	65
66	63,244	2,776	0·95610	0·04390	61,856	696,283	11·01	66
67	60,467	2,915	0·95179	0·04821	59,010	634,427	10·49	67
68	57,552	3,062	0·94680	0·05320	56,022	575,418	10·00	68
69	54,491	3,225	0·94082	0·05918	52,878	519,396	9·53	69
70	51,266	3,355	0·93455	0·06545	49,589	466,518	9·10	70
71	47,911	3,410	0·92882	0·07118	46,206	416,929	8·70	71
72	44,501	3,357	0·92455	0·07545	42,822	370,723	8·33	72
73	41,143	3,273	0·92044	0·07956	39,507	327,901	7·97	73
74	37,870	3,128	0·91739	0·08261	36,306	288,394	7·62	74
75	34,742	2,978	0·91429	0·08571	33,253	252,089	7·26	75
76	31,764	2,861	0·90995	0·09005	30,334	218,836	6·89	76
77	28,904	2,803	0·90302	0·09698	27,502	188,502	6·52	77
78	26,101	2,709	0·89623	0·10377	24,746	160,999	6·17	78
79	23,392	2,614	0·88827	0·11173	22,085	136,253	5·82	79
80	20.778	2,505	0·87944	0·12056	19,526	114,168	5·49	80
81	18,273	2,374	0·87011	0·12989	17,087	94,642	5·18	81
82	15,900	2,215	0·86068	0·13932	14,792	77,555	4·88	82
83	13,685	2,056	0·84976	0·15024	12,657	62,763	4·59	83
84	11,629	1,887	0·83769	0·16231	10,685	50,106	4·31	84
85	9,741	1,707	0·82474	0·17526	8,888	39,421	4·05	85
86	8,034	1,517	0·81122	0·18878	7,276	30,534	3·80	86
87	6,517	1,320	0·79753	0·20247	5,858	23,258	3·57	87
88	5,198	1,131	0·78240	0·21760	4,632	17,401	3·35	88
89	4,067	950	0·76644	0·23356	3,592	12,768	3·14	89
90	3,117	780	0·74965	0·25035	2,727	9,177	2·94	90
91	2,337	626	0·73203	0·26797	2,024	6,450	2·76	91
92	1,710	490	0·71357	0·28643	1,465	4,426	2·59	92
93	1,221	373	0·69428	0·30572	1,034	2,961	2·43	93
94	847	276	0·67416	0·32584	709	1,927	2·27	94
95	571	198	0·65321	0·34679	472	1,218	2·13	95
96	373	138	0·63143	0·36857	304	745	2·00	96
97	236	92	0·60881	0·39119	190	441	1·87	97
98	143	59	0·58536	0·41464	114	251	1·75	98
99	84	37	0·56108	0·43892	66	138	1·64	99
100	47	22	0·53596	0·46404	36	72	1·53	100
101	25	12	0·51002	0·48998	19	36	1·43	101
102	13	7	0·48324	0·51676	10	17	1·32	102
103	6	3	0·45563	0·54437	5	7	1·19	103
104	3	2	0·42719	0·57281	2	3	1·01	104
105	1	1	0·39791	0·60209	1	1	0·70	105

URBAN DISTRICTS LIFE TABLE NO. 7A 1965-67 FEMALES

Age x	l_x	d_x	p_x	q_x	L_x	T_x	$\mathring{e}_x$	Age x
0	100,000	2,117	0·97883	0·02117	98,164	7,277,912	72·78	0
1	97,883	133	0·99864	0·00136	97,817	7,179,748	73·35	1
2	97,750	87	0·99911	0·00089	97,707	7,081,931	72·45	2
3	97,663	67	0·99931	0·00069	97,630	6,984,225	71·51	3
4	97,596	58	0·99941	0·00059	97,567	6,886,595	70·56	4
5	97,538	36	0·99963	0·00037	97,520	6,789,028	69·60	5
6	97,502	33	0·99967	0·00033	97,486	6,691,508	68·63	6
7	97,469	34	0·99965	0·00035	97,452	6,594,023	67·65	7
8	97,435	29	0·99970	0·00030	97,421	6,496,571	66·68	8
9	97,406	26	0·99973	0·00027	97,393	6,399,150	65·70	9
10	97,380	25	0·99974	0·00026	97,367	6,301,757	64·71	10
11	97,355	24	0·99976	0·00024	97,343	6,204,390	63·73	11
12	97,331	22	0·99977	0·00023	97,320	6,107,047	62·75	12
13	97,309	23	0·99976	0·00024	97,297	6,009,727	61·76	13
14	97,286	25	0·99974	0·00026	97,273	5,912,430	60·77	14
15	97,261	28	0·99971	0·00029	97,246	5,815,157	59·79	15
16	97,232	30	0·99969	0·00031	97,217	5,717,910	58·81	16
17	97,202	30	0·99969	0·00031	97,187	5,620,693	57·83	17
18	97,171	30	0·99969	0·00031	97,156	5,523,507	56·84	18
19	97,141	28	0·99971	0·00029	97,127	5,426,350	55·86	19
20	97,113	27	0·99973	0·00027	97,100	5,329,223	54·88	20
21	97,087	27	0·99972	0·00028	97,073	5,232,123	53·89	21
22	97,059	33	0·99966	0·00034	97,043	5,135,050	52·91	22
23	97,026	40	0·99959	0·00041	97,006	5,038,007	51·92	23
24	96,986	51	0·99948	0·00052	96,961	4,941,000	50·95	24
25	96,935	62	0·99936	0·00064	96,904	4,844,040	49·97	25
26	96,873	70	0·99927	0·00073	96,838	4,747,135	49·00	26
27	96,803	72	0·99925	0·00075	96,767	4,650,297	48·04	27
28	96,731	75	0·99923	0·00077	96,693	4,553,530	47·07	28
29	96,656	75	0·99923	0·00077	96,618	4,456,837	46·11	29
30	96,581	74	0·99924	0·00076	96,544	4,360,218	45·15	30
31	96,508	75	0·99922	0·00078	96,470	4,263,674	44·18	31
32	96,433	81	0·99916	0·00084	96,392	4,167,204	43·21	32
33	96,352	83	0·99914	0·00086	96,310	4,070,812	42·25	33
34	96,268	84	0·99913	0·00087	96,226	3,974,502	41·29	34
35	96,184	87	0·99910	0·00090	96,141	3,878,276	40·32	35
36	96,098	95	0·99901	0·00099	96,050	3,782,135	39·36	36
37	96,003	111	0·99884	0·00116	95,947	3,686,084	38·40	37
38	95,892	129	0·99865	0·00135	95,827	3,590,137	37·44	38
39	95,762	153	0·99840	0·00160	95,686	3,494,310	36·49	39
40	95,609	179	0·99813	0·00187	95,520	3,398,624	35·55	40
41	95,430	206	0·99785	0·00215	95,327	3,303,104	34·61	41
42	95,225	230	0·99759	0·00241	95,110	3,207,777	33·69	42
43	94,995	256	0·99730	0·00270	94,867	3,112,667	32·77	43
44	94,739	282	0·99702	0·00298	94,598	3,017,800	31·85	44
45	94,457	311	0·99671	0·00329	94,301	2,923,202	30·95	45
46	94,146	343	0·99635	0·00365	93,974	2,828,901	30·05	46
47	93,803	383	0·99592	0·00408	93,611	2,734,926	29·16	47
48	93,420	426	0·99544	0·00456	93,207	2,641,315	28·27	48
49	92,995	474	0·99490	0·00510	92,758	2,548,107	27·40	49
50	92,520	524	0·99433	0·00567	92,258	2,455,350	26·54	50
51	91,996	572	0·99378	0·00622	91,710	2,363,092	25·69	51
52	91,424	613	0·99330	0·00670	91,118	2,271,381	24·84	52
53	90,811	648	0·99286	0·00714	90,487	2,180,263	24·01	53
54	90,163	674	0·99252	0·00748	89,826	2,089,776	23·18	54

URBAN DISTRICTS LIFE TABLE No. 7A 1965–67 FEMALES—*Contd.*

Age x	l_x	d_x	p_x	q_x	L_x	T_x	e_x	Age x
55	89,488	704	0·99213	0·00787	89,136	1,999,951	22·35	55
56	88,784	751	0·99154	0·00846	88,408	1,910,814	21·52	56
57	88,033	829	0·99058	0·00942	87,618	1,822,406	20·70	57
58	87,204	908	0·98959	0·01041	86,750	1,734,788	19·89	58
59	86,296	1,002	0·98839	0·01161	85,795	1,648,038	19·10	59
60	85,294	1,102	0·98708	0·01292	84,742	1,562,243	18·32	60
61	84,191	1,200	0·98575	0·01425	83,591	1,477,501	17·55	61
62	82,991	1,287	0·98450	0·01550	82,348	1,393,910	16·80	62
63	81,704	1,355	0·98342	0·01658	81,027	1,311,562	16·05	63
64	80,350	1,397	0·98262	0·01738	79,651	1,230,535	15·31	64
65	78,953	1,454	0·98159	0·01841	78,226	1,150,883	14·58	65
66	77,499	1,565	0·97980	0·02020	76,717	1,072,657	13·84	66
67	75,934	1,770	0·97669	0·02331	75,049	995,941	13·12	67
68	74,164	1,986	0·97322	0·02678	73,171	920,891	12·42	68
69	72,178	2,253	0·96879	0·03121	71,052	847,720	11·74	69
70	69,925	2,530	0·96382	0·03618	68,660	776,669	11·11	70
71	67,395	2,777	0·95880	0·04120	66,007	708,008	10·51	71
72	64,619	2,955	0·95428	0·04572	63,141	642,001	9·94	72
73	61,664	3,150	0·94892	0·05108	60,089	578,860	9·39	73
74	58,514	3,322	0·94323	0·05677	56,853	518,771	8·87	74
75	55,193	3,468	0·93717	0·06283	53,459	461,917	8·37	75
76	51,725	3,585	0·93068	0·06932	49,932	408,458	7·90	76
77	48,140	3,673	0·92370	0·07630	46,303	358,526	7·45	77
78	44,467	3,729	0·91615	0·08385	42,602	312,223	7·02	78
79	40,738	3,750	0 90794	0·09206	38,863	269,620	6·62	79
80	36,988	3,728	0·89921	0·10079	35,124	230,758	6·24	80
81	33,260	3,654	0·89014	0·10986	31,433	195,634	5·88	81
82	29,606	3,526	0·88091	0·11909	27,843	164,201	5·55	82
83	26,080	3,367	0·87091	0·12909	24,397	136,358	5·23	83
84	22,713	3,173	0·86030	0·13970	21,127	111,961	4·93	84
85	19,540	2,947	0·84918	0·15082	18,067	90,834	4·65	85
86	16,593	2,694	0·83767	0·16233	15,247	72,767	4·39	86
87	13,900	2,420	0·82590	0·17410	12,690	57,520	4·14	87
88	11,480	2,142	0·81343	0·18657	10,409	44,831	3·91	88
89	9,338	1,863	0·80047	0·19953	8,406	34,422	3·69	89
90	7,475	1,592	0·78703	0·21297	6,679	26,015	3·48	90
91	5,883	1,335	0·77309	0·22691	5,215	19,336	3·29	91
92	4,548	1,098	0·75867	0·24133	3,999	14,121	3·10	92
93	3,450	884	0·74376	0·25624	3,008	10,121	2·93	93
94	2,566	697	0·72836	0·27164	2,218	7,113	2·77	94
95	1,869	537	0·71247	0·28753	1,600	4,895	2·62	95
96	1,332	405	0·69609	0·30391	1,129	3,295	2·47	96
97	927	297	0·67922	0·32078	778	2,165	2·34	97
98	630	213	0·66187	0·33813	523	1,387	2·20	98
99	417	148	0·64402	0·35598	343	864	2·07	99
100	268	100	0·62569	0·37431	218	521	1·94	100
101	168	66	0·60687	0·39313	135	303	1·81	101
102	102	42	0·58755	0·41245	81	168	1·65	102
103	60	26	0·56775	0·43225	47	87	1·46	103
104	34	15	0·54747	0·45253	26	41	1·19	104
105	19	9	0·52669	0·47331	14	14	0·76	105