

**TRANSACTIONS OF SOCIETY OF ACTUARIES  
1984 REPORTS**

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

**ABSTRACT**

This report presents the 1983 and 1984 calendar-year experience of retired individuals who are covered under insured pension plans in the United States and Canada. The report includes the experience of contracts providing insurer-guaranteed annuity benefits to ongoing pension plans and the experience of contracts covering closed groups of lives for which purchases are made by a single payment at issue (single-premium close-out business); it excludes contracts which do not contain insurer guarantees of future payments (immediate participation guarantee contract, direct-payment benefits).

The total data reported in this study include all annuities where a benefit, once commenced, is to continue for the future lifetime of the annuitant. In cases of joint and survivor status, only the mortality and income of the original annuitant are included. Annuities having benefits limited to a specific number of years and those where a contingent annuitant is receiving 100 percent of the payments are excluded from the study.

The report format is very similar to the Group Annuity Mortality Report of 1981 and 1982 calendar-year experience. Seven major pension insurers submitted data in sufficient detail to allow the committee to break the total experience into subsets based on a single parameter or a combination of parameters. The Committee believes the following series of tables produces data cells which were small enough to be relatively homogeneous yet large enough to be credible and are in a format which facilitates the analysis of data.

---

**FORMAT OF STUDY**

Table 1 summarizes 1983 calendar-year exposures and deaths in five-year age groups. Male and female data are displayed by number of lives and amount of income. Table 2 displays similar data for calendar year 1984.

Tables 3–23 make extensive use of ratios of actual to expected deaths as a tool to assist analysis. The mortality basis for expected deaths is the 1983 Group Annuity Mortality (GAM) Table without projection. Expected deaths for females are based on the female mortality tables (as opposed to the standard six-year age setback in male mortality tables) except for Table 15, which is based on male mortality with no age setback.

Tables 3–14 have a similar format. Total data are divided into classification groups based on a single parameter (for instance, whether a form or benefit contains a refund or certain feature). Each table displays exposure and ratio of actual to expected deaths for each classification group and the total data in the study (equaling totals shown on Table 1 and 2) by five-year age bracket. (By definition, the sum of exposures in all classification groups equals the total exposure.)

The amount of exposure provides a key to the credibility of the data in each classification age cell and for the classification group in total. Mortality ratios are extremely useful in highlighting significant differences between classifications. Caution is advised in drawing any conclusions for experience under age 55. Ratios at the younger ages, where exposures are small, tend to be very high for a variety of reasons that are not easy to quantify.

#### *Retirement Class*

Tables 3–8 display total study data grouped by retirement class for calendar year 1983, calendar year 1984, and calendar years 1983 and 1984 combined. Each table is identified by study period, mortality table used in calculating expected deaths, and annuitant sex. Retirement classes are defined as follows:

1. Retirement prior to normal retirement date (NRD). — This class consists of employees who retired before the NRD under a plan.
2. Retirement on or after NRD. — This class consists of employees who retire on or after the NRD specified by the plan. The data include the experience of employees who are receiving payments providing for automatic retirement at the NRD even if the employee is still employed.
3. Retirement under a plan having No Stated NRD. — This class consists of employees retired under a plan with No Stated NRD or where available information does not permit determination of whether a retirement is normal, early, or late.
4. Past NRD, not receiving payments. — This class consists of employees working past NRD under a plan which provides for purchase of annuities, and the contract allows the commencement of such annuities to be deferred beyond the NRD. After payments begin, the employee moves to class 2.

#### *Benefit Class*

Tables 9 and 10 display total study data grouped by benefit class for calendar years 1983 and 1984 combined. Each table is identified by the

mortality table used in calculating expected deaths and annuitant sex. Benefit classes are defined as follows:

1. Life annuities. — This class consists of employees selecting a form of benefit which does not include a certain period or refund feature.
2. Life and certain annuities. — This class consists of employees selecting a form of benefit which guarantees a specified minimum number of payments.
3. Modified cash refund. — This class consists of employees selecting a form of benefit which provides for a lump-sum death benefit equal to the excess of a specified initial amount over the sum of income payments received prior to death.

### *Survivor Status*

Tables 11 and 12 display total study data grouped by survivor status for calendar years 1983 and 1984 combined. Each table is identified by the mortality table used in calculating expected deaths and annuitant sex. Survivor status is defined as follows:

1. Single Life. — This class consists of employees not electing a joint and survivor form of benefit.
2. Joint Life. — This class consists of employees electing a joint and survivor form of benefit, measuring the experience of the original annuitant (the employee). Contingent annuitant experience (exposures and deaths) are not included in this reported data.

### *Years Since Retirement*

Tables 13 and 14 display total study data grouped by years since retirement for calendar years 1983 and 1984 combined. Each table is identified by the mortality table used in calculating expected deaths and annuitant sex. The table format highlights summarized results for “select periods” 0–1, 2–5, 6–10, and 11 and more years.

### *Male vs. Female*

Table 15 displays a comparison of male and female mortality experience for calendar years 1983 and 1984 combined. This table was developed by calculating total-study female expected deaths using male mortality (no age setback), recomputing female actual/expected mortality ratios, and comparing these female ratios to the mortality ratios for males.

*Summary Comparison*

Tables 16–19 display a quick summary of results for both calendar years included in the current study (1983 and 1984). Each table is identified by mortality table used in calculating expected deaths, exposure basis (lives or income), and annuitant sex. The table format highlights summarized total exposures and actual-to-expected mortality ratios for the major data cells for each year in the study, and the change in actual-to-expected ratios between the two study years. These tables provide a quick overview of the data included in the study and an indication of variability of data by calendar year.

Tables 20–23 display a comparison of results for the 1981–82 mortality study and the 1983–84 mortality study. Each table is identified by mortality table used in calculating expected deaths, exposure basis (lives or income), and annuitant sex. The table format highlights summarized total exposures and actual-to-expected mortality ratios for the major data cells for each study, and the change in actual to expected ratios between the two study periods. These tables provide a quick overview of both studies and an indication of possible mortality trends.

## PRINCIPAL OBSERVATIONS

Comparing 1981–82 calendar year data against 1983–84 calendar year data did not reveal any distortions, major trends, or unreasonable results for total experience or experience by class (with the exception of a shift in exposure from retirement class No Stated NRD to the classes Prior To NRD and On/After NRD). Males exhibited slight mortality improvement over the two-year period for studies based on lives and income. Female data sent mixed signals: higher mortality for studies based on lives, but no change in mortality for studies based on income.

Both male and female exposures have increased significantly over the 1981–82 study. New retirees have a much higher annual income per life. Thus, new retirees have a larger impact on studies based on annual income than on studies based on number of lives.

The overall male mortality ratio based on number of lives improved by 0.01 (1983–84 A/E ratio of 1.20 versus 1981–82 A/E ratio of 1.21); the mortality ratio based on income improved by 0.04. The reason for the difference between the life and income ratios is that most of the mortality improvement occurred in the new entrant group: 0–1 duration, early retirement, single life annuity class, and attained age groups 55–59, 60–64, 65–69; these are the exposures with the highest average incomes.

The overall female mortality ratio based on number of lives deteriorated by 0.07 (1983–84 A/E ratio of 1.24 versus 1981–82 A/E ratio of 1.17); the mortality ratio based on income showed no change from the 1981–82 experience period. The reason for the difference in experience is that female mortality improved at the younger ages (55–59, 60–64, 65–69) and the 0–1 duration, but deteriorated at the older ages and higher durations of 11+ (which have a larger relative impact on overall mortality ratios); the higher relative income exposure for new retirees offsets the larger relative impact of worsening mortality at higher ages.

Male ratios of actual to expected deaths were lower when based on income than on number of lives for almost every attained age group in every study. This feature of the data (also observed in the 1981–82 calendar year study) would tend to support the notion that higher income (and presumably higher socioeconomic status) exhibits slightly better mortality. However, female ratios of actual to expected deaths do not support this thesis.

Almost 40 percent of male exposure is in the Prior To NRD retirement class. The mixture of exposure varies with attained age: The percentage of exposure in the Prior To NRD class rapidly decreases with increasing attained ages. This pattern of exposure indicates greater availability and higher utilization of early retirement options for the current generation of retirement.

The On/After NRD retirement class continues to exhibit marginally better mortality over the Prior To NRD and No Stated NRD retirement classes; however, the Prior To NRD class has shown some relative improvement for the 1983–84 study period.

When the data are analyzed by benefit class, about 65 percent of exposure arises from life-only annuities, and the remainder is certain and life or refund annuities. This split generally holds for both males and females. Lower attained ages have slightly lower percentages of life-only annuities; higher attained ages have slightly higher percentages of life-only annuities.

There are no significant differences in overall mortality ratios by benefit class. Mortality ratios by attained age group exhibit some variability: A/E ratios for life-only annuities exceed A/E ratios for certain and life annuities at some attained age cells, the reverse is true at other attained age cells.

Exposure for annuitants selecting joint life forms of benefits is still a relatively small percentage of the total study exposure. The 1983–84 data show a large increase in the selection of joint life benefits by new retirees for both male and female annuitants. Even with increased activity, less than 50 percent of males elect joint life benefits and 15 percent of females elect joint life benefit forms.

Overall, there is not much difference between mortality levels for single life and joint life benefit forms. There are differences by attained age (which were also observed in the 1981–82 study): Male joint life benefit forms have lower mortality ratios for ages 65 and over and have higher mortality ratios for ages 64 and under. The higher ratios at low attained ages are probably due to a small amount of antiselection in those choosing a survivor form of benefit.

When exposure is analyzed by duration (measured by years since retirement), there is no real evidence of any select period of improved or adverse mortality. Mortality ratios in duration 0–1 have improved significantly since the 1981–82 study and are now comparable to mortality ratios at the higher durations.

Results of comparing the absolute level of female mortality to male mortality are similar to the 1981–82 study: Females experience about 50 to 60 percent of the mortality rates of males for attained ages under 85, with the percentages slowly increasing at higher attained ages.

#### CONTRIBUTING COMPANIES

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

Aetna Life Insurance Company  
CIGNA  
John Hancock Mutual Life Insurance Company  
Principal Mutual Life Insurance Company  
Prudential Insurance Company of America  
Sun Life Assurance Company of Canada  
Travelers Insurance Company

TABLE 1  
CALENDAR YEAR 1983  
SUMMARY OF EXPOSURES AND ACTUAL DEATHS

Attained Age	Males		Females		Total	
	Exposure	Deaths	Exposure	Deaths	Exposure	Deaths
Lives						
Under 55 ...	2,804.88	35.00	2,254.24	11.00	5,059.12	46.00
55-59 .....	33,163.65	510.00	13,783.18	117.00	46,946.83	627.00
60-64 .....	98,632.53	1,868.00	41,665.68	435.00	140,298.21	2,303.00
65-69 .....	195,074.64	5,153.00	79,663.64	1,103.00	274,738.28	6,256.00
70-74 .....	170,348.65	6,995.00	72,621.93	1,511.00	242,970.58	8,506.00
75-79 .....	107,213.60	6,964.00	48,482.16	1,613.00	155,695.76	8,577.00
80-84 .....	57,936.04	5,399.00	24,237.52	1,388.00	82,173.56	6,787.00
85-89 .....	22,035.27	3,111.00	9,528.77	895.00	31,564.04	4,006.00
90-94 .....	6,136.86	1,218.00	2,725.40	373.00	8,862.26	1,591.00
95 and over .	1,008.76	271.00	476.92	106.00	1,485.68	377.00
Total .....	694,354.88	31,524.00	295,439.44	7,552.00	989,794.32	39,076.00
Income						
Under 55 ...	\$ 13,911,330	\$ 109,566	\$ 5,317,591	\$ 15,672	\$ 19,228,921	\$ 125,238
55-59 .....	103,383,615	1,338,172	23,272,925	207,069	126,656,540	1,545,241
60-64 .....	377,029,696	5,591,529	69,268,554	672,094	446,298,250	6,263,623
65-69 .....	564,602,311	13,329,131	114,067,948	1,390,805	678,670,259	14,719,936
70-74 .....	390,987,267	14,621,849	85,207,477	1,681,249	476,194,744	16,303,098
75-79 .....	202,926,702	12,137,343	46,393,088	1,511,192	249,319,790	13,648,535
80-84 .....	95,872,605	8,520,299	20,044,810	1,154,854	115,917,415	9,675,153
85-89 .....	30,818,292	4,165,848	7,056,291	641,412	37,874,583	4,807,260
90-94 .....	7,235,503	1,409,155	1,736,995	255,527	8,972,498	1,664,682
95 and over .	1,183,105	358,888	346,558	89,529	1,529,663	448,417
Total .....	\$1,787,950,426	\$61,581,780	\$372,712,237	\$7,619,403	\$2,160,662,663	\$69,201,183

TABLE 2  
CALENDAR YEAR 1984  
SUMMARY OF EXPOSURES AND ACTUAL DEATHS

Attained Age	Males		Females		Total	
	Exposure	Deaths	Exposure	Deaths	Exposure	Deaths
Lives						
Under 55 . . .	3,365.38	46.00	2,713.17	23.00	6,078.55	69.00
55-59 . . . . .	40,574.69	580.00	16,305.25	132.00	56,879.94	712.00
60-64 . . . . .	119,381.14	2,212.00	48,941.94	448.00	168,323.08	2,660.00
65-69 . . . . .	221,883.84	5,695.00	91,062.97	1,241.00	312,946.81	6,936.00
70-74 . . . . .	200,590.93	8,196.00	86,304.56	1,870.00	286,895.49	10,066.00
75-79 . . . . .	129,357.81	8,141.00	60,361.35	2,106.00	189,719.16	10,247.00
80-84 . . . . .	67,297.97	6,288.00	31,781.28	1,771.00	99,079.25	8,059.00
85-89 . . . . .	26,575.80	3,766.00	12,400.26	1,211.00	38,976.06	4,977.00
90-94 . . . . .	7,743.72	1,574.00	3,681.76	573.00	11,425.48	2,147.00
95 and over . . .	1,355.63	363.00	672.05	130.00	2,027.68	493.00
Total . . . . .	818,126.91	36,861.00	354,224.59	9,505.00	1,172,351.50	46,366.00
Income						
Under 55 . . . \$	17,260,063	\$ 167,700	\$ 6,467,833	\$ 38,254	\$ 23,727,896	\$ 205,954
55-59 . . . . .	128,584,051	1,517,089	28,749,146	176,497	157,333,197	1,693,586
60-64 . . . . .	465,109,818	6,542,024	88,345,701	815,984	553,455,519	7,358,008
65-69 . . . . .	678,390,780	14,910,774	137,765,298	1,911,169	816,156,078	16,821,943
70-74 . . . . .	487,144,530	18,500,979	106,192,703	2,125,881	593,337,233	20,626,860
75-79 . . . . .	261,341,401	15,245,452	60,555,064	2,024,477	321,896,465	17,269,929
80-84 . . . . .	113,680,353	9,620,354	27,092,906	1,494,314	140,773,259	11,114,668
85-89 . . . . .	39,069,469	5,235,417	9,299,340	934,009	48,368,809	6,169,426
90-94 . . . . .	9,687,942	1,991,670	2,401,510	360,598	12,089,452	2,352,268
95 and over . . .	1,498,395	370,299	441,325	79,701	1,939,720	450,000
Total . . . . .	\$2,201,766,802	\$74,101,758	\$467,310,826	\$9,960,884	\$2,669,077,628	\$84,062,642



TABLE 3  
 CALENDAR YEAR 1983  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY RETIREMENT CLASS

Attained Age	Prior to NRD		On/After NRD		No Stated NRD		Past NRD with No Payment		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Male Lives										
Under 55 . . . .	1,747.85	1.88	366.05	3.75	687.98	4.71	3.00	0.00	2,804.88	2.78
55-59 . . . . .	19,953.01	1.86	2,980.73	1.82	10,190.17	2.56	39.74	0.00	33,163.65	2.07
60-64 . . . . .	60,627.13	1.56	11,664.13	1.76	26,067.85	1.65	273.42	1.57	98,632.53	1.61
65-69 . . . . .	75,712.58	1.26	71,694.18	1.30	47,125.61	1.41	542.27	1.56	195,074.64	1.31
70-74 . . . . .	48,765.70	1.25	77,784.48	1.22	43,371.23	1.25	427.24	0.64	170,348.65	1.24
75-79 . . . . .	21,759.34	1.22	58,402.08	1.18	26,877.18	1.25	175.00	0.43	107,213.60	1.20
80-84 . . . . .	8,468.32	1.16	36,766.04	1.02	12,618.68	1.12	83.00	0.42	57,936.04	1.06
85-89 . . . . .	2,463.50	1.18	14,241.70	1.07	5,280.07	1.08	50.00	1.23	22,035.27	1.08
90-94 . . . . .	492.25	1.03	4,053.27	1.03	1,567.34	1.25	24.00	0.68	6,136.86	1.08
95 and over . .	84.83	0.88	659.75	0.96	261.18	1.20	3.00	0.00	1,008.76	1.01
Total . . . . .	240,074.51	1.28	278,612.41	1.14	174,047.29	1.27	1,620.67	0.87	694,354.88	1.21
Male Income										
Under 55 . . . .	\$ 8,298,695	1.12	\$ 1,878,119	2.53	\$ 3,728,005	3.10	\$ 6,511	0.00	\$ 13,911,330	1.81
55-59 . . . . .	66,675,691	1.38	7,194,465	1.25	29,371,737	2.67	141,722	0.00	103,383,615	1.73
60-64 . . . . .	217,418,904	1.20	50,353,283	1.29	108,935,996	1.40	321,513	0.36	377,029,696	1.27
65-69 . . . . .	206,381,519	1.15	189,658,741	1.23	167,451,027	1.19	1,111,024	1.58	564,602,311	1.19
70-74 . . . . .	100,475,477	1.11	171,937,112	1.16	117,695,040	1.13	879,638	1.60	390,987,267	1.14
75-79 . . . . .	35,455,221	1.17	112,934,279	1.09	54,063,889	1.15	473,313	0.40	202,926,702	1.12
80-84 . . . . .	10,690,917	1.03	65,186,780	0.98	19,868,088	1.12	126,820	0.25	95,872,605	1.01
85-89 . . . . .	2,391,384	1.11	22,169,038	1.03	6,141,691	1.06	116,179	0.77	30,818,292	1.04
90-94 . . . . .	431,293	1.06	5,218,322	1.00	1,551,926	1.29	33,962	0.80	7,235,503	1.06
95 and over . .	135,088	1.39	795,596	1.04	248,141	1.24	4,280	0.00	1,183,105	1.13
Total . . . . .	\$648,354,189	1.15	\$627,325,735	1.10	\$509,055,540	1.19	\$3,214,962	0.97	\$1,787,950,426	1.14

TABLE 4  
 CALENDAR YEAR 1983  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY RETIREMENT CLASS

Attained Age	Prior to NRD		On/After NRD		No Stated NRD		Past NRD with No Payment		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Female Lives										
Under 55 . . . .	1,322.33	1.71	354.67	3.39	574.16	5.10	3.08	0.00	2,254.24	2.81
55-59 . . . . .	8,924.41	2.22	1,458.71	2.46	3,385.73	3.58	14.33	0.00	13,783.18	2.58
60-64 . . . . .	25,670.64	1.79	6,018.91	2.54	9,927.72	1.83	48.41	3.76	41,665.68	1.91
65-69 . . . . .	28,171.93	1.59	30,713.40	1.57	20,600.14	1.50	178.17	1.23	79,663.64	1.56
70-74 . . . . .	17,073.89	1.39	34,558.51	1.21	20,816.87	1.33	172.66	1.74	72,621.93	1.29
75-79 . . . . .	7,722.58	1.27	26,727.77	1.12	13,841.81	0.99	190.00	0.84	48,482.16	1.10
80-84 . . . . .	3,204.66	1.14	14,344.26	1.13	6,570.60	1.09	118.00	0.99	24,237.52	1.12
85-89 . . . . .	961.84	1.19	6,055.73	1.14	2,463.20	1.14	48.00	1.82	9,528.77	1.15
90-94 . . . . .	204.66	0.98	1,861.41	1.11	650.33	0.96	9.00	0.00	2,725.40	1.06
95 and over . .	41.58	0.28	315.84	1.12	118.50	0.88	1.00	5.48	476.92	0.98
Total . . . . .	93,298.52	1.41	122,409.21	1.19	78,949.06	1.20	782.65	1.23	295,439.44	1.24
Female Income										
Under 55 . . . .	\$ 3,278,886	1.61	\$ 505,539	2.89	\$ 1,527,943	1.69	\$ 5,223	0.00	\$ 5,317,591	1.75
55-59 . . . . .	15,265,693	1.74	1,758,860	1.85	6,224,422	5.29	23,950	0.00	23,272,925	2.70
60-64 . . . . .	42,940,755	1.61	6,715,290	2.32	19,567,748	1.97	44,761	2.17	69,268,554	1.78
65-69 . . . . .	37,086,182	1.32	41,652,165	1.52	35,049,700	1.29	279,901	0.42	114,067,948	1.38
70-74 . . . . .	16,481,454	1.38	39,776,038	1.22	28,691,117	1.15	258,868	1.92	85,207,477	1.23
75-79 . . . . .	5,422,227	1.22	25,686,234	1.13	14,907,791	0.98	376,836	0.72	46,393,088	1.09
80-84 . . . . .	1,741,102	1.07	12,337,304	1.15	5,808,596	1.11	157,808	0.72	20,044,810	1.13
85-89 . . . . .	521,442	0.80	4,535,340	1.08	1,936,444	1.27	63,065	1.81	7,056,291	1.12
90-94 . . . . .	125,752	1.30	1,180,847	1.13	423,689	1.13	6,707	0.00	1,736,995	1.14
95 and over . .	36,115	0.28	232,139	1.41	78,045	0.79	259	5.48	346,558	1.12
Total . . . . .	\$122,899,608	1.35	\$134,379,756	1.22	\$114,215,495	1.23	\$1,217,378	1.03	\$372,712,237	1.24

TABLE 5  
 CALENDAR YEAR 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY RETIREMENT CLASS

Attained Age	Prior to NRD		On/After NRD		No Stated NRD		Past NRD with No Payment		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Male Lives										
Under 55 . . . . .	2,029.05	2.65	480.17	5.57	853.91	2.89	2.25	0.00	3,365.38	3.06
55-59 . . . . .	25,437.61	1.73	3,695.18	1.99	11,421.73	2.33	20.17	0.00	40,574.69	1.92
60-64 . . . . .	78,013.61	1.51	13,282.34	1.80	27,845.60	1.64	239.59	0.35	119,381.14	1.57
65-69 . . . . .	106,449.13	1.26	64,975.80	1.28	49,935.41	1.31	523.50	0.74	221,883.84	1.28
70-74 . . . . .	74,465.13	1.22	74,056.42	1.22	51,612.38	1.26	457.00	0.86	200,590.93	1.23
75-79 . . . . .	30,861.65	1.18	56,134.10	1.15	42,150.64	1.18	211.42	1.33	129,357.81	1.16
80-84 . . . . .	12,025.05	1.04	33,146.99	1.05	22,036.93	1.12	89.00	0.52	67,297.97	1.07
85-89 . . . . .	3,442.84	1.03	14,210.88	1.09	8,877.08	1.10	45.00	0.68	26,575.80	1.09
90-94 . . . . .	748.91	1.17	4,313.02	1.12	2,655.79	1.07	26.00	1.24	7,743.72	1.11
95 and over . . . . .	127.81	0.99	780.99	0.94	441.83	1.15	5.00	0.00	1,355.63	1.01
Total . . . . .	333,600.79	1.23	265,075.89	1.15	217,831.30	1.21	1,618.93	0.85	818,126.91	1.19
Male Income										
Under 55 . . . . .	\$ 10,059,626	2.06	\$ 2,270,104	4.27	\$ 4,923,819	1.75	\$ 6,514	0.00	\$ 17,260,063	2.23
55-59 . . . . .	82,421,223	1.31	10,470,783	2.00	35,585,100	2.08	106,945	0.00	128,584,051	1.58
60-64 . . . . .	283,393,818	1.13	57,076,962	1.50	124,316,496	1.20	322,542	0.17	465,109,818	1.20
65-69 . . . . .	303,306,322	1.07	185,446,827	1.12	188,602,138	1.15	1,035,493	0.52	678,390,780	1.11
70-74 . . . . .	167,112,304	1.07	175,308,743	1.15	143,754,347	1.24	969,136	0.86	487,144,530	1.15
75-79 . . . . .	55,418,291	1.07	116,072,038	1.05	89,418,273	1.15	432,799	0.57	261,341,401	1.09
80-84 . . . . .	17,494,046	0.90	58,565,511	0.95	37,405,253	1.05	215,543	0.46	113,680,353	0.98
85-89 . . . . .	4,144,843	0.90	23,063,183	1.03	11,740,441	1.09	121,002	0.24	39,069,469	1.03
90-94 . . . . .	799,703	1.33	5,989,889	1.14	2,861,162	1.03	37,188	1.71	9,687,942	1.13
95 and over . . . . .	141,674	0.71	952,602	0.84	397,440	1.22	6,679	0.00	1,498,395	0.92
Total . . . . .	\$924,291,850	1.07	\$635,216,642	1.08	\$639,004,469	1.17	\$3,253,841	0.62	\$2,201,766,802	1.10

TABLE 6  
CALENDAR YEAR 1984  
EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
EXPERIENCE BY RETIREMENT CLASS

Attained Age	Prior to NRD		On/After NRD		No Stated NRD		Past NRD with No Payment		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Female Lives										
Under 55 . . . .	1,668.97	5.97	459.91	2.95	581.46	3.06	2.83	0.00	2,713.17	4.91
55-59 . . . . .	11,198.02	2.51	1,593.46	2.08	3,503.03	2.51	10.74	0.00	16,305.25	2.46
60-64 . . . . .	31,770.34	1.77	6,561.43	1.36	10,566.92	1.61	43.25	0.00	48,941.94	1.68
65-69 . . . . .	39,791.51	1.55	29,196.10	1.53	21,921.70	1.52	153.66	0.00	91,062.97	1.53
70-74 . . . . .	26,554.70	1.43	34,709.39	1.29	24,860.15	1.30	180.32	1.03	86,304.56	1.34
75-79 . . . . .	11,567.26	1.20	27,750.51	1.19	20,859.58	1.09	184.00	0.35	60,361.35	1.15
80-84 . . . . .	4,758.77	1.01	15,475.11	1.10	11,414.90	1.10	132.50	1.04	31,781.28	1.09
85-89 . . . . .	1,443.82	1.07	6,623.31	1.22	4,280.13	1.18	53.00	1.88	12,400.26	1.19
90-94 . . . . .	339.13	1.03	2,119.64	1.19	1,208.99	1.27	14.00	1.15	3,681.76	1.20
95 and over . .	80.48	0.83	384.74	0.86	206.83	0.89	0.00	0.00	672.05	0.87
Total . . . . .	129,173.00	1.37	124,873.60	1.21	99,403.69	1.20	774.30	0.96	354,224.59	1.24
Female Income										
Under 55 . . . .	\$ 4,092,394	3.87	\$ 714,769	4.09	\$ 1,655,880	2.31	\$ 4,790	0.00	\$ 6,467,833	3.49
55-59 . . . . .	19,769,334	1.57	2,286,018	0.98	6,673,888	3.04	19,906	0.00	28,749,146	1.86
60-64 . . . . .	57,808,196	1.85	8,403,373	1.33	22,090,033	1.44	44,099	0.00	88,345,701	1.69
65-69 . . . . .	56,126,303	1.61	41,792,989	1.57	39,597,469	1.53	248,537	0.00	137,765,298	1.57
70-74 . . . . .	29,088,422	1.30	42,035,702	1.24	34,840,318	1.21	228,261	0.57	106,192,703	1.25
75-79 . . . . .	9,339,783	1.18	28,045,373	1.10	22,771,647	1.13	398,261	0.46	60,555,064	1.12
80-84 . . . . .	3,030,794	0.94	13,742,541	1.07	10,113,455	1.13	206,116	0.91	27,092,906	1.08
85-89 . . . . .	869,700	0.89	5,208,101	1.31	3,155,899	1.18	65,640	1.84	9,299,340	1.23
90-94 . . . . .	226,372	1.00	1,363,406	1.18	800,471	1.19	11,261	0.66	2,401,510	1.17
95 and over . .	63,024	0.43	245,866	0.90	132,435	0.78	0	0.00	441,325	0.79
Total . . . . .	\$180,414,322	1.42	\$143,838,138	1.21	\$141,831,495	1.23	\$1,226,871	0.78	\$467,310,826	1.26

TABLE 7  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY RETIREMENT CLASS

Attained Age	Prior to NRD		On/After NRD		No Stated NRD		Past NRD with No Payment		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Males Lives										
Under 55 . . . .	3,776.90	2.29	846.22	4.71	1,541.89	3.69	5.25	0.00	6,170.26	2.93
55-59 . . . . .	45,390.62	1.79	6,675.91	1.92	21,611.90	2.43	59.91	0.00	73,738.34	1.99
60-64 . . . . .	138,640.74	1.53	24,946.47	1.78	53,913.45	1.65	513.01	0.99	218,013.67	1.59
65-69 . . . . .	182,161.71	1.26	136,669.98	1.29	97,061.02	1.36	1,065.77	1.15	416,958.48	1.29
70-74 . . . . .	123,230.83	1.23	151,840.90	1.22	94,983.61	1.26	884.24	0.76	370,939.58	1.23
75-79 . . . . .	52,620.99	1.20	114,536.18	1.16	69,027.82	1.21	386.42	0.92	236,571.41	1.18
80-84 . . . . .	20,493.37	1.09	69,913.03	1.04	34,655.61	1.12	172.00	0.47	125,234.01	1.07
85-89 . . . . .	5,906.34	1.09	28,452.58	1.08	14,157.15	1.09	95.00	0.97	48,611.07	1.09
90-94 . . . . .	1,241.16	1.12	8,366.29	1.08	4,223.13	1.14	50.00	0.97	13,880.58	1.10
95 and over . .	212.64	0.94	1,440.74	0.95	703.01	1.17	8.00	0.00	2,364.39	1.01
Total . . . . .	573,675.30	1.25	543,688.30	1.15	391,878.59	1.23	3,239.60	0.86	1,512,481.79	1.20
Male Income										
Under 55 . . . .	\$ 18,358,321	1.63	\$ 4,148,223	3.44	\$ 8,651,824	2.32	\$ 13,025	0.00	\$ 31,171,393	2.04
55-59 . . . . .	149,096,914	1.34	17,665,248	1.69	64,956,837	2.35	248,667	0.00	231,967,666	1.65
60-64 . . . . .	500,812,722	1.16	107,430,245	1.41	233,252,492	1.29	644,055	0.26	842,139,514	1.23
65-69 . . . . .	509,687,841	1.11	375,105,568	1.17	356,053,165	1.17	2,146,517	1.06	1,242,993,091	1.14
70-74 . . . . .	267,587,781	1.08	347,245,855	1.15	261,449,387	1.19	1,848,774	1.21	878,131,797	1.14
75-79 . . . . .	90,873,512	1.11	229,006,317	1.07	143,482,162	1.15	906,112	0.48	464,268,103	1.10
80-84 . . . . .	28,184,963	0.95	123,752,291	0.97	57,273,341	1.07	342,363	0.38	209,552,958	0.99
85-89 . . . . .	6,536,227	0.98	45,232,221	1.03	17,882,132	1.08	237,181	0.50	69,887,761	1.04
90-94 . . . . .	1,230,996	1.23	11,208,211	1.08	4,413,088	1.12	71,150	1.28	16,923,445	1.10
95 and over . .	276,762	1.05	1,748,198	0.93	645,581	1.23	10,959	0.00	2,681,500	1.01
Total . . . . .	\$1,572,646,039	1.11	\$1,262,542,377	1.09	\$1,148,060,009	1.18	\$6,468,803	0.79	\$3,989,717,228	1.12

TABLE 8  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY RETIREMENT CLASS

Attained Age	Prior to NRD		On/After NRD		No Stated NRD		Past NRD with No Payment		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Female Lives										
Under 55 . . . .	2,991.30	4.11	814.58	3.15	1,155.62	4.08	5.91	0.00	4,967.41	3.95
55-59 . . . . .	20,122.43	2.38	3,052.17	2.26	6,888.76	3.03	25.07	0.00	30,088.43	2.51
60-64 . . . . .	57,440.98	1.78	12,580.34	1.93	20,494.64	1.71	91.66	2.01	90,607.62	1.78
65-69 . . . . .	67,963.44	1.57	59,909.50	1.55	42,521.84	1.51	331.83	0.66	170,726.61	1.54
70-74 . . . . .	43,628.59	1.41	69,267.90	1.25	45,677.02	1.31	352.98	1.38	158,926.49	1.31
75-79 . . . . .	19,289.84	1.23	54,478.28	1.15	34,701.39	1.05	374.00	0.60	108,843.51	1.13
80-84 . . . . .	7,963.43	1.06	29,819.37	1.11	17,985.50	1.09	250.50	1.02	56,018.80	1.10
85-89 . . . . .	2,405.66	1.12	12,679.04	1.18	6,743.33	1.17	101.00	1.85	21,929.03	1.17
90-94 . . . . .	543.79	1.01	3,981.05	1.15	1,859.32	1.16	23.00	0.71	6,407.16	1.14
95 and over . .	122.06	0.63	700.58	0.98	325.33	0.89	1.00	5.48	1,148.97	0.92
Total . . . . .	222,471.52	1.39	247,282.81	1.20	178,352.75	1.20	1,556.95	1.09	649,664.03	1.24
Female Income										
Under 55 . . . .	\$ 7,371,280	2.88	\$ 1,220,308	3.57	\$ 3,183,823	2.01	\$ 10,013	0.00	\$ 11,785,424	2.71
55-59 . . . . .	35,035,027	1.64	4,044,878	1.36	12,898,310	4.13	43,856	0.00	52,022,071	2.24
60-64 . . . . .	100,748,951	1.75	15,118,663	1.77	41,657,781	1.69	88,860	1.14	157,614,255	1.73
65-69 . . . . .	93,212,485	1.50	83,445,154	1.55	74,647,169	1.42	528,438	0.22	251,833,246	1.49
70-74 . . . . .	45,569,876	1.33	81,811,740	1.23	63,531,435	1.18	487,129	1.32	191,400,180	1.24
75-79 . . . . .	14,762,010	1.19	53,731,607	1.11	37,679,438	1.07	775,097	0.58	106,948,152	1.10
80-84 . . . . .	4,771,896	0.99	26,079,845	1.11	15,922,051	1.13	363,924	0.83	47,137,716	1.10
85-89 . . . . .	1,391,142	0.85	9,743,441	1.20	5,092,343	1.21	128,705	1.83	16,355,631	1.18
90-94 . . . . .	352,124	1.11	2,544,253	1.16	1,224,160	1.17	17,968	0.42	4,138,505	1.15
95 and over . .	99,139	0.37	478,005	1.15	210,480	0.79	259	5.48	787,883	0.93
Total . . . . .	\$303,313,930	1.39	\$278,217,894	1.21	\$256,046,990	1.23	\$2,444,249	0.90	\$840,023,063	1.26

TABLE 9  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY BENEFIT CLASS

Attained Age	Life		Life and Certain		Modified Cash Refund		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Males Lives								
Under 55 ....	3,653.40	2.96	1,653.50	3.23	863.36	2.29	6,170.26	2.93
55-59 .....	51,081.77	2.01	11,917.14	2.38	10,739.43	1.43	73,738.34	1.99
60-64 .....	139,115.99	1.60	40,249.80	1.61	38,647.88	1.52	218,013.67	1.59
65-69 .....	254,730.00	1.32	86,774.31	1.23	75,454.17	1.26	416,958.48	1.29
70-74 .....	220,730.57	1.26	84,378.95	1.19	65,830.06	1.19	370,939.58	1.23
75-79 .....	149,285.82	1.19	50,539.19	1.16	36,746.40	1.20	236,571.41	1.18
80-84 .....	89,088.53	1.05	18,845.25	1.14	17,300.23	1.10	125,234.01	1.07
85-89 .....	36,257.19	1.08	4,944.63	1.13	7,409.25	1.10	48,611.07	1.09
90-94 .....	10,865.02	1.09	1,033.90	1.08	1,981.66	1.15	13,880.58	1.10
95 and over ..	1,935.05	1.01	150.43	1.07	278.91	0.98	2,364.39	1.01
Total .....	956,743.34	1.20	300,487.10	1.21	255,251.35	1.20	1,512,481.79	1.20
Male Income								
Under 55 ....	\$ 15,454,176	1.99	\$ 9,716,541	2.56	\$ 6,000,767	1.47	\$ 31,171,393	2.04
55-59 .....	161,335,283	1.74	34,398,542	1.93	36,233,841	0.96	231,967,666	1.65
60-64 .....	544,152,508	1.26	132,192,296	1.31	165,794,710	1.07	842,139,514	1.23
65-69 .....	792,802,523	1.18	233,744,620	1.11	216,445,948	1.06	1,242,993,091	1.14
70-74 .....	536,751,204	1.17	199,840,477	1.14	141,540,116	1.06	878,131,797	1.14
75-79 .....	295,423,690	1.10	102,722,671	1.09	66,121,742	1.11	464,268,103	1.10
80-84 .....	150,250,966	0.96	32,893,557	1.13	26,408,435	1.01	209,552,958	0.99
85-89 .....	53,728,849	1.01	6,161,680	1.14	9,997,232	1.12	69,887,761	1.04
90-94 .....	13,846,523	1.09	934,598	1.06	2,142,324	1.19	16,923,445	1.10
95 and over ..	2,280,368	1.03	176,173	1.06	224,959	0.86	2,681,500	1.01
Total .....	\$2,566,026,090	1.12	\$752,781,155	1.14	\$670,909,983	1.07	\$3,989,717,228	1.12

TABLE 10  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY BENEFIT CLASS

Attained Age	Life		Life and Certain		Modified Cash Refund		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Female Lives								
Under 55 . . . .	3,382.68	4.80	869.49	2.67	715.24	1.58	4,967.41	3.95
55-59 . . . . .	20,449.82	2.31	4,869.08	2.98	4,769.53	2.92	30,088.43	2.51
60-64 . . . . .	58,733.51	1.76	14,903.84	1.61	16,970.27	2.03	90,607.62	1.78
65-69 . . . . .	105,738.86	1.59	29,755.30	1.47	35,232.45	1.46	170,726.61	1.54
70-74 . . . . .	100,182.47	1.32	28,408.89	1.30	30,335.13	1.29	158,926.49	1.31
75-79 . . . . .	74,033.12	1.16	17,187.47	1.08	17,622.92	1.05	108,843.51	1.13
80-84 . . . . .	41,759.72	1.12	6,418.61	1.00	7,840.47	1.07	56,018.80	1.10
85-89 . . . . .	17,328.76	1.19	1,404.82	1.15	3,195.45	1.12	21,929.03	1.17
90-94 . . . . .	5,349.83	1.13	265.16	1.16	792.17	1.21	6,407.16	1.14
95 and over . .	1,001.89	0.91	31.25	0.57	115.83	1.04	1,148.97	0.92
Total . . . . .	427,960.66	1.25	104,113.91	1.22	117,589.46	1.23	649,664.03	1.24
Female Income								
Under 55 . . . .	\$ 6,832,781	3.14	\$ 2,126,447	1.77	\$ 2,826,196	2.34	\$ 11,785,424	2.71
55-59 . . . . .	34,679,908	1.61	7,884,598	4.83	9,457,565	2.37	52,022,071	2.24
60-64 . . . . .	101,842,299	1.68	25,946,721	1.46	29,825,235	2.14	157,614,255	1.73
65-69 . . . . .	152,875,276	1.49	46,091,379	1.53	52,866,591	1.45	251,833,246	1.49
70-74 . . . . .	117,520,694	1.24	37,347,181	1.28	36,532,305	1.20	191,400,180	1.24
75-79 . . . . .	71,821,690	1.13	17,933,382	1.08	17,193,080	1.01	106,948,152	1.10
80-84 . . . . .	35,870,823	1.14	5,298,620	0.89	5,968,273	1.03	47,137,716	1.10
85-89 . . . . .	13,387,595	1.19	1,046,917	1.27	1,921,119	1.04	16,355,631	1.18
90-94 . . . . .	3,474,613	1.17	230,949	0.88	432,943	1.14	4,138,505	1.15
95 and over . .	716,973	0.94	15,134	0.81	55,776	0.87	787,883	0.93
Total . . . . .	\$539,022,652	1.25	\$143,921,328	1.28	\$157,079,083	1.26	\$840,023,063	1.26



TABLE 11  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY SURVIVOR STATUS

Attained Age	Single Life		Joint Life		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Male Lives						
Under 55 . . .	4,605.71	2.84	1,564.55	3.21	6,170.26	2.93
55-59 . . . . .	54,917.42	1.84	18,820.92	2.41	73,738.34	1.99
60-64 . . . . .	157,715.40	1.60	60,298.27	1.54	218,013.67	1.59
65-69 . . . . .	315,486.30	1.31	101,472.18	1.25	416,958.48	1.29
70-74 . . . . .	308,864.39	1.25	62,075.19	1.14	370,939.58	1.23
75-79 . . . . .	209,317.89	1.19	27,253.52	1.15	236,571.41	1.18
80-84 . . . . .	112,286.97	1.07	12,947.04	1.02	125,234.01	1.07
85-89 . . . . .	44,388.26	1.09	4,222.81	1.04	48,611.07	1.09
90-94 . . . . .	13,064.18	1.10	816.40	1.02	13,880.58	1.10
95 and over . .	2,237.97	1.02	126.42	0.83	2,364.39	1.01
Total . . . . .	1,222,884.49	1.20	289,597.30	1.20	1,512,481.79	1.20
Male Income						
Under 55 . . .	\$ 20,915,779	1.59	\$ 10,255,614	2.95	\$ 31,171,393	2.04
55-59 . . . . .	157,802,591	1.38	74,165,075	2.21	231,967,666	1.65
60-64 . . . . .	536,242,000	1.27	305,897,514	1.16	842,139,514	1.23
65-69 . . . . .	820,639,079	1.16	422,354,012	1.11	1,242,993,091	1.14
70-74 . . . . .	664,126,494	1.17	214,005,303	1.07	878,131,797	1.14
75-79 . . . . .	380,745,794	1.11	83,522,309	1.06	464,268,103	1.10
80-84 . . . . .	175,611,251	1.01	33,941,707	0.93	209,552,958	0.99
85-89 . . . . .	59,392,563	1.05	10,495,198	0.95	69,887,761	1.04
90-94 . . . . .	15,106,874	1.10	1,816,571	1.10	16,923,445	1.10
95 and over . .	2,371,944	1.09	309,556	0.46	2,681,500	1.01
Total . . . . .	\$2,832,954,369	1.12	\$1,156,762,859	1.09	\$3,989,717,228	1.12

TABLE 12  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY SURVIVOR STATUS

Attained Age	Single Life		Joint Life		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Female Lives						
Under 55 ...	4,672.75	3.23	294.66	14.85	4,967.41	3.95
55-59 .....	27,203.26	2.44	2,885.17	3.26	30,088.43	2.51
60-64 .....	83,396.73	1.78	7,210.89	1.87	90,607.62	1.78
65-69 .....	161,506.00	1.55	9,220.61	1.44	170,726.61	1.54
70-74 .....	154,864.50	1.31	4,061.99	1.44	158,926.49	1.31
75-79 .....	107,714.72	1.15	1,128.79	1.05	108,843.51	1.13
80-84 .....	55,523.22	1.09	495.58	1.65	56,018.80	1.10
85-89 .....	21,785.03	1.17	144.00	1.53	21,929.03	1.17
90-94 .....	6,369.58	1.14	37.58	1.93	6,407.16	1.14
95 and over .	1,140.80	0.91	8.17	1.74	1,148.97	0.92
Total .....	624,176.59	1.23	25,487.44	1.58	649,664.03	1.24
Female Income						
Under 55 ...	\$ 11,065,824	2.68	\$ 719,600	3.05	\$ 11,785,424	2.71
55-59 .....	46,193,787	2.32	5,828,284	1.61	52,022,071	2.24
60-64 .....	142,340,435	1.68	15,273,820	2.21	157,614,255	1.73
65-69 .....	234,261,097	1.50	17,572,149	1.33	251,833,246	1.49
70-74 .....	184,766,974	1.24	6,633,206	1.31	191,400,180	1.24
75-79 .....	105,061,260	1.11	1,886,892	0.96	106,948,152	1.10
80-84 .....	46,548,163	1.10	589,553	1.30	47,137,716	1.10
85-89 .....	16,214,965	1.18	140,666	0.80	16,355,631	1.18
90-94 .....	4,117,959	1.15	20,546	1.78	4,138,505	1.15
95 and over .	782,484	0.93	5,399	1.26	787,883	0.93
Total .....	\$791,352,948	1.25	\$48,670,115	1.44	\$840,023,063	1.26

TABLE 13  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY YEARS SINCE RETIREMENT

Attained Age	Years Since Retirement									
	0-1		2-5		6-10		11 and Over		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
Males Lives										
Under 55 . . . .	2,770.99	3.13	2,576.50	2.35	696.77	4.54	126.00	2.14	6,170.26	2.93
55-59 . . . . .	35,552.43	2.09	34,876.47	1.85	2,876.61	2.21	432.83	3.40	73,738.34	1.99
60-64 . . . . .	78,070.94	1.40	96,305.56	1.62	41,216.09	1.82	2,421.08	1.93	218,013.67	1.59
65-69 . . . . .	60,338.44	1.22	215,574.90	1.25	114,228.24	1.36	26,816.90	1.49	416,958.48	1.29
70-74 . . . . .	11,910.66	1.22	54,315.54	1.22	227,853.70	1.20	76,859.68	1.35	370,939.58	1.23
75-79 . . . . .	5,156.01	1.13	15,935.68	1.18	44,078.75	1.14	171,400.97	1.19	236,571.41	1.18
80-84 . . . . .	5,228.60	0.60	7,209.33	1.10	8,574.08	1.02	104,222.00	1.10	125,234.01	1.07
85-89 . . . . .	649.49	1.16	2,588.92	1.14	2,479.43	1.08	42,893.23	1.08	48,611.07	1.09
90-94 . . . . .	158.58	1.22	745.42	1.16	650.50	1.09	12,326.08	1.09	13,880.58	1.10
95 and over . .	43.06	0.44	149.00	0.82	169.00	0.99	2,003.33	1.05	2,364.39	1.01
Total . . . . .	199,879.20	1.24	430,277.32	1.28	442,823.17	1.23	439,502.10	1.15	1,512,481.79	1.20
Male Income										
Under 55 . . . .	\$ 13,358,267	1.98	\$ 13,373,011	2.14	\$ 4,210,180	1.48	\$ 229,935	9.63	\$ 31,171,393	2.04
55-59 . . . . .	128,722,863	1.63	87,925,398	1.57	13,543,196	2.36	1,776,209	1.37	231,967,666	1.65
60-64 . . . . .	371,092,653	1.07	376,687,273	1.27	86,924,537	1.69	7,435,051	1.20	842,139,514	1.23
65-69 . . . . .	213,974,632	1.08	657,706,451	1.12	328,979,047	1.21	42,332,961	1.36	1,242,993,091	1.14
70-74 . . . . .	39,400,592	1.20	145,813,547	1.21	541,893,167	1.09	151,024,491	1.26	878,131,797	1.14
75-79 . . . . .	12,187,042	1.17	36,406,888	1.12	95,965,252	1.04	319,708,921	1.11	464,268,103	1.10
80-84 . . . . .	13,032,090	0.50	14,276,055	1.06	17,521,568	0.88	164,723,245	1.04	209,552,958	0.99
85-89 . . . . .	1,195,795	1.16	4,363,295	1.09	4,464,590	1.05	59,864,081	1.03	69,887,761	1.04
90-94 . . . . .	257,615	1.46	1,114,036	1.35	951,705	0.99	14,600,089	1.08	16,923,445	1.10
95 and over . .	67,466	0.19	292,954	0.68	240,131	0.88	2,080,949	1.12	2,681,500	1.01
Total . . . . .	\$793,289,015	1.08	\$1,337,958,908	1.17	\$1,094,693,373	1.12	\$763,775,932	1.10	\$3,989,717,228	1.12

TABLE 14  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 GROUP ANNUITY MORTALITY  
 EXPERIENCE BY YEARS SINCE RETIREMENT

Attained Age	Years Since Retirement									
	0-1		2-5		6-10		11 and Over		Total	
	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected	Exposure	Actual to Expected
<i>Female Lives</i>										
Under 55 . . . .	1,906.57	4.72	2,346.33	3.19	550.01	3.40	164.50	8.13	4,967.41	3.95
55-59 . . . . .	12,761.83	2.74	14,893.16	2.19	2,185.44	3.26	248.00	4.87	30,088.43	2.51
60-64 . . . . .	30,205.34	1.67	41,229.78	1.79	17,402.09	1.81	1,770.41	3.13	90,607.62	1.78
65-69 . . . . .	27,465.44	1.60	86,795.89	1.47	46,102.67	1.59	10,362.61	1.77	170,726.61	1.54
70-74 . . . . .	6,252.81	1.34	25,777.50	1.34	93,071.54	1.25	33,824.64	1.44	158,926.49	1.31
75-79 . . . . .	2,658.66	0.95	7,359.08	1.17	24,077.12	1.09	74,748.65	1.15	108,843.51	1.13
80-84 . . . . .	1,103.47	1.13	3,422.01	0.91	5,952.09	1.12	45,541.23	1.11	56,018.80	1.10
85-89 . . . . .	422.45	1.30	1,223.83	1.04	2,006.75	1.05	18,276.00	1.19	21,929.03	1.17
90-94 . . . . .	129.59	1.20	353.92	0.81	531.58	1.20	5,392.07	1.16	6,407.16	1.14
95 and over . .	25.06	0.62	79.00	0.67	136.00	0.81	908.91	0.97	1,148.97	0.92
Total . . . . .	82,931.22	1.52	183,480.50	1.38	192,015.29	1.26	191,237.02	1.17	649,664.03	1.24
<i>Female Income</i>										
Under 55 . . . .	\$ 4,998,820	1.74	\$ 5,194,729	2.55	\$ 1,391,457	6.76	\$ 200,418	8.70	\$ 11,785,424	2.71
55-59 . . . . .	26,041,322	1.66	21,965,936	2.37	3,631,178	5.45	383,635	2.05	52,022,071	2.24
60-64 . . . . .	66,998,817	1.45	68,642,206	1.92	19,885,849	1.78	2,087,383	3.90	157,614,255	1.73
65-69 . . . . .	50,540,774	1.50	135,130,303	1.45	57,816,021	1.51	8,346,148	1.81	251,833,246	1.49
70-74 . . . . .	10,922,528	1.22	35,955,080	1.24	113,110,367	1.21	31,412,205	1.35	191,400,180	1.24
75-79 . . . . .	3,729,174	0.73	9,097,566	1.18	26,475,386	1.06	67,646,026	1.13	106,948,152	1.10
80-84 . . . . .	1,250,084	1.00	3,511,543	0.99	6,433,430	1.04	35,942,659	1.13	47,137,716	1.10
85-89 . . . . .	423,604	1.51	1,113,882	1.11	2,124,966	0.92	12,693,179	1.22	16,355,631	1.18
90-94 . . . . .	81,896	1.48	369,192	0.73	452,409	0.95	3,235,008	1.22	4,138,505	1.15
95 and over . .	17,617	0.45	89,061	0.81	119,150	0.68	562,055	1.04	787,883	0.93
Total . . . . .	\$165,004,636	1.36	\$281,069,498	1.42	\$231,440,213	1.22	\$162,508,716	1.18	\$840,023,063	1.26

TABLE 15  
 CALENDAR YEARS 1983 AND 1984  
 EXPECTED MORTALITY BASIS—1983 ANNUITY MORTALITY  
 COMPARISON OF MALE AND FEMALE MORTALITY EXPERIENCE

Attained Age	Lives					Income				
	Exposure		Actual to Expected Ratio*		Ratio of Female to Male Mortality	Exposure		Actual to Expected Ratio*		Ratio of Female to Male Mortality
	Male	Female	Male	Female		Male	Female	Male	Female	
Under 55 .....	6,170.26	4,967.41	2.93	1.65	0.56	\$ 31,171,393	\$ 11,785,424	2.04	1.14	0.56
55-59 .....	73,738.34	30,088.43	1.99	1.11	0.56	231,967,666	52,022,071	1.65	0.99	0.60
60-64 .....	218,013.67	90,607.62	1.59	0.83	0.52	842,139,514	157,614,255	1.23	0.80	0.66
65-69 .....	416,958.48	170,726.61	1.29	0.68	0.53	1,242,993,091	251,833,246	1.14	0.66	0.57
70-74 .....	370,939.58	158,926.49	1.23	0.64	0.52	878,131,797	191,400,180	1.14	0.60	0.53
75-79 .....	236,571.41	108,843.51	1.18	0.63	0.53	464,268,103	106,948,152	1.10	0.62	0.56
80-84 .....	125,234.01	56,018.80	1.07	0.65	0.61	209,552,958	47,137,716	0.99	0.65	0.65
85-89 .....	48,611.07	21,929.03	1.09	0.74	0.68	69,887,761	16,355,631	1.04	0.74	0.71
90-94 .....	13,880.58	6,407.16	1.10	0.80	0.73	16,923,445	4,138,505	1.10	0.81	0.74
95 and over....	2,364.39	1,148.97	1.01	0.77	0.76	2,681,500	787,883	1.01	0.79	0.78
Total .....	1,512,481.79	649,664.03	1.20	0.68	0.57	\$3,989,717,228	\$840,023,063	1.12	0.66	0.59

\*Expected deaths for both males and females using male mortality.

TABLE 16  
 GROUP ANNUITY MORTALITY  
 SEX: MALE  
 EXPOSURE BASIS: LIVES  
 EXPECTED MORTALITY: 83GAM

	1983		1984		Change in A/E Ratios
	Exposure	A/E	Exposure	A/E	
Total	694,355	1.21	818,127	1.19	-0.02
By Retirement Class					
Prior to NRD	240,075	1.28	333,601	1.23	-0.05
On/After NRD	278,612	1.14	265,075	1.15	+0.01
No Stated NRD	174,049	1.27	217,831	1.21	-0.06
Past NRD/No Payment	1,621	0.87	1,619	0.85	*
By Benefit Class					
Life	454,109	1.19	502,634	1.20	+0.01
Life and Certain	138,478	1.25	162,009	1.17	-0.08
Modified Cash Refund	101,768	1.22	153,484	1.18	-0.04
By Survivor Class					
Single Life	556,308	1.21	656,576	1.19	-0.02
Joint Life	128,047	1.21	161,551	1.19	-0.02
By Years Since Retirement					
0-1	97,052	1.14	102,826	1.35	+0.21
2-5	197,129	1.32	233,149	1.25	-0.07
6-10	207,049	1.23	235,774	1.23	0.00
11+	193,125	1.17	246,377	1.14	-0.03
By Attained Age					
Under 55	2,805	2.78	3,365	3.06	*
55-59	33,164	2.07	40,575	1.92	-0.15
60-64	98,633	1.61	119,381	1.57	-0.04
65-69	195,075	1.31	221,884	1.28	-0.03
70-74	170,349	1.24	200,591	1.23	-0.01
75-79	107,214	1.20	129,358	1.16	-0.04
80-84	57,936	1.06	67,298	1.07	+0.01
85-89	22,035	1.08	26,576	1.09	+0.01
90-94	6,137	1.08	7,744	1.11	+0.03
95 and over	1,009	1.01	1,356	1.01	0.00
Comparison of Female/Male		0.56		0.57	+0.01

\*Insignificant exposure.

TABLE 17  
 GROUP ANNUITY MORTALITY  
 SEX: MALE  
 EXPOSURE BASIS: INCOME  
 EXPECTED MORTALITY: 83GAM

	1983		1984		Change in A/E Ratios
	Exposure	A/E	Exposure	A/E	
Total	1,787,950,426	1.14	2,201,766,802	1.10	-0.04
By Retirement Class					
Prior to NRD	648,354,189	1.15	924,291,850	1.07	-0.08
On/After NRD	627,325,735	1.10	635,216,642	1.08	-0.02
No Stated NRD	509,055,540	1.19	639,004,469	1.17	-0.02
Past NRD/No Payment	3,214,962	0.97	3,253,841	0.62	*
By Benefit Class					
Life	1,184,586,689	1.13	1,381,439,401	1.11	-0.02
Life and Certain	334,756,236	1.20	418,024,919	1.10	-0.10
Modified Cash Refund	268,607,501	1.07	402,302,482	1.07	0.00
By Survivor Class					
Single Life	1,290,639,720	1.14	1,542,314,649	1.11	-0.03
Joint Life	497,310,706	1.12	659,452,153	1.08	-0.04
By Years Since Retirement					
0-1	368,034,006	1.04	425,255,009	1.13	+0.09
2-5	595,092,357	1.20	742,866,551	1.14	-0.06
6-10	502,962,053	1.13	591,731,320	1.11	-0.02
11+	321,862,010	1.13	441,913,922	1.07	-0.06
By Attained Age					
Under 55	13,911,330	1.81	17,260,063	2.23	+0.42
55-59	103,383,615	1.73	128,584,051	1.58	-0.15
60-64	377,029,696	1.27	465,109,818	1.20	-0.07
65-69	564,602,311	1.19	678,390,780	1.11	-0.08
70-74	390,987,267	1.14	487,144,530	1.15	+0.01
75-79	202,926,702	1.12	261,341,401	1.09	-0.03
80-84	95,872,605	1.01	113,680,353	0.98	-0.03
85-89	30,818,292	1.04	39,069,469	1.03	-0.01
90-94	7,235,503	1.06	9,687,942	1.13	+0.07
95 and over	1,183,105	1.13	1,498,395	0.92	-0.21
Comparison of Female/Male		0.58		0.61	+0.03

\*Insignificant exposure.

TABLE 18  
 GROUP ANNUITY MORTALITY  
 SEX: FEMALE  
 EXPOSURE BASIS: LIVES  
 EXPECTED MORTALITY: 83GAM

	1983		1984		Change in A/E Ratios
	Exposure	A/E	Exposure	A/E	
Total	295,439	1.24	354,225	1.24	0.00
By Retirement Class					
Prior to NRD	93,299	1.41	129,173	1.37	-0.04
On/After NRD	122,409	1.19	124,874	1.21	+0.02
No Stated NRD	78,949	1.20	99,404	1.20	0.00
Past NRD/No Payment:	783	1.23	774	0.96	*
By Benefit Class					
Life	197,661	1.24	230,300	1.25	+0.01
Life and Certain	49,154	1.18	54,960	1.26	+0.08
Modified Cash Refund	48,625	1.28	68,965	1.20	-0.08
By Survivor Class					
Single Life	283,957	1.23	340,220	1.24	+0.01
Joint Life	11,483	1.44	14,005	1.69	-0.25
By Years Since Retirement					
0-1	39,095	1.59	43,836	1.46	-0.13
2-5	84,277	1.42	99,204	1.34	-0.08
6-10	89,863	1.23	102,153	1.29	+0.06
11+	82,205	1.16	109,032	1.19	+0.03
By Attained Age					
Under 55	2,254	2.81	2,713	4.91	*
55-59	13,783	2.58	16,305	2.46	-0.12
60-64	41,666	1.91	48,942	1.68	-0.23
65-69	79,664	1.56	91,063	1.53	-0.06
70-74	72,622	1.29	86,305	1.34	+0.05
75-79	48,482	1.10	60,361	1.15	+0.05
80-84	24,238	1.12	31,781	1.09	-0.03
85-89	9,529	1.15	12,400	1.19	+0.04
90-94	2,725	1.06	3,682	1.20	+0.14
95 and over	477	0.98	672	0.87	-0.11

\*Insignificant exposure.



TABLE 19  
 GROUP ANNUITY MORTALITY  
 SEX: FEMALE  
 EXPOSURE BASIS: INCOME  
 EXPECTED MORTALITY: 83GAM

	1983		1984		Change in A/E Ratios
	Exposure	A/E	Exposure	A/E	
Total	372,712,237	1.24	467,310,826	1.26	+0.02
By Retirement Class					
Prior to NRD	122,399,608	1.35	180,414,322	1.42	+0.07
On/After NRD	134,379,756	1.22	143,838,138	1.21	-0.01
No Stated NRD	114,215,495	1.23	141,831,495	1.23	0.00
Past NRD/No Payment	1,217,378	1.03	1,226,871	0.78	*
By Benefit Class					
Life	242,872,531	1.24	296,150,121	1.26	+0.02
Life and Certain	66,034,674	1.21	77,886,654	1.33	+0.11
Modified Cash Refund	63,805,032	1.32	93,274,051	1.22	-0.10
By Survivor Class					
Single Life	351,496,553	1.24	439,856,395	1.26	+0.02
Joint Life	21,215,684	1.38	27,454,431	1.49	+0.11
By Years Since Retirement					
0-1	75,077,999	1.46	89,926,637	1.29	-0.17
2-5	125,294,558	1.41	155,774,940	1.42	+0.01
6-10	104,495,165	1.17	126,945,048	1.26	+0.09
11+	67,844,515	1.17	94,664,201	1.19	+0.02
By Attained Age					
Under 55	5,317,591	1.75	6,467,833	3.49	*
55-59	23,272,925	2.70	28,749,146	1.86	-0.84
60-64	69,268,554	1.78	88,345,701	1.69	-0.09
65-69	114,067,948	1.38	137,765,298	1.57	+0.19
70-74	85,207,477	1.23	106,192,703	1.25	+0.02
75-79	46,393,088	1.09	60,555,064	1.12	+0.03
80-84	20,044,810	1.13	27,092,906	1.08	-0.05
85-89	7,056,291	1.12	9,299,340	1.23	+0.11
90-94	1,736,995	1.14	2,401,510	1.17	+0.03
95 and over	346,558	1.12	441,325	0.79	-0.33

\*Insignificant exposure.

TABLE 20  
 GROUP ANNUITY MORTALITY  
 SEX: MALE  
 EXPOSURE BASIS: LIVES  
 EXPECTED MORTALITY: 83GAM

	1981-1982		1983-1984		Change in A/E Ratios
	Exposure	A/E	Exposure	A/E	
Total	1,286,169	1.21	1,512,482	1.20	-0.01
By Retirement Class					
Prior to NRD	430,869	1.27	573,675	1.25	-0.02
On/After NRD	439,241	1.15	543,688	1.15	0.00
No Stated NRD	412,655	1.23	391,878	1.23	0.00
Past NRD/No Payment	3,405	0.87	3,240	0.86	*
By Benefit Class					
Life	732,575	1.24	956,743	1.20	-0.04
Life and Certain	290,827	1.14	300,487	1.21	+0.07
Modified Cash Refund	262,767	1.17	255,251	1.20	+0.03
By Survivor Class					
Single Life	1,105,648	1.21	1,222,885	1.20	-0.01
Joint Life	180,521	1.18	289,597	1.20	+0.02
By Years Since Retirement					
0-1	174,950	1.39	199,879	1.24	-0.15
2-5	364,702	1.28	430,277	1.28	0.00
6-10	395,373	1.24	442,823	1.23	-0.01
11+	351,144	1.14	439,502	1.15	+0.01
By Attained Age					
Under 45	369	12.46	477	5.33	*
45-49	909	7.37	864	8.38	*
50-54	4,276	3.15	4,829	2.29	*
55-59	55,231	2.17	73,738	1.99	-0.18
60-64	172,212	1.63	218,014	1.59	-0.04
65-69	377,541	1.32	416,958	1.29	-0.03
70-74	319,697	1.25	370,940	1.23	-0.02
75-79	201,183	1.16	236,571	1.18	+0.02
80-84	101,305	1.09	125,234	1.07	-0.02
85-89	40,994	1.07	48,611	1.09	+0.02
90-94	10,697	1.06	13,881	1.10	+0.04
95 and over	1,755	0.89	2,364	1.01	+0.12
Comparison of Female/Male		0.53		0.57	+0.04

\*Insignificant exposure.

TABLE 21  
 GROUP ANNUITY MORTALITY  
 SEX: MALE  
 EXPOSURE BASIS: INCOME  
 EXPECTED MORTALITY: 83GAM

	1981-1982		1983-1984		Change in A/E Ratios
	Exposure	A/E	Exposure	A/E	
Total	2,892,292,588	1.16	3,989,717,228	1.12	-0.04
By Retirement Class					
Prior to NRD	939,654,899	1.18	1,572,646,039	1.11	-0.07
On/After NRD	923,954,452	1.11	1,262,542,377	1.09	-0.02
No Stated NRD	1,022,452,527	1.21	1,148,060,009	1.18	-0.03
Past NRD/No Payment	6,230,710	0.76	6,468,803	0.79	*
By Benefit Class					
Life	1,716,199,971	1.18	2,566,026,090	1.12	-0.06
Life and Certain	623,544,283	1.12	752,781,155	1.14	+0.02
Modified Cash Refund	552,538,334	1.12	670,909,983	1.07	-0.05
By Survivor Class					
Single Life	2,250,965,138	1.17	2,832,954,369	1.12	-0.05
Joint Life	641,327,450	1.12	1,156,762,859	1.09	-0.03
By Years Since Retirement					
0-1	549,390,106	1.23	793,289,015	1.08	-0.15
2-5	923,357,985	1.17	1,337,958,908	1.17	0.00
6-10	868,250,420	1.18	1,094,693,373	1.12	-0.06
11+	551,294,077	1.12	763,775,932	1.10	-0.02
By Attained Age					
Under 45	1,804,775	2.37	2,151,419	2.31	*
45-49	4,704,434	3.89	5,780,311	5.66	*
50-54	16,491,709	1.97	23,239,663	1.49	*
55-59	138,241,610	1.86	231,967,666	1.65	-0.21
60-64	524,695,291	1.34	842,139,154	1.23	-0.11
65-69	952,914,455	1.19	1,242,993,091	1.14	-0.05
70-74	677,533,667	1.17	878,131,797	1.14	-0.03
75-79	354,451,895	1.12	464,268,013	1.10	-0.02
80-84	153,013,535	1.05	209,552,958	0.99	-0.06
85-89	54,477,591	1.08	69,887,761	1.04	-0.04
90-94	12,141,791	1.07	16,923,445	1.10	+0.03
95 and Over	1,821,835	0.88	2,681,500	1.01	+0.13
Comparison of Female/Male		0.57		0.59	+0.02

\*Insignificant exposure.

TABLE 22  
 GROUP ANNUITY MORTALITY  
 SEX: FEMALE  
 EXPOSURE BASIS: LIVES  
 EXPECTED MORTALITY: 83GAM

	1981-1982		1983-1984		Change in A/E Ratios
	Exposure	A/E	Exposure	A/E	
Total	542,731	1.17	649,664	1.24	+0.07
By Retirement Class					
Prior to NRD	156,885	1.41	222,472	1.39	-0.02
On/After NRD	185,075	1.24	247,283	1.20	-0.04
No Stated NRD	199,105	0.99	178,352	1.20	+0.21
Past NRD/No Payment	1,667	1.40	1,557	1.09	*
By Benefit Class					
Life	313,011	1.25	427,961	1.25	0.00
Life and Certain	104,296	0.99	104,114	1.22	+0.23
Modified Cash Refund	125,424	1.06	117,589	1.23	-0.17
By Survivor Class					
Single Life	530,266	1.16	624,177	1.23	+0.07
Joint Life	12,465	2.08	25,487	1.58	-0.50
By Years Since Retirement					
0-1	65,607	1.58	82,931	1.52	-0.06
2-5	154,740	1.39	183,481	1.38	-0.01
6-10	169,653	1.19	192,015	1.26	+0.07
11+	152,731	1.05	191,237	1.17	+0.12
By Attained Age					
Under 45	358	8.68	734	6.51	*
45-49	494	7.82	747	2.08	*
50-54	2,652	3.10	3,486	4.04	*
55-59	22,879	2.54	30,088	2.51	-0.03
60-64	68,412	1.82	90,608	1.78	-0.04
65-69	149,368	1.49	170,727	1.54	+0.05
70-74	140,873	1.20	158,926	1.31	+0.11
75-79	90,673	1.06	108,844	1.13	+0.07
80-84	44,260	1.02	56,019	1.10	+0.08
85-89	17,380	1.07	21,929	1.17	+0.00
90-94	4,614	1.04	6,407	1.14	+0.10
95 and Over	768	0.86	1,149	0.92	+0.06

\*Insignificant exposure.

TABLE 23  
 GROUP ANNUITY MORTALITY  
 SEX: FEMALE  
 EXPOSURE BASIS: INCOME  
 EXPECTED MORTALITY: 83GAM

	1981-1982		1983-1984		Change in A/E Ratios
	Exposure	A/E	Exposure	A/E	
Total	576,910,072	1.26	840,023,063	1.26	0.00
By Retirement Class					
Prior to NRD	164,068,363	1.56	303,313,930	1.39	-0.17
On/After NRD	186,246,493	1.25	278,217,894	1.21	-0.04
No Stated NRD	224,189,054	1.14	256,046,990	1.23	+0.09
Past NRD/No Payment	2,406,162	1.24	2,444,249	0.90	*
By Benefit Class					
Life	332,244,970	1.28	539,022,652	1.25	-0.03
Life and Certain	111,802,685	1.16	143,921,328	1.28	+0.12
Modified Cash Refund	132,862,417	1.26	157,079,083	1.26	0.00
By Survivor Class					
Single Life	555,448,966	1.23	791,352,948	1.25	+0.02
Joint Life	21,461,106	2.29	48,670,115	1.44	-0.85
By Years Since Retirement					
0-1	103,306,133	1.67	165,004,636	1.36	-0.31
2-5	190,163,285	1.42	281,069,498	1.42	0.00
6-10	173,579,451	1.24	231,440,213	1.22	-0.02
11+	109,861,203	1.11	162,508,716	1.18	+0.07
By Attained Age					
Under 45	802,712	4.89	2,028,871	2.96	*
45-49	963,499	2.65	1,816,010	1.61	*
50-54	4,752,420	4.35	7,940,543	2.85	*
55-59	31,823,594	2.33	52,022,071	2.24	-0.09
60-64	96,107,007	1.88	157,614,255	1.73	-0.15
65-69	181,733,953	1.57	251,833,246	1.49	-0.08
70-74	140,505,400	1.27	191,400,180	1.24	-0.03
75-79	74,322,689	1.05	106,948,152	1.10	+0.05
80-84	31,674,234	1.05	47,137,716	1.10	+0.05
85-89	11,060,681	1.12	16,355,631	1.18	+0.06
90-94	2,649,083	1.13	4,138,505	1.15	+0.02
95 and Over	514,800	0.80	787,883	0.93	+0.13

\*Insignificant exposure.

