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Based on several tables of working life, the article provides some basic perspectives on major labor market developments for men and is intended to provide a background for the study of training and retraining needs in our modern industrial society. Among the developments discussed were: (1) Work life expectancy declined by one-half year between 1950 and 1960, reversing a long-term rise between 1900 and 1950. (2) The decline in work life expectancy resulted from a small increase in life expectancy combined with accelerated trends towards longer schooling and earlier retirement. (3) One of the circumstances most directly associated with the decline in the age of retirement has been the continued liberalization of social security benefits and coverage. (4) Under 1960 conditions a male worker at age 20 could expect to live almost 50 years and to work almost 43 years. (5) If it is assumed that the 1961 age patterns of job changing remain constant during the next 40 or so years, it can be estimated from the 1960 table of working life that a 20-year-old man will make more than six job changes (defined as a change of employer) during his remaining work life. Tables of working life for each age group from 14 through 85 are given for the years 1940, 1950, and 1960. (ET)

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OFFICE OF EDUCATION

THE LENGTH OF WORKING LIFE FOR MALES, 1900–60

During the decade of the 1950's, the length of working life--a key indicator of economic and social development--reversed its long-term rise. Work life expectancy for men declined by one-half year between 1950 and 1960. This decline is associated with a longer training period prior to entering upon a work career and a drop in the age of retirement, both of which are hallmarks of modern industrial society.[1] During past periods the effects on the length of working life of the longer training period and earlier retirement had been offset by large increases in life expectancy, and work life expectancy had continued to increase. Between 1900 and 1950 life expectancy for a male child increased 18 years, from 48 to 66 years. Work life expectancy also rose but only by 10 years--from 32 to 42 years.

As we approach the Biblical threescore and ten years, however, gains in life expectancy become harder to achieve and life expectancy for males rose only 1 year between 1950 and 1960. This small increase in life expectancy combined with accelerated trends towards longer schooling and earlier retirement have resulted in the striking decline in work life expectancy.

One of the circumstances most directly associated with the decline in the age of retirement has been the continued liberalization of social security benefits and coverage. The tendency to retire between the 64th and 65th year of age--the youngest age at which full benefits become available for men--was about three times as high in 1960 as it was in 1950. Between 1950 and 1960, the number of retired aged workers receiving benefits increased from 1.8 million to 8.1 million and the average monthly benefit rose from 44 to 74 dollars. The continued development of private pension systems--some of

[1] Demographic Aspects of Manpower--Sex and Age Patterns of Participation in Economic Activities, United Nations, New York, 1962. See also Journal of Health and Human Behavior, Volume III, No. 2, "Mortality Rates and Participation in Sustenance Activities: An Ecological Analysis, Summer 1962."

which include compulsory retirement provisions, the decline in the relative importance of nonagricultural self-employment, in farm employment, and the difficulties faced by older workers in searching for new jobs all contributed to the early retirement pattern.

The implications of the decline in the length of working life are extremely complex. First, the decision to retire from the labor force is becoming more a matter of choice as social security and other retirement benefits increase in scope and amount. Second, the working abilities and experience of the older retired persons are not utilized. Third, the wishes and needs of older persons for more adequate income as well as the desire for recognition often go unheeded when they cannot find satisfactory employment. Fourth, the trend toword earlier retirement seems to be more or less irreversible as does the growth of the population 65 years of age and over. Thus, the economic, social, and political effects of these considerations will become substantially greater in the years ahead.

Obviously, the issues raised by the trend toward a shorter working life cannot be readily resolved or summarily dismissed. The American work force is expected to increase dramatically in the next several years as record numbers of young people reach labor force ages. Providing useful employment for young and old who wish to work will continue to be one of our major manpower problems. The following article on tables of working life for men provides some basic perspectives on major labor market developments for men. It is intended to provide a background for the study of training and retraining needs in our modern industrial society.

The Length of Working Life for Males, 1960

Under 1960 conditions a male worker at age 20 could expect to live almost 50 years and to work almost 43 years (table A). During his remaining 43 years of working life, many changes in the economic climate and in industrial processes are certain to occur. Viewing in retrospect changes that have occurred in our industrial structure in the past 40 years enables one to appreciate the almost overwhelming task of providing our workers with the kinds of training and retraining that will help them to meet new developments. During the last 40 years, the proportion of our labor force in farming has dropped from about 30 percent to less than 10 percent. Manufacturing employment has risen to a peak and begun to decline as a percent of total employment. Mining, an industry that provided employment for over a million persons, has declined and today employs less than 700,000 workers. The tempo of change may accelerate in the next 40 years. The flexibility that must be provided for our young workers is thus one of our major problems.

The need for a continuous retraining program is also evident from the extent of lifetime job changing. A recent study of job mobility prepared by the Bureau of Labor Statistics showed the number of job changes that were made in 1961 by men in each age group. If it is assumed that the 1961 age patterns of job changing remain constant during the next 40 or so years, it can be estimated from the 1960 table of working life that a 20-year-old man will make more than 6 job changes (defined as a change of employer) during his remaining working life. Even at age 40, he can still be expected to make more than 2 job changes. These, of

OFFICE OF MANPOWER, AUTOMATION AND TRAINING: SEYMOUR L. WOLFBEIN, DIRECTOR

course, are averages, as some men will probably wark at ane job all their lives while athers will make many mare than the average number af jab changes.

The table af warking life for 1960 enables us to set in perspective many ather changes in wark life patterns and provides guidelines in many policy areas. The table shaws, in additian ta the length af warking life, measures af the rate af entry inta the labor force and the rate of separatian from the labor force due ta death and ta retirement.

The tables are based upon a technique for measuring life expectancy which has been used for many years as a means af measuring social and economic progress and as an aid in the estimatian af life insurance premiums. The table af warking life starts with a group af 100,000 male babies, and fallaws them through life until the age when the last person has died. The 1960 tables show at age 14, the age when labor force measurement begins by definitian, that 95,452 af the original group are still alive. Death rates between age 14 and age 40 are rather law and at age 40, 91,330 af the original group are still alive. The next 20 years af a man's life are much more hazardous, however, and anly 72,624 are expected ta be alive to age 60. After age 60 the death rates rise even more rapidly and by age 80, anly 23,308 are still alive. It is nevertheless remarkable that in this country almost a quarter af all male babies can be expected to live until they are 80 years ald.

Patterns of Working Life, 1960

The table af warking life differs fram an ardinary life table in that it reflects nat anly the effects af death on a group af 100,000 males barn alive, but also the effects af labor market activities. For example, at age 14, some 15 percent af the male populatian are warking ar looking for wark. This proportian rises very rapidly after age 14, particularly at those ages when young men are graduating from ar atherwise leaving school. Between ages 16 and 17, for instance, 15 percent af the populatian begin a wark career and between ages 17 and 18 about 18 percent begin a wark career. The rates af labor force entry drop aff very rapidly after the late teens, and after age 30 there are very few men wha begin a work career.

The early years af a wark career are very different from the prime warking years. During 1960, far example, 40 percent af the 18- ta 19-year-old young men wha did any work during the year warked primarily at part-time jabs and anly 30 percent warked mare than 49 weeks.[1] With advancing age, work patterns changed cansiderably and, for example, among men 25-34 years ald, anly 4 percent worked part-time and 75 percent warked mare than 49 weeks during 1960.

Labor farce participatian for men reaches a peak in the early 30's and remains relatively stable at a level af aver 95 percent until age 50, although declining very slightly between ages 35 and 50. After age 50 the incidence af disabling conditians, the difficulties af finding wark among unemplayed warkers wha have lost jabs, and ather circumstances result in more rapid separatians from the labor force. The 1960 patterns af labor force participatian shaw that between ages 50 and 60 the labor force rate declined from 95 ta 85 percent; and between ages 60 and 65, it declined from 85 to 56 percent.

The labor force activity af men in their late 60's is somewhat similar to that af young men beginning a wark career. Almost ane-half of the men 65-69 years ald wha worked at all during the year warked less than 50 weeks.

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[1] Work Experience of the Population in 1960, Special Labor Farce Report No. 19 (U. S. Department of Labor, Bureau of Labor Statistics).

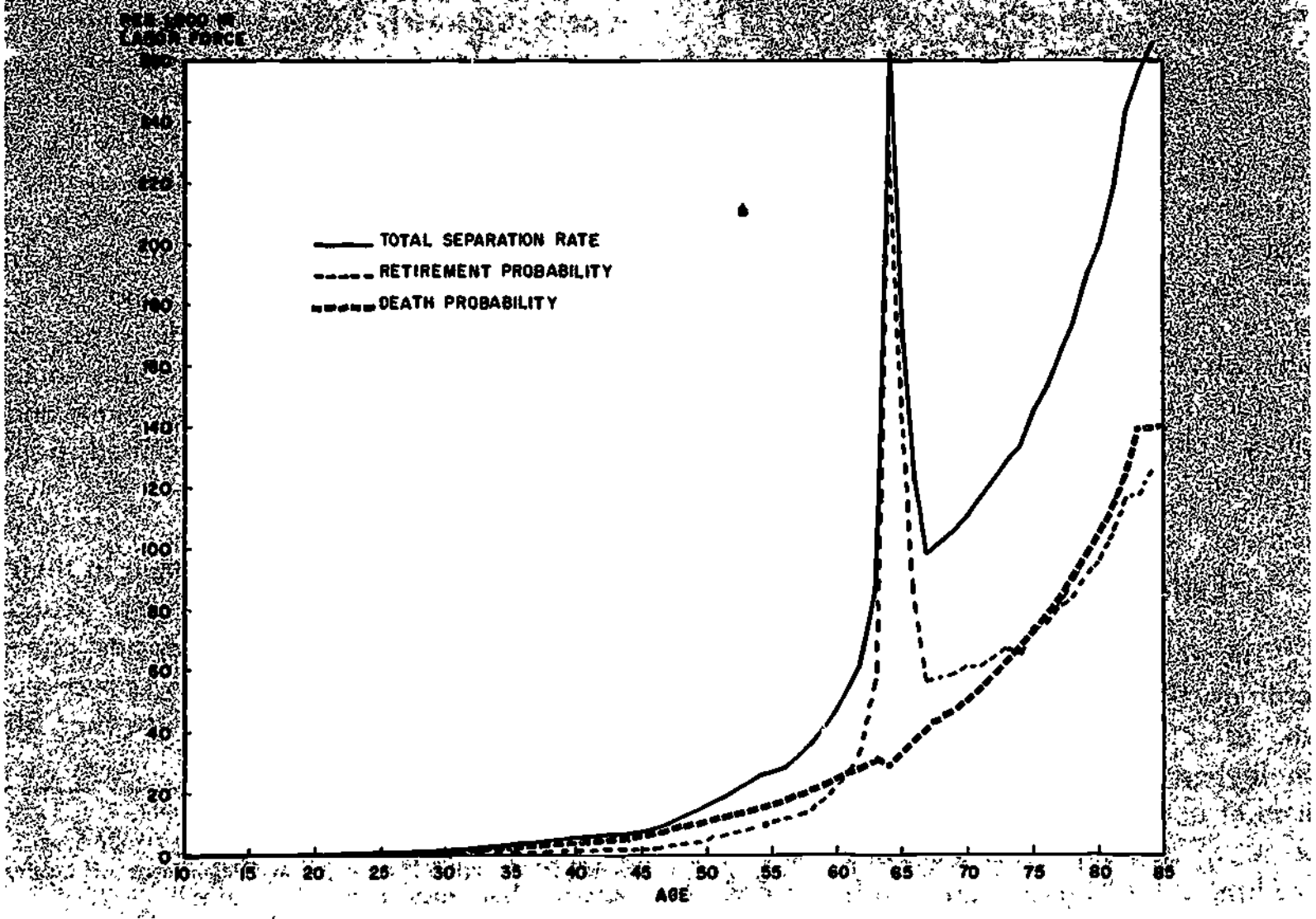
One af the sharpest changes that tokes place in the wark lives af men accurs between the ages af 64 and 65, the age at which social security benefits became available without penalty and the age at which many private pensian plans pravide far compulsory retirement. Almost a fourth af the men in the labor force at age 64 retire by the time they are 65 years af age (chart 1). Retirement continues to be a mare important reason thon death far separatian from the labor force far several years after age 65, although the tendency to retire declines very sharply after age 65. The rise in the retirement rate at age 65 daes not show fully the extent af the reductian in labor farce activity at this age. The praportion af emplayed men wha wark an part-time schedules increases from 14 to 21 percent between ages 64 and 65. Thus, the labor input af those who remain emplayed after age 65 is sharply reduced in part as a result af the availability af social security benefits to thase over 65 whose earnings da not exceed specified amounts.

The Length of Working Life, 1960

As mentianed earlier, men at age 20 can expect to live an additianal 50 years and to wark 43 years, leaving abaut 7 years autside the labor force. These figures are averages.

CHART 1

ANNUAL RATES OF LABOR FORCE SEPARATION DUE TO DEATH AND RETIREMENT, MALES: 1960

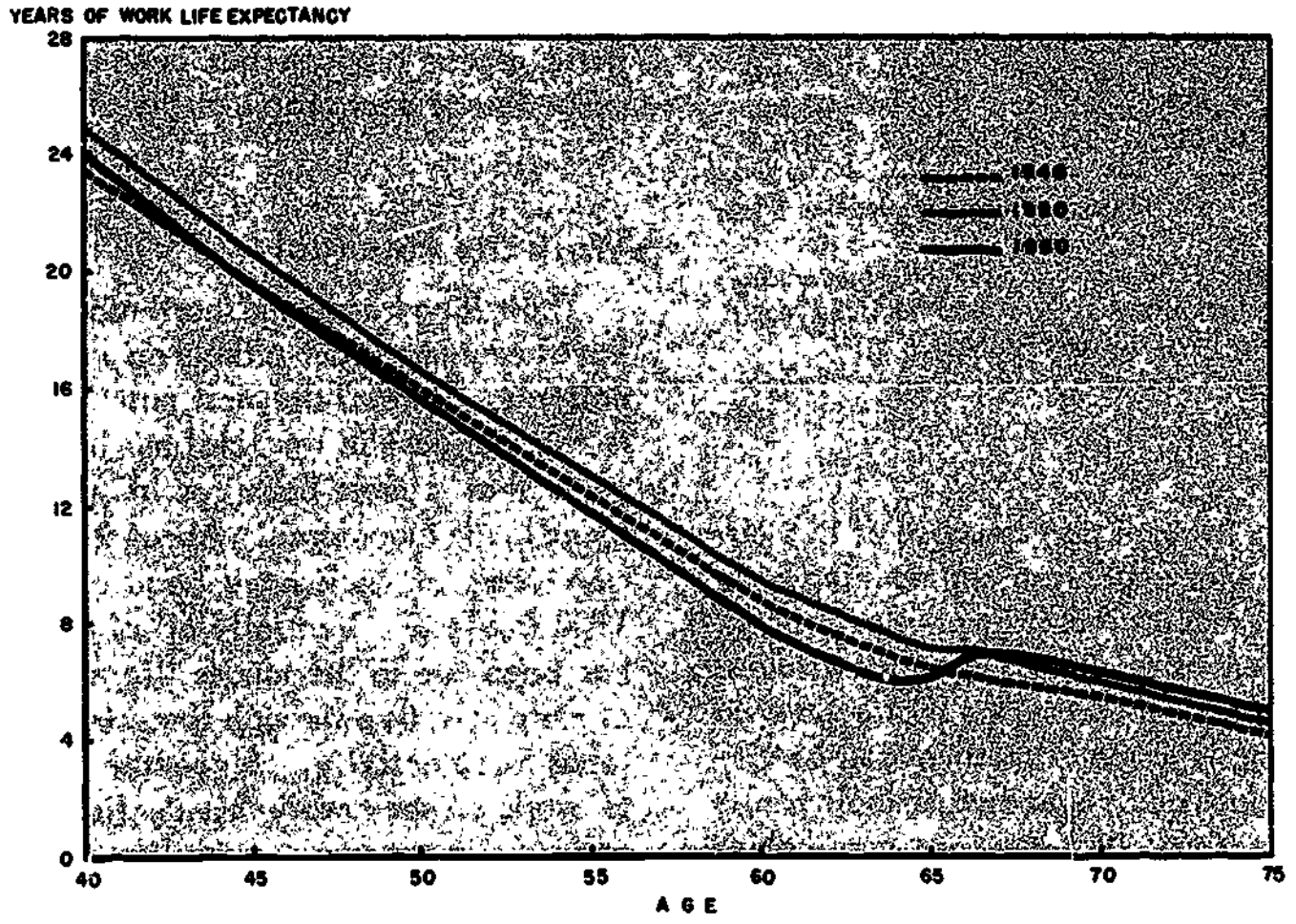


They include the man who leaves the labor force at age 20 because of death; the man who leaves the labor force because of disability but who lives for many years beyond age 20; and they also include the 20-year-old who will continue to work virtually until he dies. Even among persons 85 years old and over, about 8 percent appear to perform some labor force activities.

At age 40 life expectancy has declined to 31 years and work life expectancy to 24 with 7 years still expected in retirement. Even at age 60, men can expect to live an additional 15.8 years, on the average, and to work an additional 8½ years. Because of the very rapid rate of retirement between the 64th and 65th year of age, those remaining in the labor force at age 65 actually have a longer work life expectancy than did those in the labor force at age 64 (chart 2). This, of course, does not mean that a 65-year-old male worker will work longer than a 64-year-old worker, but simply that the work life expectancy is longer for those who continue to work beyond age 65.

CHART 2

WORK LIFE EXPECTANCY FOR MEN 40-75 YEARS OF AGE, 1940, 1950, 1960



Changes in the Length and Patterns of Working Life, 1900–60

A male baby born in 1960 is entering a much more complex world than if he had been born in 1900. The increase in life expectancy at birth from 48 years in 1900 to 67 years by 1960 is one reflection of the differences between the two periods. Most of the improvements in mortality conditions which have resulted in the longer life expectancy have occurred in the younger ages. Under 1960 mortality patterns more than 95 out of 100 male babies will reach age 20, compared with only 76 under 1900 conditions (table 1).

Table 1. Number Living Out of 100,000 Male Babies Born Alive, at Selected Ages: 1900, 1940, 1950, and 1960

Age	1900[1]	1940	1950	1960
15	78,037	92,508	95,366	96,071
20	76,376	91,617	94,695	95,472
40	64,954	85,246	90,207	91,502
60	46,452	65,142	71,246	73,502
80	12,266	18,995	23,237	24,639

[1] White males in 11 original death registration States of 1900.

Note: Data on life expectancy in this paper are from the National Vital Statistics Division of the U.S. Department of Health, Education and Welfare.

Perhaps it is in some part because of this circumstance that education and training have been given much greater emphasis in recent years. Even aside from personal attitudes, this country can feel reassured that education for the young is a good investment since virtually all reach adult ages and use their training in some way. Not only are more babies living to age 20, but the chances of living longer after age 20 have also improved. A 20-year-old man could expect to live another 42 years under 1900 mortality conditions compared with 49½ years in 1960 (table 2).

Table 2. Average Remaining Lifetime for Males, at Selected Ages, 1900, 1940, 1950, and 1960

Age	1900[1]	1940	1950	1960
0	48.2	61.2	65.5	66.6
20	42.2	46.8	48.9	49.6
40	27.7	29.5	30.8	31.2
60	14.4	15.1	15.7	15.8
80	5.1	5.5	5.9	6.0

[1] White males in 11 original death registration States of 1900.

Recent trends, however, indicate that the improvements in life expectancy seem to be leveling off, although perhaps tempararily. Between 1950 and 1960 the number of 100,000 male babies expected to reach their 20th birthday increased from 95,366 to 96,071 and life expectancy for a 20-year-old man increased very slightly from 48.9 to 49.6. There was virtually no change in life expectancy for a 60-year-old man, indicating that little recent progress has been made in the reduction of death rates at the older ages.

Work Life Potential

These long-range and short-range changes have many important effects on working life patterns. One of the most notable changes is the increase in the total number of man-years that a male baby can be expected to spend in the labor force. About 9 additional man-years of work have been added since 1900 (table 3). Virtually all of the change has been due to the longer life expectancy as more men live through the prime years of labor force activity. Since the propensity to work or seek work has declined at both ends of the age range, work life expectancy would have been reduced if life expectancy had remained unchanged.

The meaning of this 9-year increase in work life expectancy becomes increasingly

important ta aur manpower training and retraining programs if the figures are examined in greater detail. Under 1900 canditians about twa-thírds af a man's life wauld be spent in the labor farce. Although this figure had dropped to about 62 percent by 1960, the investment in training aur young workers today yields a much higher return in terms af praductive years af work because af the overall increase in wark life expectancy.

Table 3. Life and Work Life Expectancy at Birth for Men, 1900, 1940, 1950, and 1960

(Number of years)

Year	Life expectancy	Work life expectancy	Outside labor force
1900	48.2[1]	32.1	16.1
1940	61.2	38.3	22.9
1950	65.5	41.9	23.6
1960	66.6	41.4	25.2

[1] White males in 11 original death registration States of 1900.

The Length of Working Life, 1900–60

Wark life expectancy for a 20-year-old man rose from 39 years in 1900 to 43 years by 1960 largely as a result af langer life expectancy (chart 3 and toble 4). Retirement as it is known taday was relatively uncomman in 1900 and the difference be-

CHART 3

AVERAGE NUMBER OF REMAINING YEARS OF LIFE IN LABOR FORCE AND IN RETIREMENT, TOTAL MALES: 1900, 1940, 1950, AND 1960

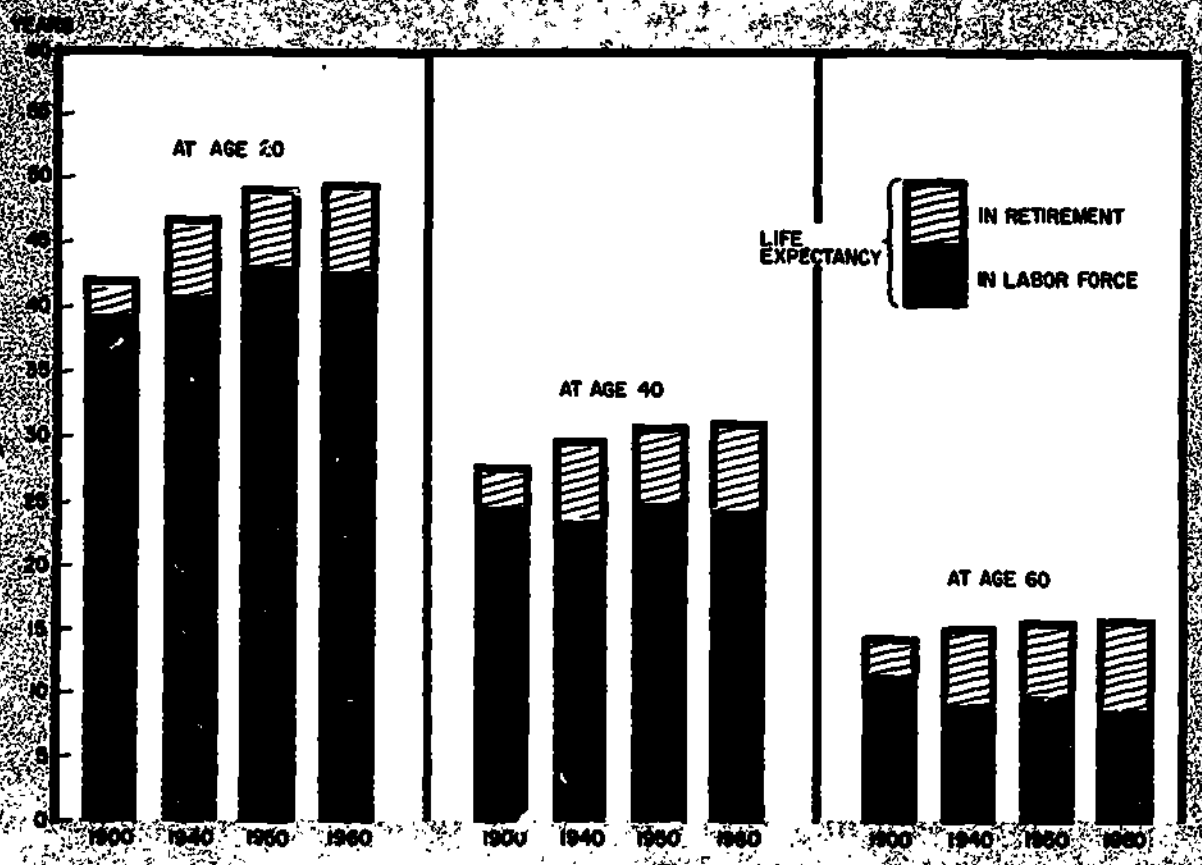


Table 4. Average Number of Remaining Years of Life in Labor Force and in Retirement for Males 1900, 1940, 1950, and 1960

Age and year	Average number of years remaining		
	Life expectancy	Work life expectancy	In retirement
Age 20			
1900.....	42.2[1]	39.4	2.8
1940.....	46.8	41.3	5.5
1950.....	48.9	43.1	5.8
1960.....	49.6	42.6	7.0
Age 60			
1900.....	14.3[1]	11.5	2.8
1940.....	15.1	9.2	5.9
1950.....	15.7	9.8	5.9
1960.....	15.8	8.5	7.3

[1] For white males in 11 original death registration States of 1900.

tween life expectancy and work life expectancy was a scant 3 years. The longer range effects of the decline in opportunities for self-employment in agricultural as well as nonagricultural industries, and the effects of discrimination against older workers in layoff and hiring practices, are evident from 1900 and 1940 working life patterns. Life expectancy rose moderately--by almost a year--for 60-year-old men but work life expectancy declined by over 2 years. Between 1940 and 1950 both life expectancy and work life expectancy increased by about one-half year as improved employment opportunities encouraged many older workers to remain at work. Between 1950 and 1960 a surprisingly rapid increase in retirement rates for older men more than offset a moderate increase in life expectancy, and work life expectancy for 20-year-old men declined one-half year--from 43.1 to 42.6. Moreover, at age 60 the decrease in work life expectancy between 1950 and 1960 was 1.3 years, more than twice the decrease at age 20. Thus, the decrease in work life expectancy resulting from the increased rates of retirement between 1950 and 1960 was exaggerated at the older ages by the lack of improvement in life expectancy.

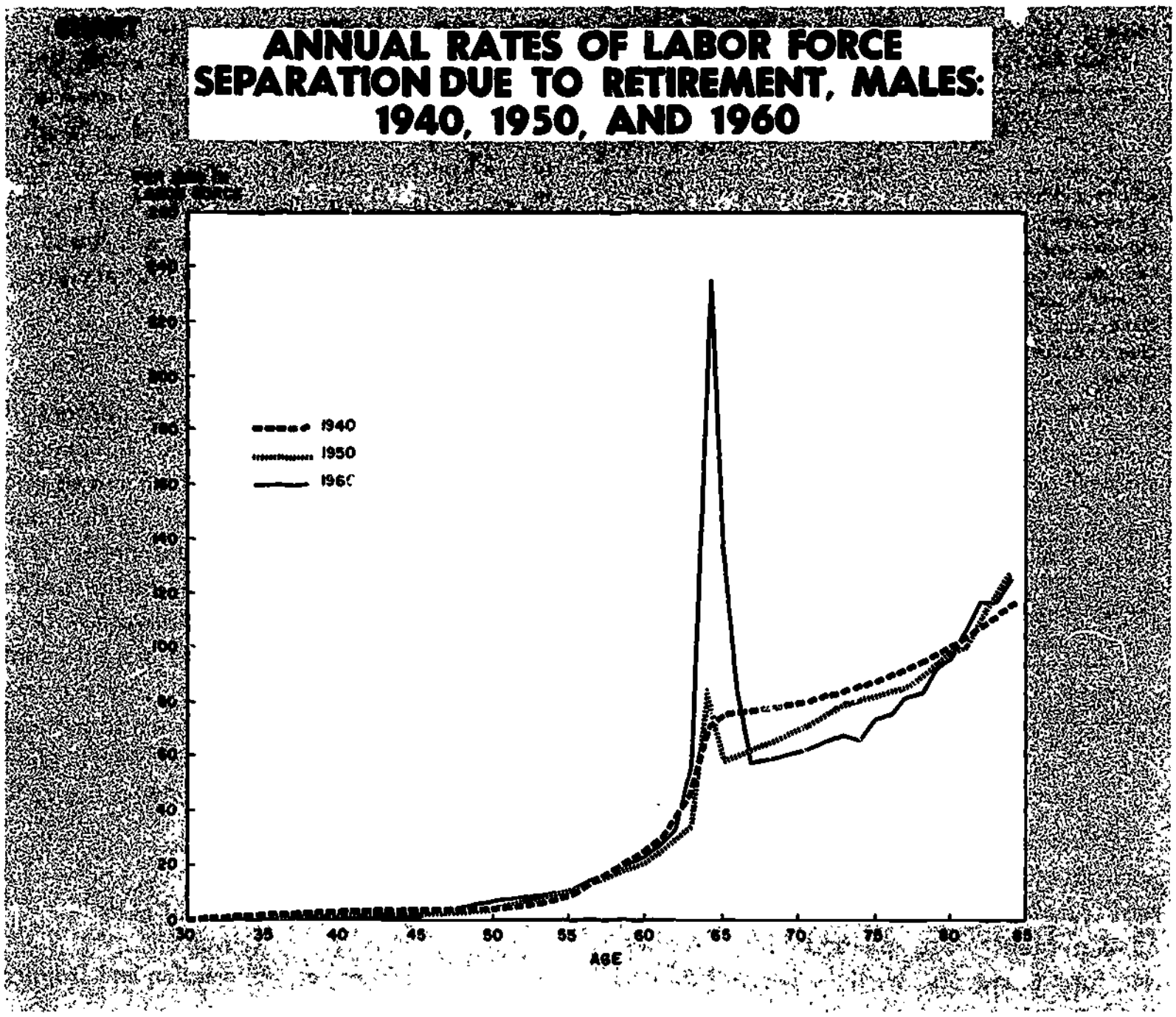
Changes in Labor Force Entry Rates, 1900-60

In 1900 when about 40 percent of our work force was employed on farms, the average young man entered the work force at about age 15. By 1940 the age of entry had risen to age 17 or 18, partially as a result of the depressed economic situation as well as longer schooling and other legal restraints on the employment of young people. The basic pattern of labor force entry was not strikingly different in 1940 and 1950 although the accession rates were somewhat lower in 1950 at ages 20, 21, and 22. This decline is associated with the increases in school enrollment rates for young men which have the effect of delaying entry into the work force. The general pattern of labor force entries in 1960, however, was also similar to that for 1940 and 1950 as labor force entries were concentrated among 16-, 17-, and 18-year-olds. Moderate increases did occur between 1950 and 1960 in entry rates among men 19 and over as labor force entry for these men had apparently been delayed. (See tables B and C.)

Changes in Separation Rates, 1940-60

Perhaps the most dramatic development in the work life patterns of older men is the rise in the retirement rate between ages 64 and 65 which in large part reflects the development of retirement programs under social security and private pension plans. In 1940, 70 out of 1,000 men 64 years of age left the labor force by the time they became a year older; by 1950 this figure had risen to 83, and in 1960 the retirement rate for this group rose to 234 per thousand--a rate almost 3 times as high as in 1950. Even at age 65, the retirement rate in 1960 was over twice as high as in 1950 (chart 4).

This almost astonishing change makes it necessary to give careful attention to the



kinds of jobs at which older men continue to work after reaching the age when so many retire. Data from the 1960 Census of Population on occupations of men over 65 years of age provided a source of information on this matter. Data were available for 162 separate occupation groups.[1] In 14 occupational groups more than 10 percent of the workers were over 65, and the workers in these particular groups tended to fall into the following categories: the self-employed, service workers, and professionals.

The conspicuously oldest occupational group of all was that of tailors and furriers, of whom 27 percent were more than 65 years old (table 5). In second place is found the category of independent shoemakers and repairers, of whom 19.2 percent were older than 65. Both of these occupational groups represent skilled trades which are traditionally practiced by immigrants and to which younger American workers may not be commonly attracted. Barbers represent a similar type of occupation, with 13.4 percent over 65.

[1] United States Census of Population, 1960: Detailed Characteristics, U.S. Summary.

Table 5. Occupations in Which More Than 10 Percent of All Employed Males Were Aged 65 or Over

Occupation	Percent aged 65 or over
Tailors and furriers	26.9
Shoemakers and repairers, except factory	19.2
Elevator operators	15.9
Real estate agents and brokers	15.3
Private household workers	14.7
Farmers and farm managers	14.0
Guards and watchmen	13.7
Barbers	13.4
Officials and inspectors, State and local administration	13.2
Janitors and porters	12.4
Blacksmiths, forgemen, and hammermen	12.2
Locomotive engineers	11.9
Dentists	11.2
Lawyers and judges	10.5
Self-employed managers, wholesale trade	10.0
Self-employed managers, other industries n.e.c.	10.0

Source: United States Census of Population, 1960: Detailed Characteristics, U.S. Summary.

Other occupation groups with high proportions of self-employed older workers were real estate agents and brokers, of whom 15.3 percent were 65 and older; farmers and farm managers, with 14 percent 65 and over; and self-employed nonfarm managers with 10 percent in this upper age group. Dentists, lawyers and judges also were found to include a high proportion of older workers--11 percent and 10 percent, respectively. Pharmacists, clergymen, architects, and physicians and surgeons were all found to have only slightly less than 10 percent older than 65 years.

In the service occupations, 16 percent of elevator operators, 14 percent of the private household workers, 14 percent of guards and watchmen, and 12 percent of janitors and porters had passed the 65-year mark. It is reasonable to assume that many of the workers in these service jobs had not always worked in these jobs since they are not a significant source of employment for men in the prime working ages. Thus it would seem that these occupations provide opportunities for displaced or unemployed workers who desire to remain in the labor market.

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Office of
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Pioneering work in the development of Tables of Working Life as a tool for analysis of the dynamics of the labor force was planned and directed by Seymour L. Wolfbein, now Director, Office of Manpower, Automation and Training. An extensive description of working life patterns and a detailed exposition of techniques used in the preparation of Tables of Working Life was published as Bureau of Labor Statistics Bulletin 1001, Tables of Working Life, Length of Working Life for Men, August 1950. A later article presenting abridged Tables of Working Life for Men in 1950 was published in the Monthly Labor Review for March 1955. The 1960 Table of Working Life for Men is included in the July 1963 Monthly Labor Review along with a brief description of the methods of computation and sources of data used in the preparation of the 1960 table. The 1960 tables shown are preliminary and will be revised slightly when additional detail on death rates and labor force participation rates become available. Little or no significant change in the data is expected to result from these revisions. Copies of the methods of preparing tables of working life are available on request.

Table A. Table of Working Life: Males, 1960

Year of age	Number living of 100,000 born alive			Accessions to the labor force (per 1,000 in population)	Separations from the labor force (per 1,000 in labor force)			Average number of remaining years of:	
	In population	In labor force			Due to all causes	Due to death	Due to retirement	Life	Labor force participation
		Number	Percent of population						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
x	l_x	Lw_x	w_x	1000 A_x	1000 Q^s_x	1000 Q^d_x	1000 Q^r_x	$\mathring{e}_x$	$\mathring{e}w_x$
	(In year of age)			(Between years of age)				(At beginning of year of age)	
14	96,102	14,800	15.4	52.0	.9	.9	-	55.2	48.3
15	96,020	19,780	20.6	119.9	1.1	1.1	-	54.2	47.3
16	95,918	31,269	32.6	143.8	1.2	1.2	-	53.3	46.3
17	95,800	45,026	47.0	177.8	1.4	1.4	-	52.3	45.4
18	95,666	61,992	64.8	116.8	1.5	1.5	-	51.4	44.4
19	95,523	73,075	76.5	63.9	1.5	1.6	-	50.5	43.5
20	95,374	79,065	82.9	33.9	1.7	1.7	-	49.6	42.6
21	95,211	82,167	86.3	26.0	1.8	1.8	-	48.6	41.6
22	95,039	84,490	88.9	18.9	1.8	1.8	-	47.7	40.7
23	94,865	86,137	90.8	14.0	1.8	1.8	-	46.8	39.8
24	94,692	87,306	92.2	11.0	1.8	1.8	-	45.9	38.9
25	94,526	88,193	93.3	9.0	1.8	1.8	-	45.0	37.9
26	94,360	88,887	94.2	8.0	1.7	1.7	-	44.1	37.0
27	94,197	89,487	95.0	7.0	1.7	1.7	-	43.1	36.1
28	94,033	89,990	95.7	5.9	1.7	1.7	-	42.2	35.1
29	93,869	90,396	96.3	5.0	1.8	1.8	-	41.3	34.2
30	93,697	90,699	96.8	2.0	1.9	1.9	-	40.4	33.2
31	93,522	90,716	97.0	1.0	1.9	1.9	-	39.4	32.3
32	93,341	90,634	97.1	1.0	2.0	2.0	-	38.5	31.4
33	93,151	90,543	97.2	1.0	2.2	2.2	-	37.6	30.4
34	92,948	90,438	97.3	-	3.4	2.4	1.0	36.7	29.5
35	92,728	90,132	97.2	-	3.6	2.5	1.1	35.7	28.6
36	92,493	89,811	97.1	-	3.8	2.8	1.0	34.8	27.7
37	92,238	89,471	97.0	-	4.0	3.0	1.0	33.9	26.8
38	91,960	89,109	96.9	-	4.3	3.3	1.0	33.0	25.9
39	91,659	88,726	96.8	-	4.7	3.6	1.1	32.1	25.0
40	91,326	88,312	96.7	-	5.0	4.0	1.0	31.2	24.1
41	90,964	87,871	96.6	-	5.4	4.4	1.0	30.3	23.2
42	90,568	87,398	96.5	-	5.9	4.8	1.1	29.5	22.3
43	90,131	86,886	96.4	-	6.3	5.3	1.0	28.6	21.4
44	89,654	86,337	96.3	-	7.1	6.1	1.0	27.7	20.6
45	89,106	85,720	96.2	-	7.5	6.4	1.1	26.9	19.7
46	88,534	85,081	96.1	-	9.2	7.1	2.1	26.0	18.8
47	87,904	84,300	95.9	-	10.0	7.9	2.1	25.2	18.0
48	87,206	83,456	95.7	-	12.0	8.9	3.1	24.4	17.2
49	86,428	82,452	95.4	-	13.8	9.6	4.2	23.6	16.4
50	85,596	81,316	95.0	-	16.4	11.2	5.2	22.8	15.6
51	84,637	79,982	94.5	-	18.6	12.4	6.2	22.1	14.8
52	83,591	78,492	93.9	-	20.8	13.4	7.4	21.3	14.0
53	82,468	76,860	93.2	-	22.8	14.3	8.5	20.6	13.3
54	81,283	75,105	92.4	-	25.1	15.4	9.7	19.9	12.6
55	80,020	73,218	91.5	-	27.0	16.2	10.8	19.2	11.9
56	78,717	71,239	90.5	-	28.3	17.3	11.0	18.5	11.2
57	77,344	69,223	89.5	-	32.1	18.8	13.3	17.8	10.5
58	75,881	67,003	88.3	-	35.2	20.6	14.6	17.1	9.8
59	74,306	64,646	87.0	-	41.1	22.9	18.2	16.4	9.1
60	72,588	61,990	85.4	-	47.8	24.7	23.1	15.8	8.5
61	70,774	59,026	83.4	-	54.0	26.8	27.2	15.2	7.8
62	68,849	55,837	81.1	-	61.8	29.0	32.8	14.6	7.2
63	66,820	52,387	78.4	-	87.3	30.8	56.5	14.0	6.7
64	64,699	47,813	73.9	-	263.7	29.6	234.1	13.4	6.1
65	62,533	35,206	56.3	-	170.1	34.1	136.0	12.8	6.3
66	60,246	29,219	48.5	-	122.5	37.6	84.9	12.3	7.0
67	57,879	25,640	44.3	-	98.4	41.0	57.4	11.8	7.1
68	55,438	23,118	41.7	-	102.6	44.1	58.5	11.2	7.0
69	52,923	20,746	39.2	-	106.4	46.8	59.6	10.7	6.7
70	50,374	18,538	36.8	-	111.7	50.8	60.9	10.2	6.4
71	47,733	16,468	34.5	-	116.5	54.6	61.9	9.8	6.1
72	45,046	14,550	32.3	-	121.5	58.5	63.0	9.3	5.9
73	42,325	12,782	30.2	-	129.7	62.5	67.2	8.8	5.6
74	39,586	11,124	28.1	-	133.6	68.5	65.1	8.4	5.3
75	36,785	9,638	26.2	-	145.2	71.7	73.5	8.0	5.1
76	34,047	8,239	24.2	-	152.3	77.1	75.2	7.5	4.8
77	31,320	6,984	22.3	-	164.1	82.8	81.3	7.1	4.6
78	28,617	5,838	20.4	-	173.3	89.4	83.9	6.7	4.3
79	25,946	4,826	18.6	-	190.8	99.6	91.2	6.3	4.1
80	23,245	3,905	16.8	-	200.8	105.5	95.3	6.0	3.9
81	20,669	3,121	15.1	-	220.4	115.0	105.4	5.6	3.7
82	18,199	2,433	13.4	-	243.3	125.6	117.7	5.3	3.6
83	15,734	1,841	11.7	-	256.9	139.1	117.8	5.0	3.6
84	13,408	1,368	10.2	-	265.4	140.4	125.0	4.7	3.6
85 years & over	55,525	4,386	7.9	-	-	-	-	4.5	3.6

Table 8. Table of Working Life: Males, 1950

Year of age	Number living of 100,000 born alive			Accessions to the labor force (per 1,000 in population)	Separations from the labor force (per 1,000 in labor force)			Average number of remaining years of:	
	In population	In labor force			Due to all causes	Due to death	Due to retirement	Life	Labor force participation
		Number	Percent of population						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
x	L_x	Lw_x	w_x	1000 A_x	1000 Q^e_x	1000 Q^d_x	1000 Q^r_x	$\mathring{e}_x$	$\mathring{e}w_x$
	(In year of age)			(Between years of age)				(At beginning of year of age)	
14	95,411	19,273	20.2	59.9	1.0	1.0	-	54.5	48.7
15	95,313	24,972	26.2	108.9	1.2	1.2	-	53.6	47.8
16	95,198	35,318	37.1	136.8	1.4	1.4	-	52.6	46.8
17	95,069	48,295	50.8	193.7	1.5	1.5	-	51.7	45.9
18	94,928	66,639	70.2	125.8	1.6	1.6	-	50.8	45.0
19	94,774	78,473	82.8	22.9	1.7	1.7	-	49.8	44.0
20	94,610	80,513	85.1	20.9	1.8	1.8	-	48.9	43.1
21	94,436	82,348	87.2	18.9	1.9	1.9	-	48.0	42.2
22	94,255	83,981	89.1	17.0	2.0	2.0	-	47.1	41.3
23	94,070	85,416	90.8	15.0	2.0	2.0	-	46.2	40.3
24	93,884	86,655	92.3	13.0	2.0	2.0	-	45.3	39.4
25	93,699	87,702	93.6	11.0	2.0	2.0	-	44.4	38.5
26	93,516	88,560	94.7	9.0	2.0	2.0	-	43.4	37.6
27	93,332	89,225	95.6	7.0	2.0	2.0	-	42.5	36.6
28	93,148	89,702	96.3	5.0	2.1	2.1	-	41.6	35.7
29	92,957	89,982	96.8	2.0	2.1	2.1	-	40.7	34.8
30	92,762	89,979	97.0	1.0	2.2	2.2	-	39.8	33.9
31	92,558	89,874	97.1	-	2.3	2.3	-	38.9	32.9
32	92,347	89,669	97.1	-	2.5	2.4	.1	38.0	32.0
33	92,121	89,449	97.1	-	3.6	2.6	1.0	37.0	31.1
34	91,883	89,127	97.0	-	3.8	2.8	1.0	36.1	30.2
35	91,628	88,788	96.9	-	4.0	3.0	1.0	35.2	29.3
36	91,355	88,432	96.8	-	4.3	3.2	1.1	34.3	28.4
37	91,059	88,054	96.7	-	4.6	3.5	1.1	33.4	27.5
38	90,738	87,653	96.6	-	4.9	3.8	1.1	32.6	26.6
39	90,389	87,225	96.5	-	5.2	4.2	1.0	31.7	25.8
40	90,009	86,769	96.4	-	5.7	4.6	1.1	30.8	24.9
41	89,593	86,278	96.3	-	6.1	5.1	1.0	29.9	24.0
42	89,140	85,753	96.2	-	6.6	5.6	1.0	29.1	23.2
43	88,644	85,187	96.1	-	7.1	6.1	1.0	28.2	22.3
44	88,102	84,578	96.0	-	7.7	6.7	1.0	27.4	21.4
45	87,511	83,928	95.9	-	9.5	7.3	2.2	26.6	20.6
46	86,868	83,133	95.7	-	10.2	8.1	2.1	25.7	19.3
47	86,167	82,289	95.5	-	10.9	8.8	2.1	24.9	19.0
48	85,408	81,394	95.3	-	12.8	9.6	3.2	24.1	18.2
49	84,585	80,356	95.0	-	14.7	10.5	4.2	23.4	17.4
50	83,697	79,177	94.6	-	15.6	11.4	4.2	22.6	16.6
51	82,739	77,940	94.2	-	17.7	12.5	5.2	21.8	15.9
52	81,708	76,560	93.7	-	19.9	13.6	6.3	21.1	15.1
53	80,596	75,035	93.1	-	22.2	14.7	7.5	20.4	14.4
54	79,400	73,366	92.4	-	24.7	16.1	8.6	19.6	13.7
55	78,117	71,555	91.6	-	27.2	17.5	9.7	19.0	13.0
56	76,744	69,607	90.7	-	28.8	19.0	9.8	18.3	12.3
57	75,280	67,601	89.7	-	31.5	20.5	11.0	17.6	11.7
58	73,728	65,470	88.6	-	34.4	22.2	12.2	17.0	11.0
59	72,087	63,220	87.4	-	43.9	23.7	20.2	16.3	10.4
60	70,363	60,442	85.9	-	46.2	25.5	20.7	15.7	9.8
61	68,551	57,651	84.1	-	51.9	27.4	24.5	15.1	9.2
62	66,655	54,657	82.0	-	58.1	29.3	28.8	14.5	8.7
63	64,674	51,480	79.6	-	65.9	31.2	34.7	13.9	8.2
64	62,615	48,088	76.8	-	115.9	32.7	83.2	13.3	7.7
65	60,479	42,517	70.3	-	92.7	35.5	57.2	12.7	7.4
66	58,270	38,575	66.2	-	97.3	38.0	59.3	12.2	7.2
67	55,984	34,822	62.2	-	102.3	40.9	61.4	11.6	6.9
68	53,619	31,260	58.3	-	107.6	44.0	63.6	11.1	6.6
69	51,185	27,896	54.5	-	113.5	47.3	66.2	10.6	6.3
70	48,683	24,731	50.8	-	119.7	50.8	68.9	10.1	6.0
71	46,122	21,770	47.2	-	126.7	54.8	71.9	9.6	5.7
72	43,503	19,011	43.7	-	134.4	59.1	75.3	9.2	5.5
73	40,832	16,455	40.3	-	142.8	63.8	79.0	8.7	5.2
74	38,121	14,105	37.0	-	149.6	68.9	80.7	8.2	5.0
75	35,383	11,995	33.9	-	156.6	74.4	82.2	7.8	4.7
76	32,637	10,117	31.0	-	163.7	80.4	83.3	7.4	4.5
77	29,899	8,461	28.3	-	170.8	86.7	84.1	7.0	4.3
78	27,193	7,016	25.8	-	181.4	92.6	88.8	6.6	4.1
79	24,544	5,743	23.4	-	192.6	99.8	92.8	6.3	3.8
80	21,974	4,637	21.1	-	205.3	107.2	98.1	5.9	3.6
81	19,498	3,685	18.9	-	214.4	115.3	99.1	5.6	3.4
82	17,132	2,895	16.9	-	233.9	124.0	109.9	5.3	3.1
83	14,884	2,218	14.9	-	251.6	133.6	118.0	5.0	2.9
84	12,771	1,660	13.0	-	271.1	143.9	127.2	4.7	2.7
85 years & over	51,827	3,554	6.9	-	-	-	-	4.4	2.5

Table C. Table of Working Life: Males, 1940

Year of age	Number living of 100,000 born alive			Accessions to the labor force (per 1,000 in population)	Separations from the labor force (per 1,000 in labor force)			Average number of remaining years of:	
	In population	In labor force			Due to all causes	Due to death	Due to retirement	Life	Labor force participation
		Number	Percent of population						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
x	L_x	Lw_x	w_x	1000 A_x	1000 Q^s_x	1000 Q^d_x	1000 Q^r_x	$\mathring{e}_x$	$\mathring{e}w_x$
	(In year of age)			(Between years of age)				(At beginning of year of age)	
14	92,115	5,610	6.1	60.7	1.6	1.6	-	52.2	46.6
15	91,968	11,192	12.2	108.5	1.7	1.7	-	51.3	45.7
16	91,812	21,152	23.0	158.8	1.9	1.9	-	50.4	44.8
17	91,638	35,692	38.9	181.4	2.1	2.1	-	49.5	43.8
18	91,446	52,240	57.1	147.7	2.3	2.3	-	48.6	42.9
19	91,236	65,626	71.9	86.5	2.5	2.5	-	47.7	42.0
20	91,008	73,354	80.6	49.7	2.6	2.6	-	46.8	41.1
21	90,771	77,686	85.6	35.4	2.7	2.7	-	45.9	40.2
22	90,526	80,690	89.1	24.1	2.8	2.8	-	45.0	39.3
23	90,273	82,646	91.6	15.7	2.9	2.9	-	44.1	38.4
24	90,011	83,824	93.1	9.0	3.0	3.0	-	43.3	37.6
25	89,741	84,383	94.0	6.5	3.1	3.1	-	42.4	36.7
26	89,463	84,705	94.7	4.4	3.2	3.2	-	41.5	35.8
27	89,177	84,828	95.1	2.7	3.3	3.3	-	40.6	34.9
28	88,883	84,789	95.4	1.6	3.4	3.4	-	39.8	34.0
29	88,581	84,643	95.6	.7	3.5	3.5	-	38.9	33.1
30	88,271	84,409	95.6	.3	3.6	3.6	-	38.0	32.2
31	87,953	84,132	95.7	-	3.8	3.8	-	37.2	31.3
32	87,619	83,812	95.7	-	4.3	4.0	.3	36.3	30.5
33	87,269	83,452	95.6	-	4.7	4.2	.5	35.5	29.6
34	86,902	83,060	95.6	-	5.1	4.4	.7	34.6	28.7
35	86,520	82,636	95.5	-	5.6	4.6	1.0	33.7	27.8
36	86,122	82,173	95.4	-	6.2	4.9	1.3	32.9	27.0
37	85,700	81,664	95.3	-	6.8	5.2	1.6	32.0	26.1
38	85,254	81,109	95.1	-	7.5	5.6	1.9	31.2	25.3
39	84,777	80,501	95.0	-	8.1	6.0	2.1	30.4	24.5
40	84,268	79,849	94.8	-	8.6	6.4	2.2	29.5	23.7
41	83,729	79,162	94.5	-	9.1	6.8	2.3	28.7	22.9
42	83,160	78,442	94.3	-	9.7	7.3	2.4	27.9	22.1
43	82,553	77,681	94.1	-	10.5	7.9	2.6	27.1	21.3
44	81,901	76,865	93.9	-	11.3	8.5	2.8	26.3	20.5
45	81,205	75,996	93.6	-	12.2	9.2	3.0	25.5	19.7
46	80,458	75,069	93.3	-	13.2	9.9	3.3	24.8	18.9
47	79,661	74,078	93.0	-	14.2	10.7	3.5	24.0	18.2
48	78,809	73,026	92.7	-	15.3	11.6	3.7	23.2	17.4
49	77,895	71,909	92.3	-	16.5	12.5	4.0	22.5	16.7
50	76,921	70,723	91.9	-	17.7	13.5	4.2	21.8	15.9
51	75,883	69,471	91.6	-	19.1	14.5	4.6	21.0	15.2
52	74,783	68,144	91.1	-	20.7	15.6	5.1	20.3	14.5
53	73,618	66,733	90.7	-	22.6	16.8	5.8	19.6	13.8
54	72,379	65,225	90.1	-	24.6	17.9	6.7	18.9	13.1
55	71,076	63,620	89.5	-	27.0	19.2	7.8	18.3	12.4
56	69,704	61,902	88.8	-	29.8	20.6	9.2	17.6	11.7
57	68,261	60,057	88.0	-	33.4	22.0	11.4	17.0	11.0
58	66,752	58,051	87.0	-	38.3	23.4	14.9	16.3	10.3
59	65,177	55,828	85.7	-	46.8	25.0	21.8	15.7	9.7
60	63,528	53,215	83.8	-	51.6	26.9	24.7	15.1	9.1
61	61,800	50,469	81.7	-	58.6	28.9	29.7	14.5	8.6
62	59,989	47,512	79.2	-	68.2	30.9	37.3	13.9	8.0
63	58,099	44,272	76.2	-	80.6	33.1	47.5	13.3	7.5
64	56,129	40,704	72.5	-	105.1	35.2	69.9	12.7	7.1
65	54,080	36,426	67.4	-	111.8	37.8	74.0	12.2	6.8
66	51,955	32,354	62.3	-	115.9	40.7	75.2	11.6	6.5
67	49,757	28,604	57.5	-	119.8	43.8	76.0	11.1	6.3
68	47,493	25,177	53.0	-	123.9	47.0	76.9	10.6	6.1
69	45,171	22,058	48.8	-	128.8	50.3	78.5	10.1	5.8
70	42,804	19,217	44.9	-	133.5	54.2	79.3	9.6	5.6
71	40,390	16,652	41.2	-	138.8	58.1	80.7	9.1	5.4
72	37,946	14,341	37.8	-	144.7	62.5	82.2	8.6	5.2
73	35,472	12,266	34.6	-	151.3	67.5	83.8	8.2	4.9
74	32,971	10,410	31.6	-	158.7	73.3	85.4	7.7	4.7
75	30,445	8,758	28.8	-	166.9	79.8	87.1	7.3	4.5
76	27,906	7,296	26.1	-	175.9	86.9	89.0	6.9	4.3
77	25,369	6,013	23.7	-	185.7	94.6	91.1	6.5	4.1
78	22,855	4,896	21.4	-	196.3	102.8	93.5	6.1	3.8
79	20,391	3,935	19.3	-	207.7	111.4	96.3	5.8	3.6
80	18,005	3,118	17.3	-	219.9	120.4	99.5	5.5	3.5
81	15,724	2,432	15.5	-	232.9	129.8	103.1	5.2	3.3
82	13,571	1,866	13.7	-	246.7	139.7	107.0	4.9	3.1
83	11,568	1,406	12.2	-	261.3	149.9	111.4	4.6	2.9
84	9,732	1,039	10.7	-	276.7	160.3	116.4	4.3	2.7
85 years & over	36,276	2,304	6.4	-	-	-	-	4.1	2.6

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