

The 1995 labor force: BLS' latest projections

A third look shows that the 1995 labor force will have about 129 million persons, 2 million fewer than projected earlier; the proportion of blacks will increase, but women are still expected to have the fastest growth

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The labor force is projected to reach 129 million persons in 1995, up from 114 million in 1984, according to new Bureau of Labor Statistics projections. The new middle growth projections show the labor force growing at a slower rate over the 1984–95 period than over the 1975–84 period, with the slowest growth occurring during the early 1990's.

Blacks are expected to account for a larger share (20 percent) of the future labor force growth, the consequence of higher birth rates during the past several decades. Women also are expected to account for a larger share of growth (60 percent), the consequence of continued increased participation rates. Because of the aging of the baby-boom generation and the projected continued declines in participation among older persons, nearly three-fourths of the 1995 labor force is projected to be in the prime working ages (25 to 54 years), compared with two-thirds of the 1984 labor force. The prime working age component of the labor force is projected to increase by 21 million, while the overall labor force is projected to increase by only 15 million inasmuch as the numbers of those in both the older and younger labor force are projected to drop.

Participation among women ages 25 to 44 is expected to exceed 80 percent in 1995, up from 70 percent in 1984 and 50 percent in 1970. The continuing increases reflect changes

in marital status, educational attainment, fertility, and rising career aspirations. Participation among persons ages 55 and over is expected to be only 25 percent in 1995, down from 30 percent in 1984 and 39 percent in 1970. These persistent declines reflect increasing percentages of workers who are eligible for pensions and who select early retirement.

This article presents BLS' third look at the 1995 labor force.¹ Each look has resulted in lower 1995 labor force participation. The revisions reflect the more modest increases in female participation over the last several years, compared with the substantial increases during the 1970's. The change in historical trends occurred mostly among 20- to 34-year-old women and reflects the movement of the baby-boom generation through these ages.

The projections are presented by age, sex, and race for 1990 and 1995. They are based on the Bureau of Census middle population projection as well as BLS assumptions concerning future trends in labor force participation.²

The projection for each component of the middle growth scenario is based on past trends of labor force activity extended forward to 1995. These extrapolated trends, modified when necessary, are then applied to Census Bureau population levels for different groups.³ (The methods for projecting the labor force and other components of BLS' economic growth model are described on pages 58–59.) Also discussed briefly are two scenarios (low and high growth) which illustrate the sensitivity of labor force trends to demographic assumptions such as male and female and black and white

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labor force participation rates converging over time. These alternative scenarios provide some insights into the range of uncertainty concerning the future size of the U.S. labor force. Finally, this article compares current projections with projections of the 1995 labor force published by BLS in 1980 and 1983.

Middle growth scenario

The labor force is projected to continue the slowdown in growth that began in the late 1970's. The largest growth, 3.3 percent or 3.2 million additional persons, occurred over the 1977-78 period. Over the 1980-84 period, the labor force grew by only 1.7 million persons per year. Over the 1984-85 period, the average increase is expected to be only 1.4 million persons per year—1.5 million during the 1984-90 period and 1.3 million during 1990-95.⁴

The change in labor force growth between the late 1970's and early 1980's reflected sharply lower population and participation growth rates during the early 1980's. The labor force trends over the last and next decade are dominated by the movement of the baby-boom generation from the ages of labor force entry into the prime working ages. The participation trends are affected by the aging of the baby-boom generation and by an increasing propensity of older workers to retire early.

Labor force trends are projected to continue to vary by age, sex, and race. (See table 1.) During the last 15 years, the prime age female labor force has consistently been the fastest growing group. While the growth for this group is expected to slow, it would still be one of the fastest growing elements in this latest projection. The 1970-80 trends reflected large increases in both population and participation; the 1980-84 trends reflect modest increases. In absolute numbers, the 1975-84 and projected 1984-95 increases in the prime age female labor force are nearly equal.

The youth labor force (ages 16 to 24) also grew rapidly during the 1970's; during the late 1980's and early 1990's, it is projected to decline in absolute numbers. This change reflects the movement of the baby-boom generation into and through this age group. The projected population declines will more than offset projected modest increases in participation for this age group.

The older labor force (those 55 years and over) expanded during the 1970's, began to contract in the 1980's, and is expected to continue declining. The decline reflects a slowing of the growth of the older population that began about 1980. In the 1970's, population growth more than offset participation decreases for this group; in the 1980's and 1990's, this is not expected to hold.

The prime age male labor force has grown steadily; it is

Table 1. Civilian labor force, by sex, age, and race, actual 1975-84 and middle growth projections to 1995

Group	Actual			Projected	
	1975	1980	1984	1990	1995
Total, 16 years and over (thousands)	93,775	106,940	113,544	122,653	129,168
Men	56,299	61,453	63,835	67,146	69,282
16 to 24	12,371	13,606	12,727	11,163	10,540
25 to 54	34,991	38,712	42,302	48,079	51,200
55 and over	8,938	9,135	8,805	7,904	7,542
Women	37,475	45,487	49,704	55,507	59,886
16 to 24	10,250	11,696	11,260	10,089	9,623
25 to 54	21,860	27,888	32,360	39,632	44,519
55 and over	5,365	5,904	6,084	5,786	5,744
White	82,831	93,600	98,492	105,467	110,086
Black	9,263	10,865	12,033	13,602	14,796
Total, 16 years and over (percent)	100.0	100.0	100.0	100.0	100.0
Men	60.0	57.5	56.2	54.7	53.6
16 to 24	13.2	12.7	11.2	9.1	8.2
25 to 54	37.3	36.2	37.3	39.2	39.2
55 and over	9.5	8.5	7.8	6.4	5.8
Women	40.0	42.5	43.8	45.3	46.4
16 to 24	10.9	10.9	9.9	8.2	5.8
25 to 54	23.3	26.1	28.5	32.3	34.5
55 and over	5.7	5.5	5.4	4.7	4.4
White	88.3	87.5	86.7	86.0	85.2
Black	9.9	10.2	10.6	11.1	11.5
	Average annual rate of change				
	1970-75	1975-80	1980-84	1984-90	1990-95
Total, 16 years and over	2.5	2.7	1.5	1.3	1.0
Men	1.9	1.8	1.0	.8	.6
16 to 24	4.9	1.9	-1.7	-2.2	-1.1
25 to 54	1.7	2.0	2.2	2.2	1.3
55 and over	-.8	.4	-.9	-1.8	-.9
Women	3.5	4.0	2.2	1.9	1.5
16 to 24	4.8	2.7	-.9	-1.8	-.9
25 to 54	3.7	5.0	3.8	3.4	2.4
55 and over	.6	1.9	.8	-.8	-.1
White	2.4	2.5	1.3	1.1	.9
Black	—	3.2	2.6	2.1	1.7

NOTE: Dash indicates data not available.

Table 2. Civilian noninstitutional population, by sex, age, and race, actual 1975–84 and projected to 1995

(Numbers in thousands)

Group	Actual			Projected	
	1975	1980	1984	1990	1995
Total, 16 years and over	153,153	167,745	176,383	186,655	193,817
Men	72,291	79,398	83,605	88,568	92,065
16 to 24	17,084	18,282	17,494	15,162	14,254
25 to 54	37,071	41,095	45,039	51,407	55,054
55 and over	18,138	20,021	21,073	21,999	22,757
Women	80,860	88,348	92,778	98,087	101,752
16 to 24	17,929	18,895	27,829	15,653	14,746
25 to 54	39,700	43,603	47,436	53,544	56,994
55 and over	23,231	25,850	27,413	28,890	30,012
White	134,790	146,122	152,347	105,467	164,860
Black	15,751	17,824	19,348	21,204	22,658
Average annual rate of change					
	1970–75	1975–80	1980–84	1984–90	1990–95
Total, 16 years and over	2.2	1.8	1.3	0.9	0.8
Men	2.4	1.9	1.3	1.3	0.8
16 to 24	4.1	1.4	-1.1	-2.4	-1.2
25 to 54	2.0	2.1	2.3	2.2	1.4
55 and over	1.7	2.0	1.3	0.7	0.7
Women	2.1	1.8	1.2	1.0	0.7
16 to 24	2.5	1.1	-1.3	-2.2	-1.2
25 to 54	1.8	1.9	2.1	2.0	1.3
55 and over	2.5	2.2	1.5	0.9	0.8
White	2.0	1.6	1.0	0.8	0.6
Black	—	2.5	2.1	1.5	1.3

NOTE: Dash indicates data not available.

SOURCE: Data are based on Census Bureau "middle" projections of the population.

expected to continue doing so. Like the prime age female labor force, the increases for men over the next decade are projected to be the same size as the last decade's. Prime working age women are expected to account for more than one-third of the labor force in 1995. Because of the differing trends in participation by age, the prime age labor force share of the total labor force has been steadily increasing since 1975 and is expected to reach nearly 75 percent in 1995.

The black labor force has grown faster than the white labor force for the last two decades; this is expected to continue. Even so, blacks would still account for a modest share (about 12 percent) of the 1995 labor force. The black share of the additions to the labor force over the 1984–95 period paints a more dramatic picture; they are projected to account for almost 20 percent of the additions to the labor force.

The projected growth in the labor force reflects two important underlying factors—population and labor force participation. An examination of these factors reveals their contribution to future labor force growth.

Population projections

Past and future trends in the labor force are determined by the composition of population and by the proportion of the population working or seeking work (participation or activity rates) within each of the age, sex, and race groups. The labor force changes as the composition of the population changes because each group differs as to levels and trends of participation.

The population projections reflect trends in births, mor-

ality, and net migration. Of the three, births have the greatest and most direct impact on the labor force, life expectancy the least. Past trends in births have a direct impact on the 1995 labor force; future births are important only as they affect women's and men's labor force participation.

Births have fluctuated in long cycles over the past century, reflecting different combinations of fertility rates and numbers of women in their childbearing years. There was a sharp increase in births with the end of World War II, but the highest level occurred in the 1950's. From 1954 through 1964, annual births exceeded 4 million. Between the late 1950's and the mid-1970's, births dropped, numbering only 3.2 million in 1975. Since then, births have been rising and are expected to peak in 1988 at 3.9 million. After that, the number of births is projected to drop, as the baby-boom generation moves past its peak childbearing years, even as the total fertility rate is assumed to continue increasing slightly. Following is the total fertility rate (births per woman), 1955–95:⁵

	Actual				Projected
	1955	1965	1975	1982	1995
White	3.4	2.8	1.7	1.8	1.9
Black	4.1	3.6	2.2	2.3	2.0

Because of the swings in births during the 1940–80 period, the 25- to 54-year-old population group will be the fastest growing component during the next decade; the 16- to 24-year-old population will decline. (See table 2.) Those born in 1957, the peak year for births, will be 38 years in 1995; those born in 1973, the trough year for births, will be 22 years.

Black birth rates are higher than those of whites. Thus, the black population is growing faster and has a younger median age than the white population. The younger population of blacks would have proportionately more labor force entrants.

Life expectancy changes affect mainly the number and sex composition of the older population. This, however, has only a modest effect on the labor force projections, given that older persons have relatively low levels of labor force participation. Following is the life expectancy at birth (in years) for men and women, 1955-95:⁵

	<i>Actual</i>				<i>Projected</i>
	1955	1965	1975	1982	1995
Men	66.7	66.8	68.8	70.6	72.3
Women	72.8	73.7	76.6	78.1	79.8

Migration will have an increasingly important impact on labor force growth during the next decade. The Census Bureau assumed that the yearly level of net migration during the next decade would be about the same as it has been recently. Following is the net migration (in thousands), 1955-95:⁵

	<i>Actual</i>				<i>Projected</i>
	1955	1965	1975	1982	1995
Total migration	373	449	480	450	387

However, net migration will account for about 25 percent of the additions to the total population, compared with about 20 percent during the 1970's and 13 percent during the 1960's. According to Vernon M. Briggs, Jr., "In the 1970's and early 1980's, the United States legally admitted twice as many immigrants in absolute numbers as did all of the remaining nations of the world combined."⁶ Further, since World War II, more immigrants have women and most are in the prime working ages.⁷

Labor force participation

The second element in labor force projections is BLS' projections of labor force participation rates. Trends in participation are projected for 82 age, sex, and race or ethnic groups. These projections involve two steps. First, past trends in participation are extrapolated to 1995. Second, these extrapolated trends are modified when cross-sectional and cohort analysis show an inconsistency with the time-series analysis. The second step has a major impact on most projected trends.

Patterns of participation differ by age and sex. (See chart 1.) Male rates are higher than women's at all ages. Participation increases rapidly during the teens and early twenties. Participation for women peaks in their late twenties; for men, in their early thirties. While the gap between male and female participation has been diminishing, it is projected to continue at least through 1995. The past declines in male participation are expected to continue through 1995; past

Chart 1. Labor force participation rates of men and women aged 16 and over, 1975-95

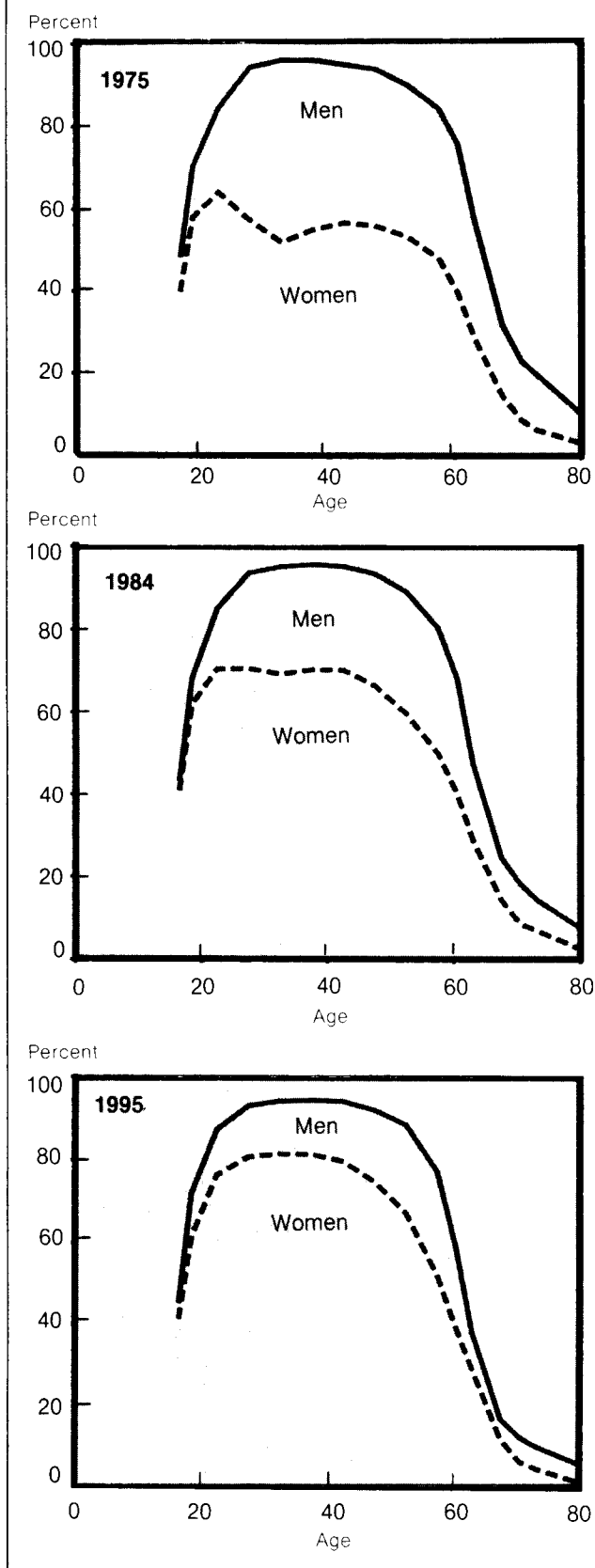


Table 3. Civilian labor force participation, by sex, age, and race, actual 1975-84 and middle growth projection to 1995

Group	Actual			Projected	
	1975	1980	1984	1990	1995
Total, 16 years and over	61.2	63.8	64.4	65.7	66.6
Men	77.9	77.4	76.4	75.8	75.3
16 to 24	72.4	74.4	72.8	73.6	73.9
25 to 54	94.4	94.2	93.9	93.5	93.0
55 and over	49.3	45.6	41.8	35.9	33.1
Women	46.3	51.5	53.6	56.6	58.9
16 to 24	57.2	61.9	62.8	64.5	65.3
25 to 54	55.1	64.0	68.2	74.0	78.1
55 and over	23.1	22.8	22.2	20.0	19.1
White	61.5	64.1	64.6	65.9	66.8
Black	58.8	61.0	62.2	64.1	65.8
Average annual rate of change					
	1970-75	1975-80	1980-84	1984-90	1990-95
Total, 16 years	0.3	0.8	0.2	0.4	0.3
Men	-.5	-.1	-.4	.0	-.1
16 to 24	.8	.5	-.6	.2	.1
25 to 54	-.3	.0	-.1	-.1	-.1
55 and over	-2.4	-1.5	-2.2	-2.5	-1.6
Women	1.3	2.2	1.0	.9	.8
16 to 24	2.2	1.6	-.4	.4	2
25 to 54	1.9	3.0	1.6	1.4	1.1
55 and over	-1.8	-.3	-.7	-1.7	-.9
White	.4	.8	.2	.3	.3
Black	—	.7	.5	.5	.4

NOTE: Dash indicates data not available.

increases in female participation are expected to continue, albeit at slower rates. (See table 3.)

White women. Participation of white women ages 20 to 29 increased rapidly during the early 1970's, but moderately during the late 1970's and early 1980's. (See table 4.) Moderate increases are projected to continue through 1995, as career aspirations and other factors, such as the use of child care facilities, continue to influence participation decisions of women.

The change from rapid to moderate participation reflects, in part, the passage of the baby-boom generation through their twenties. Those born in the late 1940's and early 1950's (the initial phase of the baby-boom generation) experienced a "marriage squeeze," a shortage of men 2 to 3 years older than themselves. Along with other factors, this squeeze increased the average age of women at marriage.⁸ Because participation is much higher for single than for married women, the overall participation of women increased. (The squeeze had little effect on male rates because their participation varies little by marital status.) The marriage squeeze during the 1960's and early 1970's paralleled (and were a likely factor in) the declining fertility rates and increasing educational attainment among 20- to 29-year-old women. Since the mid-1970's, the marriage squeeze has lessened and should remain stable for at least the next decade. The population projections assume that fertility rates will increase slightly over the next decade.

Participation among white women ages 30 to 45 is expected to continue increasing rapidly during the next decade.

These women, and their spouses, will have reached a point in their working lives when earnings no longer increase rapidly.⁹ Thus, to maintain their living standard, they will have to increase their time in the labor force.¹⁰ Some economists argue that because of the size of the baby-boom generation, its lifetime earnings will be depressed. If true, this would further encourage these women to contribute to family income through increased labor force activity.¹¹

Data for the labor force participation rates of white women look very different, depending on whether one analyzes cohorts (generations) or cross-sectional patterns (the rate in a given calendar year for all labor force groups by age). For the entire post-World War II period, successive generations of white women have had greater labor force participation at the age of labor force entry. Furthermore, J. Gregory Robinson and Claudia Goldin report that rates for cohorts rise along with age until the participants reach their fifties.¹² A chart of the participation rate of several cohorts therefore would show an upward curve which levels off in the fifties and then declines; each successive cohort would have a higher curve (except for the 1940-44 and 1945-49 birth cohorts). Charts of the cross-sectional pattern, however, do not show this constant rise. Instead, they show a relative decline, or "valley," because participation rates appear to rise sharply through ages 25 to 29, then drop for ages 30 to 39, then rise again. The "valley" in the cross-sectional chart appears because the participation rate of women age 35 in 1975 was lower than the rate of women age 25 in that year. Note, however, that while the rate for women age 35 in 1975 is lower than the rate for 25-year-olds in 1975, it is not lower than the 1974 rate for the 25 year-old women who were born in 1949. (See chart 1.) It might also be noted that although this "valley" may be of interest, it has been disappearing in the cross-sectional data and this projection has it disappearing completely. Again, this reflects the interaction of two changes, lower growth in participation at the age of entry into the labor force and higher growth in participation in the prime working ages.

Black versus white women. In the 1960's and early 1970's, the participation of prime working age black women exceeded that of white women by as much as 15 percentage points for a few age groups. By 1984, white rates equaled or exceeded those of blacks in most age groups. To make this projection, it was necessary to consider whether participation of white women was likely to equal or exceed that of black women in the prime working age groups. Participation rates for black women have been projected to remain above those of whites at ages 30 to 64, but below those for whites at ages 25 to 29. A further assumption in the projections is that changes in family status would not result in labor force for black women being below those of white women.

The labor force participation rates of a few age groups of women are projected to increase by more than 1 percent

a year. The following tabulation shows the eight groups with the fastest participation growth projected for 1984-95:

Race	Age group	Projected decline per year
Black men	65 and older	-5.4
White men	65 and over	-3.5
Black women	65 and over	-2.9
White women	65 and over	-2.6
Black men	60-64	-1.8
White men	60-64	-1.1
Black men	18-19	-.7
Black men	16-17	-.7

As noted earlier, the activity rates of men are expected to continue their slow descent. The rates of black men have been (and are projected to continue) declining most rapidly. Those of white men are expected to drop at a moderate pace.

Teenagers. Participation among most teenage groups declined over the past decade, but are expected to increase over the next decade. Teenage participation has been more cyclically responsive than other age groups. Teens have also faced considerable competition for jobs in the recent past; now that their numbers are falling, there should be relatively

less competition. However, a greater proportion of the youth population is projected to be minority. To the extent that minorities live where there are fewer jobs, their participation or at least their chances of employment could be lower than one would expect, even if openings for youths exist elsewhere.

The absolute decline in the numbers of younger workers during the next decade may imply a labor shortage for some employers. Some employers of younger workers, particularly teenagers, are responding to this shortage either by hiring a different age mix of employees or by offering higher wages to continue attracting teenage employees.

Older persons. The participation rate of older workers is projected to drop substantially through 1995. Several factors lead to this projection. For those 65 and over, rates have dropped for the entire century. The drop for those 55 to 64 is a post-World War II phenomenon; there is no indication that this drop will end soon. A recent National Bureau of Economic Research study concludes that the largest expected gain from most pension plans is obtained by retiring as soon as a person is eligible.¹³ As more people are covered by pension plans, labor force participation of older workers can be expected to drop.¹⁴ They may start withdrawing funds

Table 4. Civilian labor force and participation rates by sex, age, and race, actual 1975-84 and middle growth projection for 1995

Group	Participation rate			Labor force (thousands)		
	Actual		Projected	Actual		Projected
	1975	1984	1995	1975	1984	1995
Total, 16 years and over	61.2	64.4	66.6	93,775	113,544	129,168
Men	77.9	76.4	75.3	56,299	63,835	69,282
16 to 19	59.1	56.0	57.9	4,805	4,134	3,750
20 to 24	84.5	85.0	87.3	7,565	8,594	6,790
25 to 34	95.3	94.4	93.7	14,192	18,488	18,247
35 to 44	95.6	95.4	94.3	10,398	14,037	19,232
45 to 54	92.1	91.2	90.4	10,401	9,776	13,721
55 to 64	75.6	68.5	62.6	7,023	7,050	6,119
65 and over	21.6	16.3	11.0	1,914	1,755	1,423
Women	46.3	53.6	58.9	37,475	49,704	59,886
16 to 19	49.1	51.8	51.2	4,065	3,809	3,307
20 to 24	64.1	70.4	76.3	6,185	7,451	6,316
25 to 34	54.9	69.8	81.1	8,673	14,234	16,168
35 to 44	55.8	70.1	80.5	6,505	10,896	16,943
45 to 54	54.6	62.9	71.3	6,683	7,230	11,408
55 to 64	40.9	41.7	42.7	4,323	4,911	4,695
65 and over	8.2	7.5	5.5	1,042	1,173	1,049
White	61.5	64.6	66.8	82,831	98,492	110,086
Men	78.7	77.1	75.8	50,324	56,062	59,894
16 to 24	74.4	75.0	77.0	10,931	10,977	9,051
25 to 54	95.1	94.8	94.0	31,225	37,067	44,062
55 and over	49.7	42.2	33.3	8,167	8,016	6,781
Women	45.9	53.3	58.4	32,508	42,431	50,192
16 to 24	59.0	65.5	68.3	8,988	9,706	8,175
25 to 54	54.3	68.0	78.0	18,732	27,378	37,090
55 and over	22.7	21.8	18.7	4,788	5,346	4,927
Black	58.8	62.2	65.8	9,263	12,033	14,796
Men	71.0	70.8	69.5	5,016	6,126	7,215
16 to 24	60.3	62.3	53.4	1,237	1,462	1,146
25 to 24	88.6	88.1	86.2	3,109	4,041	5,528
55 and over	44.7	36.2	29.5	670	623	541
Women	48.9	55.2	62.7	4,247	5,907	7,581
16 to 24	45.5	49.7	50.9	1,078	1,291	1,140
25 to 54	60.9	70.6	82.2	2,651	3,994	5,791
55 and over	26.2	25.4	23.4	517	621	650

from Individual Retirement Accounts (IRA's) at age 59½, which may also contribute to the trend in lower participation. Older people dominate the groups with rapidly declining labor force participation. Following are the eight groups with the most rapidly declining participation rates projected for 1984–95:

<i>Race</i>	<i>Age group</i>	<i>Projected decline per year</i>
Black men	65 and older	- 5.4
White men	65 and over	- 3.5
Black women	65 and over	- 2.9
White women	65 and over	- 2.6
Black men	60–64	- 1.8
White men	60–64	- 1.1
Black men	18–19	- .7
Black men	16–17	- .7

Implications of underlying assumptions

Prime working age workers (those 25 to 54) are projected to account for 74 percent of the 1995 labor force, compared with 66 percent in 1984 and 61 percent in 1970. Women would make up nearly 60 percent of the increase. Because of the drop in the numbers of younger and older workers, prime working age men would also be an increasing proportion of the labor force in the 1990's. This development should have a positive effect on labor productivity. The increase in relative size of the prime age male labor force comes about because of the more rapid drop in participation or population of other age groups, not because of a rise in prime age male participation. The rise in women's share results from the drop in younger and older workers, as well as from a rise in participation of women.

To pursue the age structure of the labor force further, the median age of the labor force peaked around 1960, affected by the rapid entry of the baby-boom generation into the labor force in the 1970's. By 1975, it had dropped sharply; the drop over the next 9 years has been more modest. Under the assumptions of the middle growth projection, the median age of the labor force would increase from 1984 through 1995. The 1995 labor force would be older than the 1975 labor force (have a greater median age). For the population as a whole, women are older than men; however, for the labor force, men have a greater median age. The difference in the median age of women and men in the labor force was 1½ years in 1955. This difference narrowed over the 1960's, but remains and is projected to continue. The white labor force was less than a year older than the black labor force in the mid-1970's, a difference that is projected to continue. Following is the median age of the labor force by sex and race, 1955–95:

	1955	1965	1975	1984	1995
Total	40.0	40.2	35.8	35.2	37.6
Men	40.5	40.3	36.5	35.4	37.9
Women	38.7	40.1	34.8	34.5	37.3
White	40.3	40.5	34.8	35.3	37.8
Black	—	—	34.1	33.5	36.3

By 1995, more of the total U.S. population, including children, is projected to be in the labor force than not in the labor force, as the economic dependency ratio shows. (The economic dependency ratio is defined as the number of persons not in the labor force, including those under age 16, per hundred persons in the labor force.) The numerator of the economic dependency ratio can be decomposed by age: those under 16, those 16 to 64, and those 65 and over. The following tabulation shows the economic dependency ratio, 1955–95:

	1955	1965	1975	1984	1995
Total	142.8	151.8	125.0	104.5	98.4
Under 16 years	74.9	81.3	61.1	47.9	46.1
16–64 years	51.4	50.6	43.4	34.9	28.2
65 years and over	16.4	19.9	20.5	21.7	24.0

The drop in the economic dependency ratio over the 1955–95 period in the 16–64 age group (from 51 persons per hundred workers to 28 per hundred) reflects the steady entry of women into the work force. The ratio for this age group has dropped by a third over the last 30 years. The ratio attributed to youth has also dropped by more than a third. In 1955, the youth ratio was high because of the baby-boom births; then it dropped with the entry of the baby-boom generation into the work force.

The dependency ratio attributed to older people has grown over the period, reflecting both the aging of the population and lower participation of older workers. By 1995, this group would account for a quarter of the ratio, up from a tenth in 1955. Although older people account for the smallest segment of the "dependent" population, their costs per person are three times that of the other groups.¹⁵ Thus, a cost-weighted dependency ratio for older people would rise, and older persons would account for a larger portion of the overall ratio.

Women. The proportion of the labor force that is female increased from 40 percent in 1975 and 44 percent in 1984 and is projected to reach 46 percent by 1995. Although women are more than half the population 16 and older, they will not account for half of the labor force as long as their participation rates remain 10 percentage points lower than men of the same age.

Women do account for slightly more than half of the increment to the population 16 and older; during the early 1970's, when the baby-boom group was entering the labor force, each sex contributed to the labor force growth in proportion to their population growth. During the late 1970's as the entry of the baby-boom generation ended, women provided a greater share of the increment to the labor force. During the early 1980's, their share of labor force growth was more than 10 percentage points more than their addition to the population. In the late 1980's, as their participation growth slows, the percent of the increment should fall slightly, and continue falling in the early 1990's. The following

tabulation shows the percent of population and labor force growth attributed to women, 1970-95:

	1970-75	1975-80	1980-84	1984-90	1990-95
Labor force ...	53.9	60.9	63.9	63.7	61.3
Population ...	53.2	52.5	51.7	52.1	51.8
Difference5	8.4	12.2	11.5	9.5

Blacks. Blacks should account for a growing proportion of both the population and of the labor force between now and 1995. Their proportion of the population is expected to increase more than their proportion of the labor force. The population growth reflects higher fertility and, thus a younger population. This in itself partially explains why the proportion of blacks is higher in the population than in the labor force—more blacks than whites are too young to work. In addition, younger blacks of working age have substantially lower participation than other population groups. The combination of these two factors explains blacks' modest share of the labor force increment in the mid-1970's, a time when many youth were entering the labor force. While the proportion of growth attributed to women levels out after 1990, blacks should account for a growing proportion of the labor force after 1990, indicating their great importance in labor force developments as the century ends. The following tabulation shows the percent of population and labor force growth attributed to blacks, 1972-95:

	1972-75	1975-80	1980-84	1984-90	1990-95
Labor force ...	8.2	12.2	17.7	17.2	18.3
Population ...	13.6	14.2	17.8	18.6	20.1
Difference ...	- 5.4	- 2.0	- .1	- 1.4	- 1.8

Alternative scenarios

The projections reflect underlying assumptions; the results are significantly altered by changes in those assumptions. Different assumptions yield a 1995 labor force ranging from 124.4 million participants (low scenario) to 134.1 million (high scenario).¹⁶ (See table 5.)

In the middle scenario, participation rates of women ages 20 to 29 are assumed to continue their 1977-84 trends over the 1984-95 period. During the late 1960's and 1970's, the participation for 20- to 29-year-old women steadily accelerated. Growth slowed in the mid-1970's, in part, because

of the lessening of the marriage squeeze which also could cause the participation rates for these women to slow even more over the next decade. If this occurs, the 1995 labor force would be sharply lower than the middle scenario portrays (low scenario). Should the 1970's phenomena of accelerating growth recur during the next decade, the 1995 labor force would be sharply higher than the middle scenario (high scenario).

The high scenario presents a labor force with male and female rates nearly converging. This might be attained with a greater proportion of families with two wage earners and either a greater demand for child care facilities or the presence of fewer children than are implicit in the middle scenario. Or it might be achieved with a greater proportion of single heads of household and higher divorce rates, compared with the middle scenario. Either way, the high scenario implies substantially greater changes in the traditional family. Further, it assumes the activity rates of black men will increase, converging with those of whites, a sharp change in trends from the past.

The low scenario reflects both a sharp deceleration in the trends of the 1970's and a modest deceleration of the 1980-84 trend. This scenario represents a return to the growth pattern of the 1950's and early 1960's. While not a reversal of the growth in women's participation rates and related shifts in marital status, this scenario implies only modest growth.

A second assumption for the middle scenario concerns the relative trends in black-white participation. Over the last two decades, the rates for black and white women have been converging (toward the higher black rates), while the rates for black and white men have been diverging. The middle (and low) scenario assumes these respective trends will continue. The high scenario assumes that the rates for black men converges to the higher white male rates.

Previous BLS projections

The 1995 labor force projections described above are lower than those published in 1983, but higher than those published in 1980. (See table 6.)

The current projections are lower than the 1983 projections because they reflect the slowdown in the rate of growth

Table 5. Three scenarios of the civilian labor force and participation rates, by sex, age, and race, projections for 1995

Group	Participation rate			Labor force (thousands)		
	High	Middle	Low	High	Middle	Low
Total	69.2	66.6	64.2	134,085	129,168	124,411
Men	77.8	75.3	71.9	71,621	69,282	66,219
16 to 24 years	77.5	73.9	66.7	11,050	10,540	9,514
25 to 54 years	94.4	93.0	90.7	51,959	51,200	49,955
55 years and over	37.8	33.1	29.7	8,612	7,542	6,750
Women	61.4	58.9	57.2	62,464	59,886	58,192
16 to 24 years	68.6	65.3	64.4	10,112	9,623	9,495
25 to 54 years	81.2	78.1	75.7	46,292	44,519	43,132
55 years and over	20.2	19.1	18.5	6,060	5,744	5,565
White	69.0	66.8	64.5	113,761	110,086	106,327
Black	70.3	65.8	60.4	15,932	14,796	13,686

Table 6. Comparison of current and previous labor force middle growth projections for 1995

(Numbers in thousands)

Item	Projections made in			Difference between 1985 and previous projections			
	1985	1983	1980	Number		Percent	
				1983	1980	1983	1980
Labor force:							
Total	129,168	131,387	127,542	-2,219	1,626	-1.7	1.3
Men	69,282	69,970	67,611	-688	1,671	-1.0	2.5
Women	59,886	61,417	59,931	-1,531	-45	-2.5	-.1
Participation rate:							
Total	66.6	67.8	68.6	-1.2	-2.0	-1.8	-2.9
Men	75.3	76.1	76.8	-.8	-1.5	-1.1	-2.0
Women	58.6	60.3	61.2	-1.7	-2.6	-2.8	-4.2
Population:							
Total	193,817	193,833	186,034	-16	7,783	(¹)	4.2
Men	92,065	91,947	88,031	118	4,034	.1	4.6
Women	101,752	101,886	98,003	-134	3,749	-.1	3.8

¹Between -.1 and 0.0.

in women's participation which started in 1978 and continued through 1984. Much of the decrease in men's labor force participation occurred among older men whose participation is projected to continue to decrease. There were modest changes in the projected size of the population, reflecting the revision in mortality at the older ages. How-

ever, the revised population projections accounted for less than 1 percent of the overall change.

One reason the current and 1980 projections differ is because of revisions in the population projections, the result of the introduction of the population controls from the 1980 Census. Also, the difference between the current and the 1980 projected labor force reflects changes in labor force activity.

How accurate are these new projections? This question obviously cannot be answered until after 1995, but the accuracy of past BLS projections has been reviewed. Between 1965 and 1976, BLS published four projections of the 1980 labor force. Each underestimated the 1980 labor force by 1.7 to 2.9 percent. Most of the discrepancy was attributed to an underestimation of participation rates of women.¹⁷

THE LABOR FORCE WILL CONTINUE TO GROW, according to the middle growth scenario, although more slowly than in the recent past. Women's labor force participation would continue to grow slowly. Blacks would be a greater proportion of the labor force. By 1995, about three-quarters of the labor force would be in the 25- to 54-year-old age group, reflecting the aging of the baby-boom generation and the drop in participation by older workers. □

—FOOTNOTES—

¹These projections replace those described by Howard N Fullerton, Jr. and John Tschetter in "The 1995 labor force: a second look," *Monthly Labor Review*, November 1983, pp. 3-10; and Howard N Fullerton, Jr., "The 1995 labor force: a first look," *Monthly Labor Review*, December 1980, pp. 11-21.

²*Projections of the Population of the United States: 1983 to 2080, Current Population Reports, Series P-25, No. 952* (Bureau of the Census, 1984).

³For a short description of the BLS demographic labor force projection methodology, see Chapter 18 in *BLS Handbook of Methods*, Bulletin 2134-1 (Bureau of Labor Statistics, 1982); for a complete description, see Chapter 2 in *BLS Economic Growth Model System Used for Projections to 1990*, Bulletin 2112 (Bureau of Labor Statistics, 1982).

⁴The labor force (civilian labor force and resident Armed Forces) is projected to be 124,450,000 in 1990 and 130,965,000 in 1995. Of these, 55,698,000 in 1990 will be women and 60,462,000 in 1995 will be women. Because there is no age or race detail in the resident Armed Forces measure of the labor force, this article is based on the civilian labor force.

⁵Data are from the Census Bureau.

⁶Vernon M. Briggs, Jr., *Immigration Policy and the American Labor Force* (Baltimore, MD, The Johns Hopkins University Press, 1984), p. 1.

⁷Marion F. Houstoun, "Aliens in irregular status in the United States: a review of their numbers, characteristics, and role in the U.S. labor market," *International Migration*, 1983, pp. 372-414.

⁸Robert Schoen, "Measuring the Tightness of a Marriage Squeeze," *Demography*, February 1983, pp. 61-78. According to Schoen, "The marriage squeeze is shown to be capable of producing significant changes in both the level and distribution of marriage" (p. 61). Also see Kingsley Davis, "Wives and work: Consequences of the sex role revolution," *Population and Development Review*, September 1984, pp. 397-417; and Kingsley Davis and Peitronella van den Oever, "Demographic foundations of new sex roles," *Population and Development Review*, September 1982, pp. 495-511; Willard L. Rodgers and Arland Thornton, "Changing Patterns of First Marriage in the United States," *Demography*, May 1985, pp. 265-79; and Thomas J. Espenshade, "Marriage trends in America: Estimates, implications, and causes," *Population and Development Review*, June 1985, pp. 193-245.

⁹Valarie Kincade Oppenheimer, "The life-cycle squeeze: The interaction of men's occupational and family cycles," *Demography*, May 1974, pp. 227-45.

¹⁰Valarie Kincade Oppenheimer, "The Easterlin hypothesis: another aspect of the echo," *Population and Development Review*, September-December 1976, pp. 433-57.

¹¹Richard Easterlin, "Relative economic status and the American fertility swing," in Eleanor Sheldon, ed., *Family Economic Behavior* (Philadelphia, PA, Lippincott, 1973); Richard Easterlin, *Birth and Fortune: The Impact of Numbers on Personal Welfare* (New York, Basic Books, 1980). Also, see Finis Welch, "Effects of Cohort Size on Earnings," *Journal of Political Economy*, October 1979, pp. 565-98; and Richard B. Freeman, "The Effect of Demographic Factors on Age-Earnings Profiles," *The Journal of Human Resources*, summer 1979, pp. 289-318.

¹²See J. Gregory Robinson, "Labor Force Participation Rates of Cohorts of Women in the United States: 1890-1979," presented at the 1980 Annual Meeting of the Population Association of America; and Claudia Goldin, "The Changing Economic Role of Women: A Quantitative Approach," *Journal of Interdisciplinary History*, spring 1983, pp. 707-33.

¹³David A. Wise, "Labor Aspects of Pension Plans," *NBER Reporter*, Winter 1984-85, pp. 23-25.

¹⁴Robert L. Clark, "Aging and labor force participation," in Pauline K. Robinson, Judy Livingston, and James E. Birren, eds., *Aging and Technological Advances* (New York, Plenum, 1985), pp. 39-54.

¹⁵Robert Clark and Joseph Spengler, "Dependency ratios: Their use in economic analysis," in Julian Simon and Julie Devanzo, eds., *Research in Population Economics, Vol. 2* (Greenwich, CT, JAI Press, 1980), pp. 63-67.

¹⁶BLS' alternative scenarios of gross national product, industry output, and employment trends and occupational requirements use the macro labor force model's projections of total labor force. This was done because the macro labor force is part of the macroeconomic model of the economic projections.

¹⁷See Howard N Fullerton, Jr., "How accurate were the 1980 labor force projections," *Monthly Labor Review*, July 1982, pp. 15-21.