

*Employment outlook: 2004–14*

## Labor force projections to 2014: retiring boomers

*The baby boomers' exit from the prime-aged workforce and their movement into older age groups will lower the overall labor force participation rate, leading to a slowdown in the growth of the labor force*

Mitra Toossi

The U.S. labor force—the number of persons working or looking for work—is projected to reach 162.1 million in 2014, an increase of nearly 15 million from the size of the labor force in 2004.<sup>1</sup> This increase represents an annual growth rate of 1.0 percent, which is 0.2 percent lower than the annual growth rate of the previous decade, 1994–2004. The growth of the labor force is the result of simultaneous changes in the civilian noninstitutional population and the labor force participation rates of the various sex, age, race, and Hispanic origin groups.<sup>2</sup> During the 2004–14 period, the growth of the labor force will be due entirely to population growth, as the overall labor force participation rate is expected to decrease slightly from the 2004 level.

The labor force in the next 10 years will be affected by the aging of the baby-boom cohort, those born between 1946 and 1964. This age group will be between 50 and 68 years old in 2014 and is expected to show significant growth over the 2004–14 period, as it did from 2002 to 2012. The labor force will continue to age, with the annual growth rate of the 55-and-older group projected to be 4.1 percent, 4 times the rate of growth of the overall labor force. By contrast, the annual growth rate of the 25-to-54-year age group will be 0.3 percent, and that of the young age group consisting of 16-to-24-year-olds will be essentially flat.

The women's labor force is expected to grow at an annual rate of 1.0 percent during the 2004–14 projection period. (See table 1.) This rate is

slower than the group's growth rate in the previous decade. Still, during the 2004–14 time frame, the women's labor force will increase at a slightly faster rate than that of men, whose labor force is projected to grow at an annual rate of 0.9 percent. Men's share of the labor force is expected to decrease from 53.6 percent to 53.2 percent in 2014. By contrast, the women's share is projected to increase from 46.4 percent in 2004 to 46.8 percent in 2014.

Every 2 years, the Bureau of Labor Statistics projects labor force levels for the next 10 years. The projections in this article are for the 2004–14 period and are based on the assumption that a long-term, full-employment economy in which labor markets clear will prevail.<sup>3</sup> In order to carry out these projections, the labor force participation rates are analyzed and projected for 136 different groups, including the 2 sexes, 17 age groups, and 4 race and ethnicity categories. The basis of these estimations are labor force participation trends, as well as the behavior of each of the various detailed categories in the past, according to data provided by the BLS Current Population Survey (CPS) program. By multiplying the projected labor force participation rates of each group by the Census Bureau's corresponding projected population, the labor supply for each category and for the economy as a whole are projected.

Population growth and changes in participation rates are the chief determinants of the growth of the labor force. The Bureau's main role in labor force projections is to estimate future

Mitra Toossi is an economist in the Office of Occupational Statistics and Employment Projections, Bureau of Labor Statistics. E-mail: Toossi.Mitra@bls.gov

**Table 1. Civilian labor force by sex, age, race, and Hispanic origin, 1984, 1994, 2004, and projected 2014**

[Numbers in thousands]

Group	Level				Change			Percent change			Percent distribution				Annual growth rate (percent)		
	1984	1994	2004	2014	1984-94	1994-2004	2004-14	1984-94	1994-2004	2004-14	1984	1994	2004	2014	1984-94	1994-2004	2004-14
Total, 16 years and older .....	113,544	131,056	147,401	162,100	17,512	16,345	14,699	15.4	12.5	10.0	100.0	100.0	100.0	100.0	1.4	1.2	1.0
16 to 24 years .....	23,989	21,612	22,268	22,158	-2,377	656	-110	-9.9	3.0	-5	21.1	16.5	15.1	13.7	-1.0	.3	.0
25 to 54 years .....	74,661	93,898	102,122	105,627	19,237	8,224	3,505	25.8	8.8	3.4	65.8	71.6	69.3	65.2	2.3	.8	.3
55 years and older .....	14,894	15,546	23,011	34,315	652	7,465	11,304	4.4	48.0	49.1	13.1	11.9	15.6	21.2	.4	4.0	4.1
Men .....	63,835	70,817	78,980	86,194	6,982	8,163	7,214	10.9	11.5	9.1	56.2	54.0	53.6	53.2	1.0	1.1	.9
Women .....	49,709	60,239	68,421	75,906	10,530	8,182	7,485	21.2	13.6	10.9	43.8	46.0	46.4	46.8	1.9	1.3	1.0
One race:																	
White .....	98,492	111,082	121,086	129,936	12,590	10,004	8,850	12.8	9.0	7.3	86.7	84.8	82.1	80.2	1.2	.9	.7
Black .....	12,033	14,502	16,638	19,433	2,469	2,136	2,795	20.5	14.7	16.8	10.6	11.1	11.3	12.0	1.9	1.4	1.6
Asian <sup>1</sup> .....	3,019	5,472	6,271	8,304	2,456	799	2,033	81.4	14.6	32.4	2.7	4.2	4.3	5.1	6.1	1.4	2.8
All other groups <sup>2</sup> .....	( <sup>3</sup> )	( <sup>3</sup> )	3,406	4,427	...	...	1,021	...	...	30.0	...	...	2.3	2.7	...	...	2.7
Hispanic origin .....	7,451	11,975	19,272	25,760	4,524	7,297	6,488	60.7	60.9	33.7	6.6	9.1	13.1	15.9	4.9	4.9	2.9
Other than Hispanic origin .....	106,093	119,081	128,129	136,340	12,988	9,048	8,211	12.2	7.6	6.4	93.4	90.9	86.9	84.1	1.2	.7	.6
White Non-Hispanic .....	91,296	100,462	103,202	106,373	9,166	2,740	3,171	10.0	2.7	3.1	80.4	76.7	70.0	65.6	1.0	.3	.3

<sup>1</sup> There was a disruption in the series for "Asian and other" and "Asian only" as a result of changes in the definition of the race categories in the 2000 census. Data for 1984-94 represent the "Asian and other" race category with 1990 census weights. Data for 2004-14 represent the "Asian only" race category with 2000 census weights.

<sup>2</sup> The "All other groups" category includes (1) those classed as of multiple racial origin and (2) the race categories of (2a) American Indian and Alaska Native or (2b) Native Hawaiian and Other Pacific Islanders.

<sup>3</sup> Data for "All other groups" are not available for 1984 or 1994.

participation rates. The key focus of this article, therefore, will be on the trend of labor force participation rates and how this trend will affect the size of the labor force in 2014.

In what follows, past population trends, in addition to population projections of all the different sex, age, race, and ethnic categories, are examined first. Then the different forces at work that have affected the historical participation rates and that are likely to continue to do so in the future are analyzed. Next, past trends in the labor force participation rate, in addition to projected rates for the 2004-14 period for the various groups, are discussed. Then the projected level and growth rate of the labor force over the 2004-14 period is considered, and finally, the different aspects of an aging labor force are examined.

## Population

*Determining factors: total resident population.* The labor force projections of the Bureau of Labor Statistics are based on the population projections of the Census Bureau. Every 2 years, the Census Bureau provides the Bureau of Labor Statistics with a projection of the resident population of the United States. The Census Bureau's population projections are based on alternative assumptions regarding future fertility, life expectancy, and net

international migration. The Bureau of Labor Statistics uses the "middle series" population projections, which are based on the mid-level assumption for each of the foregoing components and is deemed the most likely path of future population changes. However, for the 2004-14 round of labor force projections, the Census Bureau did not carry out updates on its previously published "Interim population projections of the Census," provided to the Bureau of Labor Statistics in 2003. The interim projections included the results of the 2000 census, the 1997 Office of Management and Budget racial classifications system, and the population estimates created in 2001.<sup>4</sup> To take advantage of the latest published population data, the previously published Census Bureau interim projections of the population have been benchmarked to the actual 2003 and 2004 CPS data.

According to the Census Bureau, the interim population projections were based on the cohort-component method, which uses assumptions about the components of population change: fertility, mortality, and international migration.<sup>5</sup> From the interplay among these components, different rates of population growth lead to different rates of labor force growth.

*Fertility.* Fertility is often the largest component of population change. It also has the greatest cumulative effect of all

of the components on population growth, because each extra birth adds not only to the next year's population, but also to the projected population for the person's entire life span, which is roughly 75 years.<sup>6</sup> In the long run, the fertility assumptions are the most crucial for national population projections.<sup>7</sup> Actual historical data are provided by the National Center for Health Statistics and are used as a basis for projecting future fertility trends.<sup>8</sup>

*Mortality.* The Census Bureau mortality rate projections are based on data on deaths provided by the National Center for Health Statistics and the Census Bureau's own population projections. There are significant mortality differences by sex, race, and ethnicity groups in the United States. In general, life expectancy has increased for all groups in the 20th century. Among the different components of population change, life expectancy at birth changes very slowly and is the most stable. Because, in the developed countries, mortality happens overwhelmingly at the high end of the age cohorts, it does not have a significant impact on labor force projections.<sup>9</sup>

*Immigration.* Of the three components of population change, immigration is the most uncertain and the hardest to project. In contrast to changes in fertility and mortality, which are slow and take years to materialize, immigration is the only component of population change having a direct impact on all age groups. An increase in the level of immigration within the different sex, age, race, and ethnic groups can vastly change the composition of the population and hence that of the labor force.

During 1987 and 1988, as a result of the 1986 Immigration Reform and Control Act, a large number of immigrants attained legal status. These immigrants in turn sponsored the legal immigration of their immediate relatives without being subject to numerical limits. As a part of this trend, a considerable number of people from Mexico and various Central American nations attained legal status as well. As a result, according to the projections of the Census Bureau, immigration from these source countries is projected to reach a peak at around 2010 and gradually decrease to much lower numbers.<sup>10</sup>

Immigration has been the major source of racial and ethnic diversity of the U.S. population and labor force.<sup>11</sup> Hispanics and Asians in particular have seen their shares of the labor force increase through immigration in the past several decades. Immigration also affects the age distribution of the population. Migrants in general, and especially Hispanic migrants, are largely in younger age categories, so both the level and share of the foreign born in the population, as well as the age structure of the population, are affected by their numbers. Immigrants come to the United States in search of job opportunities, higher wages, and brighter futures for themselves and their children. They are usually in younger age brackets with higher fertility rates, and

because they come here to work, they have high labor force participation rates.

*Determining factors: civilian noninstitutional population.* The Census Bureau projects the resident population of the United States by age, sex, race, and Hispanic origin. For these projections to be used as the basis for BLS labor force projections, several tasks have to be performed. First, the number of youths 0–15 years of age in the population has to be subtracted from the resident population to find the population older than 16 years. Second, the number of people in the Armed Forces by age, sex, race, and ethnicity must be subtracted from the result of step 1 to obtain an estimate of the civilian population. The institutional population then must be subtracted from the civilian population to measure the civilian noninstitutional population in each of the various categories.

The composition of the civilian noninstitutional population is shown in table 2. The civilian noninstitutional population was 196.8 million in 1994 and 223.4 million in 2004, an increase of approximately 26.5 million. The growth of the civilian noninstitutional population was 1.3 percent on an annual basis between 1994 and 2004. The Bureau expects that, during the 2004–2014 period, the growth rate of the civilian noninstitutional population will slow to 1.0 percent, so that the projected civilian noninstitutional population will be 247.2 million in 2014. This increase will add nearly 24 million to the population of 2004.

Table 2 also shows the composition and the shares of the youth, prime-aged, and older civilian noninstitutional population for the different decades. The group aged 16 to 24 years represented 16.3 percent of the civilian noninstitutional population in 2004 and will represent 15.2 percent of that population in 2014. The prime-aged group's (25 to 54 years) share was 55.3 percent of the civilian noninstitutional population in 2004 and is projected to decrease to 51.1 percent in 2014. The highest growth rate in this age category is the 1.0 percent projected for 25- to 34-year-olds, a group that contains the age cohorts of the "baby-boomer echoes."

The segment of the civilian noninstitutional population aged 55 years and older increased its relative share from 26.2 percent in 1994 to 28.4 percent in 2004. This group is projected to attain about a 34-percent share in 2014. The fastest-growing age group in this category is those 65 to 74 years, with a 3.5-percent annual growth rate; this group is followed by those 55 to 64 years of age, with a comparable 3.1-percent annual growth rate. In 2014, baby boomers will be in the 50- to 68-year-old age group, increasing the growth of the civilian noninstitutional population in these age categories.

The civilian noninstitutional population of men stood at 107.7 million in 2004 and is projected to be 120 million in 2014. The civilian noninstitutional population of women, which was nearly 115.5 million in 2004, is projected to be 127.2 million in 2014.

**Table 2. Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1984, 1994, 2004, and projected 2014**

[Number in thousands]

Group	Level				Change			Annual growth rate			Percent distribution			
	1984	1994	2004	2014	1984-94	1994-2004	2004-14	1984-94	1994-2004	2004-14	1984	1994	2004	2014
Total, 16 years and older.....	176,383	196,814	223,357	247,239	20,431	26,543	23,882	1.1	1.3	1.0	100.0	100.0	100.0	100.0
16 to 24 years .....	35,423	35,549	36,419	37,469	126	870	1,050	.0	.2	.3	20.1	18.1	16.3	15.2
16 to 19 years .....	14,735	17,196	16,222	15,903	2,461	-974	-319	1.6	-6	-2	8.4	8.7	7.3	6.4
20 to 24 years .....	20,688	18,353	20,197	21,566	-2,335	1,844	1,369	-1.2	1.0	.7	11.7	9.3	9.0	8.7
25 to 54 years .....	92,476	112,618	123,410	126,423	20,142	10,792	3,013	2.0	.9	.2	52.4	57.2	55.3	51.1
25 to 34 years .....	39,999	41,306	38,939	43,063	1,307	-2,367	4,124	.3	-6	1.0	22.7	21.0	17.4	17.4
35 to 44 years .....	30,251	41,534	43,226	40,171	11,283	1,692	-3,055	3.2	.4	-7	17.2	21.1	19.4	16.2
45 to 54 years .....	22,226	29,778	41,245	43,189	7,552	11,467	1,944	3.0	3.3	.5	12.6	15.1	18.5	17.5
55 years and older ..	48,486	51,647	63,528	83,345	3,161	11,881	19,817	.6	2.1	2.8	27.5	26.2	28.4	33.7
55 to 64 years .....	22,052	20,635	28,919	39,336	-1,417	8,284	10,417	-7	3.4	3.1	12.5	10.5	12.9	15.9
65 years and older .....	26,434	31,012	34,609	44,009	4,578	3,597	9,400	1.6	1.1	2.4	15.0	15.8	15.5	17.8
65 to 74 years ..	16,288	18,249	18,181	25,764	1,961	-68	7,583	1.1	.0	3.5	9.2	9.3	8.1	10.4
75 years and older .....	10,146	12,763	16,429	18,245	2,617	3,666	1,816	2.3	2.6	1.1	5.8	6.5	7.4	7.4
Men, 16 years and older.....	83,605	94,355	107,710	120,007	10,750	13,355	12,297	1.2	1.3	1.1	47.4	47.9	48.2	48.5
16 to 24 years .....	17,494	16,277	18,359	18,841	-1,217	2,082	482	-7	1.2	.3	9.9	8.3	8.2	7.6
16 to 19 years .....	7,386	7,203	8,234	8,018	-183	1,031	-216	-3	1.3	-3	4.2	3.7	3.7	3.2
20 to 24 years .....	10,108	9,074	10,125	10,823	-1,034	1,051	698	-1.1	1.1	.7	5.7	4.6	4.5	4.4
25 to 54 years .....	45,039	55,349	60,773	62,704	10,310	5,424	1,931	2.1	.9	.3	25.5	28.1	27.2	25.4
25 to 34 years .....	19,596	20,361	19,358	21,584	765	-1,003	2,226	.4	-5	1.1	11.1	10.3	8.7	8.7
35 to 44 years .....	14,719	20,443	21,255	19,919	5,724	812	-1,336	3.3	.4	-6	8.3	10.4	9.5	8.1
45 to 54 years .....	10,724	14,545	20,160	21,201	3,821	5,615	1,041	3.1	3.3	.5	6.1	7.4	9.0	8.6
55 years and older ..	21,073	22,728	28,578	38,462	1,655	5,850	9,884	.8	2.3	3.0	11.9	11.5	12.8	15.6
55 to 64 years .....	10,285	9,810	13,894	18,956	-475	4,084	5,062	-5	3.5	3.2	5.8	5.0	6.2	7.7
65 years and older .....	10,788	12,918	14,684	19,506	2,130	1,766	4,822	1.8	1.3	2.9	6.1	6.6	6.6	7.9
65 to 74 years ..	7,076	8,109	8,294	12,170	1,033	185	3,876	1.4	.2	3.9	4.0	4.1	3.7	4.9
75 years and older .....	3,713	4,809	6,391	7,336	1,096	1,582	945	2.6	2.9	1.4	2.1	2.4	2.9	3.0
Women, 16 years and older.....	92,778	102,460	115,547	127,232	9,682	13,087	11,685	1.0	1.2	1.0	52.6	52.1	51.7	51.5
16 to 24 years .....	17,929	16,272	18,061	18,629	-1,657	1,789	568	-1.0	1.0	.3	10.2	8.3	8.1	7.5
16 to 19 years .....	7,349	6,993	7,989	7,885	-356	996	-104	-5	1.3	-1	4.2	3.6	3.6	3.2
20 to 24 years .....	10,580	9,279	10,072	10,744	-1,301	793	672	-1.3	.8	.6	6.0	4.7	4.5	4.3
25 to 54 years .....	47,436	57,269	62,636	63,719	9,833	5,367	1,083	1.9	.9	.2	26.9	29.1	28.0	25.8
25 to 34 years .....	20,403	20,945	19,581	21,479	542	-1,364	1,898	.3	-7	.9	11.6	10.6	8.8	8.7
35 to 44 years .....	15,532	21,091	21,970	20,252	5,559	879	-1,718	3.1	.4	-8	8.8	10.7	9.8	8.2
45 to 54 years .....	11,501	15,233	21,085	21,988	3,732	5,852	903	2.9	3.3	.4	6.5	7.7	9.4	8.9
55 years and older ..	27,413	28,919	34,950	44,883	1,506	6,031	9,933	.5	1.9	2.5	15.5	14.7	15.6	18.2
55 to 64 years .....	11,768	10,825	15,025	20,380	-943	4,200	5,355	-8	3.3	3.1	6.7	5.5	6.7	8.2
65 years and older .....	15,645	18,094	19,925	24,503	2,449	1,831	4,578	1.5	1.0	2.1	8.9	9.2	8.9	9.9
65 to 74 years ..	9,212	10,140	9,887	13,594	928	-253	3,707	1.0	-3	3.2	5.2	5.2	4.4	5.5
75 years and older .....	6,433	7,955	10,038	10,909	1,522	2,083	871	2.1	2.4	.8	3.6	4.0	4.5	4.4
White, 16 years and older.....	152,347	165,555	182,643	197,212	13,208	17,088	14,569	.8	1.0	.8	86.4	84.1	81.8	79.8
Men .....	72,723	80,059	89,044	96,770	7,336	8,985	7,726	1.0	1.1	.8	41.2	40.7	39.9	39.1
Women .....	79,624	85,497	93,599	100,442	5,873	8,102	6,843	.7	.9	.7	45.1	43.4	41.9	40.6
Black, 16 years and older.....	19,348	22,879	26,065	30,655	3,531	3,186	4,590	1.7	1.3	1.6	11.0	11.6	11.7	12.4
Men .....	8,654	10,258	11,656	14,023	1,604	1,398	2,367	1.7	1.3	1.9	4.9	5.2	5.2	5.7
Women .....	10,694	12,621	14,409	16,632	1,927	1,788	2,223	1.7	1.3	1.4	6.1	6.4	6.5	6.7

See footnotes at end of table.

**Table 2.** Continued—Civilian noninstitutional population by sex, age, race, and Hispanic origin, 1984, 1994, 2004, and projected 2014

[Numbers in thousands]

Group	Level				Change			Annual growth rate			Percent distribution			
	1984	1994	2004	2014	1984-94	1994-2004	2004-14	1984-94	1994-2004	2004-14	1984	1994	2004	2014
Asian, 16 years and older <sup>1</sup> .....	4,688	8,380	9,520	12,635	3,692	1,140	3,115	6.0	1.3	2.9	2.7	4.3	4.3	5.1
Men .....	2,226	4,038	4,530	5,931	1,812	492	1,401	6.1	1.2	2.7	1.3	2.1	2.0	2.4
Women .....	2,462	4,342	4,990	6,704	1,880	648	1,714	5.8	1.4	3.0	1.4	2.2	2.2	2.7
All other groups <sup>2</sup>	( <sup>3</sup> )	( <sup>3</sup> )	5,129	6,737	...	5,129	1,608	...	...	2.8	...	...	2.3	2.7
Men .....	( <sup>3</sup> )	( <sup>3</sup> )	2,481	3,283	...	2,481	802	...	...	2.8	...	...	1.1	1.3
Women .....	( <sup>3</sup> )	( <sup>3</sup> )	2,648	3,454	...	2,648	806	...	...	2.7	...	...	1.2	1.4
Hispanic origin, 16 years and older .....	11,479	18,118	28,109	37,246	6,639	9,991	9,137	4.7	4.5	2.9	6.5	9.2	12.6	15.1
Men .....	5,662	9,104	14,417	18,972	3,442	5,313	4,555	4.9	4.7	2.8	3.2	4.6	6.5	7.7
Women .....	5,817	9,014	13,692	18,274	3,197	4,678	4,582	4.5	4.3	2.9	3.3	4.6	6.1	7.4
Other than Hispanic origin, 16 years and older .....	164,904	178,696	195,248	209,993	13,792	16,552	14,745	.8	.9	.7	93.5	90.8	87.4	84.9
Men .....	77,943	85,251	93,293	101,035	7,308	8,042	7,742	.9	.9	.8	44.2	43.3	41.8	40.9
Women .....	86,961	93,446	101,855	108,958	6,485	8,409	7,103	.7	.9	.7	49.3	47.5	45.6	44.1
White non-Hispanic, 16 years and older .....	141,221	149,473	156,556	162,826	8,252	7,083	6,270	.6	.5	.4	80.1	75.9	70.1	65.9
Men .....	67,262	71,962	75,615	79,164	4,700	3,653	3,549	.7	.5	.5	38.1	36.6	33.9	32.0
Women .....	73,959	77,511	80,940	83,662	3,552	3,429	2,722	.5	.4	.3	41.9	39.4	36.2	33.8
Age of baby-boomers .....	20 to 38	30 to 48	40 to 58	50 to 68	...	...	...	...	...	...	...	...	...	...

<sup>1</sup> There was a disruption in the series for "Asian and other" and "Asian only" as a result of changes in the definition of the race categories in the 2000 census. Data for 1984-94 represent the "Asian and other" race category with 1990 census weights. Data for 2004-14 represent the "Asian only" race category with 2000 census weights.

<sup>2</sup> The "All other groups" category includes (1) those classed as of multiple racial origin and (2) the race categories of (2a) American Indian and Alaska Native or (2b) Native Hawaiian and Other Pacific Islanders.

<sup>3</sup> Data for "All other groups" are not available for 1984 or 1994.

## Labor force participation

*Different forces at work.* Economists generally view the labor force participation rate as one of the key indicators of the state of the labor market and an important input into the economy's potential for creating goods and services. The projection of the labor force participation rate is based on historical CPS annual averages of the labor force participation rates by age, sex, race, and ethnicity. Each age, sex, race, and ethnic group exhibits different socioeconomic trends and thus different labor force participation rates. The time series for all these various groups are smoothed and the trends extrapolated. The final overall participation rate is then the weighted average of the varying participation rates of the different sex, age, race, and ethnic groups. The weights are the populations of each group. In attempting to understand the forces that have been at work to affect labor force participation rates, questions such as the following are asked: What impact does the participation rate of

men and women have on the overall labor force participation rate? How does the behavior of the different age groups of the population influence the overall labor force participation rate? What impact do the differing participation rates of the various race and ethnic groups have on the overall participation rate? How do demographic and compositional changes in the population change the overall labor force participation rate? What is the impact of the structural changes in the economy on the labor force participation rate? and How do cyclical factors affect the labor force participation rate?

The labor force participation rate reflects the labor market behavior of different segments of the population.<sup>12</sup> Changes in the overall and detailed labor force participation rates are the result of a combination of factors, including changes in the demographic composition of the population, as well as cyclical and structural changes in the economy. Each of these factors affects labor force participation rates in various ways.

*Demographic/compositional change.* The demographic composition of a population reflects the share of men and women and the different age, race, and ethnic groups within that population. Since the second decade of the 1900s, several population-related events have occurred in the United States with a long-lasting impact on future labor markets. The impact of these events appeared after a roughly 16-year lag, when the population cohorts involved entered the labor force. The events in question are as follows:

- In the late 1920s and early 1930s, there was a noticeable reduction in birthrates, a phenomenon referred to as the “birth dearth.” Today, the age cohort born during those years is mostly 75 years and older and is by and large out of the labor force.
- Between 1946 and 1964, the U.S. fertility rate increased substantially, and approximately 78 million people were born. This huge segment of the population, called the “baby boomers,” were between the ages of 40 and 58 years in 2004 and will be between the ages of 50 and 68 years in 2014.
- Between 1965 and 1976, the number of births decreased once again. The population born during this time, called the “baby bust,” will constitute part of the prime-aged worker group 25 to 54 years of age from 2004 to 2014. The baby-bust population is much smaller than the baby-boom population, and this difference in their numbers will contribute to the decrease in the growth of the labor force during those years.
- Finally, the “baby-boom echo” comprises the children born to the baby-boom generation after 1976 and until 2000. A part of this cohort already entered the labor force in 2004 and will be in the prime-aged workforce by 2014.

A prime example of a demographic change affecting the labor force participation rate is the aging of the baby-boom generation. In 2000, baby boomers were aged 36 to 54 years and were in the group with the highest participation rates: the prime-aged group 25 to 54 years old. The participation rate for women in this group was 76.7 percent and for men was 91.6 percent, so that the overall participation rate of the group was 84.0 percent. The participation rate of the next-older age group, that 55 years and older, was 32.4 percent, so the difference between the two age groups was 52 percentage points. With the passage of every year after 2000, a segment of the baby-boomer population passes into the 55-years-and-older age group and thus moves from a group with a high participation rate in the labor force to an age category with a much lower participation rate, causing the overall participation rate to decrease.

The U.S. labor market is currently experiencing the negative demographic compositional effect just described, wherein the population moves from an age group with a higher participation rate to an age group with a lower participation rate. In contrast, a positive demographic compositional effect was experienced in the 1970s when baby boomers were increasingly joining the prime-aged workforce and causing an increase in the labor force participation rate.

Meanwhile, during the 2004–14 timeframe, the baby-bust population will be in the prime-aged work group, with very high participation rates. However, because the baby-bust cohorts are much smaller than those of the baby boomers, their numbers applied to their respective labor force participation rates will not be able to compensate for the large cohorts of baby boomers leaving the prime-aged group and moving into a group with much lower participation rates. The result is a decrease in the overall labor force participation rate and a slower rate of growth of the labor force.

*Structural change.* Long-term changes in tastes, preferences, and educational attainment, as well as technological changes, among others, cause the economy to create or eliminate certain skills, industries, and occupations, leading to structural change in the economy. The increase in school attendance in the past couple of decades can be considered a structural change with a permanent impact on the labor market. During that period, young people increased their school attendance and decided to stay in school longer, in effect making a capital investment in themselves for a higher return on their education throughout their lives.

During the past several decades, the number of students enrolled in high school, college, and summer school has increased, resulting in a decline in the overall labor force participation rate of youths, especially those 16 to 19 years. According to research by the Bureau of Labor Statistics, more of the workforce in the 16- to 24-year-old age group reported going to school as one of the main reasons for their nonparticipation in the labor force in 2001 than their counterparts had reported a decade earlier.<sup>13</sup> In addition to rising school enrollment, decreases in the labor force participation rates for both students and nonstudents contributed to the overall decline in teen labor force participation.<sup>14</sup> (See table 3.)

A structural change has the potential to exaggerate a cyclical effect. For example, the rising school attendance of youths (a structural change) strengthened the impact of the recession of 2001 (a cyclical effect). The combination of structural and cyclical factors has resulted in the current decrease in youth participation rates to new low levels.

Another structural change that has taken place in the labor market is the narrowing of the gap between women’s participation rates at all age levels and men’s rates at those same levels. The continually increasing participation rate of women

**Table 3. Enrollment of 16- to 24-year-olds in school and labor force participation by enrollment status, 1994 and 2004**

Group	Proportion enrolled in school			Labor force participation, 1994										
	1994	2004	Change	1994				2004				Changes, 1994-2004		
				Total	Enrolled in school	Not enrolled in school	Difference	Total	Enrolled in school	Not enrolled in school	Difference	Total	Enrolled in school	Not enrolled in school
Total, 16 to 24 years .....	43.9	50.6	6.7	66.4	49.6	79.3	29.7	61.1	43.8	78.9	35.1	-5.3	-5.8	-0.4
16 to 19 years .....	65.6	73.6	8.0	52.7	44.0	69.2	25.2	43.9	35.6	66.8	31.2	-8.8	-8.4	-2.4
20 to 24 years .....	27.0	32.1	5.1	77.0	60.8	83.0	22.2	75.0	58.9	82.7	23.8	-2.0	-1.9	-.3
20 to 21 years .....	37.3	43.9	6.6	72.1	58.1	80.3	22.2	70.3	57.1	80.5	23.4	-1.8	-1.0	.2
22 to 24 years .....	20.9	24.4	3.5	80.0	63.7	84.2	20.5	78.2	61.0	83.7	22.7	-1.8	-2.7	-.5
White, 16 to 24 years .....	43.4	49.6	6.2	69.5	53.5	81.7	28.2	63.8	46.9	80.4	33.5	-5.7	-6.6	-1.3
16 to 19 years .....	65.3	72.9	7.6	56.4	47.9	72.6	24.7	47.1	38.9	69.2	30.3	-9.3	-9.0	-3.4
20 to 24 years .....	26.6	31.1	4.5	79.5	64.1	85.0	20.9	77.1	61.8	84.0	22.2	-2.4	-2.3	-1.0
20 to 21 years .....	37.8	43.1	5.3	75.0	61.5	83.1	21.6	72.5	60.1	81.9	21.8	-2.5	-1.4	-1.2
22 to 24 years .....	20.0	23.1	3.1	82.1	67.0	85.9	18.9	80.1	63.9	85.0	21.1	-2.0	-3.1	-.9
Black, 16 to 24 years .....	43.4	51.6	8.2	54.9	36.3	69.2	32.9	51.2	31.8	72.0	40.2	-3.7	-4.5	2.8
16 to 19 years .....	66.2	74.8	8.6	38.5	30.2	54.8	24.6	31.4	23.0	56.5	33.5	-7.1	-7.2	1.7
20 to 24 years .....	24.1	31.7	7.6	68.8	50.6	74.6	24.0	68.3	49.5	76.9	27.4	-.5	-1.1	2.3
20 to 21 years .....	29.6	41.5	11.9	62.5	45.2	69.8	24.6	62.8	44.4	75.9	31.5	.3	-.8	6.1
22 to 24 years .....	20.4	25.2	4.8	72.9	55.8	77.3	21.5	71.8	55.1	77.5	22.4	-1.1	-.7	.2
Asian, 16 to 24 years .....	( <sup>1</sup> )	65.8	...	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	48.0	33.6	75.6	42.0	...	...	...
16 to 19 years .....	( <sup>1</sup> )	83.0	...	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	28.4	22.8	55.3	32.5	...	...	...
20 to 24 years .....	( <sup>1</sup> )	53.9	...	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	61.5	45.1	80.7	35.6	...	...	...
20 to 21 years .....	( <sup>1</sup> )	67.4	...	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	54.6	45.1	74.2	29.1	...	...	...
22 to 24 years .....	( <sup>1</sup> )	45.4	...	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	65.9	45.2	83.2	38.0	...	...	...
Hispanic, 16 to 24 years .....	35.0	40.7	5.7	61.6	42.5	71.8	29.3	59.4	36.5	75.2	38.7	-2.2	-6.0	3.4
16 to 19 years .....	58.9	67.7	8.8	44.4	33.6	59.8	26.2	38.2	26.8	61.9	35.1	-6.2	-6.8	2.1
20 to 24 years .....	17.8	21.5	3.7	74.0	63.8	76.2	12.4	74.5	58.1	79.0	20.9	.5	-5.7	2.8
20 to 21 years .....	24.9	29.2	4.3	72.4	63.4	75.3	11.9	71.1	55.9	77.4	21.5	-1.3	-7.5	2.1
22 to 24 years .....	13.3	16.7	3.4	75.0	64.2	76.6	12.4	76.7	60.5	79.9	19.4	1.7	-3.7	3.3

<sup>1</sup> There was a disruption in the series for "Asian and other" and "Asian only" as a result of changes in the definition of the race categories in the 2000 census. Information on Asians was not available in 1994.

started in the 1930s and expanded rapidly in the 1970 and 1980s. Since the 1990s, the women's participation rate has continued its ascent, although at a decreasing rate. The recent deceleration in women's participation is another factor contributing to the downward trend in overall participation rates since 2000.

Historically, structural changes have been more important than cyclical changes to the labor force 55 years and older. The continued trend in "early retirements" of the 55-and-older workforce is another structural change facing the U.S. economy. This phenomenon affects the overall labor force participation rate in a negative way, especially at a time when the early cohorts of the baby boomers have already passed into this age group and are near to retiring in vast numbers. However, the older workforce also has experienced increasing labor force participation rates since the late 1980s, an increase that has continued even during economic downturns, suggesting that the phenomenon may be due more to the impact

of a long-term structural change than to a short-term cyclical one.

*Cyclical change.* Cyclical changes are changes that happen in response to business cycles and are generally short term. Cyclical factors such as economic expansions and recessions cause short-term changes in the overall labor force participation rates. Usually, the rates increase during expansions and decline during economic downturns.

Historically, cyclical factors have had the greatest impact on the labor force participation of the young. The youth labor force is particularly vulnerable during recessions; youths are usually the first to be fired and the last to be hired. During economic downturns and weak job markets, this group tends to stay in school longer, experiencing a lower labor force participation rate. Table 4 gives the historical labor force participation rates of selected age groups, including youths, during the economic downturns of 1981-82, 1991-92, and 2001.

**Table 4.** Historical labor force participation rates for selected age groups, 1980–2004

Year	16–19 years	20–24 years	25–54 years	55–64 years	65 years and older
1980	56.7	77.2	78.6	55.7	12.5
1981	55.4	77.3	79.3	55.0	12.2
1982	54.1	77.1	79.8	55.1	11.9
1983	53.5	77.2	80.1	54.5	11.7
1984	53.9	77.6	80.7	54.2	11.1
1985	54.5	78.2	81.5	54.2	10.8
1986	54.7	78.9	82.0	54.0	10.9
1987	54.7	78.9	82.5	54.4	11.1
1988	55.3	78.7	82.9	54.6	11.5
1989	55.9	78.7	83.4	55.5	11.8
1990	53.7	77.8	83.5	55.9	11.8
1991	51.6	76.7	83.4	55.5	11.5
1992	51.3	77.0	83.6	56.2	11.5
1993	51.5	77.0	83.4	56.4	11.2
1994	52.7	77.0	83.4	56.8	12.4
1995	53.5	76.6	83.5	57.2	12.1
1996	52.3	76.8	83.8	57.9	12.1
1997	51.6	77.6	84.1	58.9	12.2
1998	52.8	77.5	84.1	59.3	11.9
1999	52.0	77.5	84.1	59.3	12.3
2000	52.0	77.8	84.0	59.2	12.9
2001	49.6	77.1	83.7	60.4	13.0
2002	47.4	76.4	83.3	61.9	13.2
2003	44.5	75.4	83.0	62.4	14.0
2004	43.9	75.0	82.8	62.3	14.4

The participation rate of both the 16- to 19-year and the 20- to 24-year age group fell during the last three recessions. In the recession of 2001, the labor force participation rate of 16- to 19-year-olds dropped by 2.4 percentage points from the previous year, to 49.6 percent. The rate has been declining every year since then, falling to a low of 43.9 percent in 2004, a sizable decrease of 8.1 percentage points from the 2000 figure. During the same 2000–04 timeframe, the labor force participation rate of 20- to 24-year-olds also decreased, by 2.8 points. The falling participation rates of youths—in particular, the 16- to 19-year age group—is one of the main reasons for the decline in the overall participation rate during the past several years. During economic expansions, the labor force participation of young workers—especially teenagers—is expected to increase; however, during the expansion of the 1990s, the participation of youths did not expand, but instead started a downward trend that has continued to the present. Thus, the continuing drop in youth labor force participation rates may be mainly a structural phenomenon.

The prime-aged workforce is least sensitive to economic downturns, because its members are already firmly established in the labor market. By contrast, like the youth labor force, the 55-years-and-older workforce is more sensitive to cyclical changes.

Clearly, then, a combination of demographic, structural, and cyclical factors has affected the overall labor force participation rate, as well as the participation rates of the different age, race,

sex, and ethnic groups, in the past. The continued operation of one or more of these factors in the future will make it difficult for the overall participation rate to reach and maintain its former peak attained in the late 1990s.

*Determining factors: labor force participation.* During the 1990s, the U.S. economy experienced strong growth in gross domestic product and productivity. In recent years, the economy has weathered the recession of 2001, the burst of the high-tech bubble, and corporate accounting scandals.<sup>15</sup> Meanwhile, the aggregate labor force participation rate, which reached a plateau at 67.1 percent over the 1997–2000 period, has exhibited a gradual decline that seems to be continuing. Registering 66.8 percent in 2001, the rate continued its gradual slide, decreasing to 66.6 percent in 2002, 66.2 percent in 2003, and, finally, 66.0 percent in 2004. The Bureau of Labor Statistics projects that the overall participation rate will decrease slightly, to 65.6 percent, in 2014. (See table 5.)

Chart 1 shows the participation rates for different age groups since 1948. The overall labor force participation rate was 58.8 percent in 1948. The rate increased for several decades and peaked at 67.1 percent from 1997 to 2000. Since then, the overall participation rate has declined by 0.2 percent each year, finally reaching 66.0 percent in 2004, an increase of 7.2 percentage points over the 1948 level and a decline of 1.1 percentage points in the last 4 years.

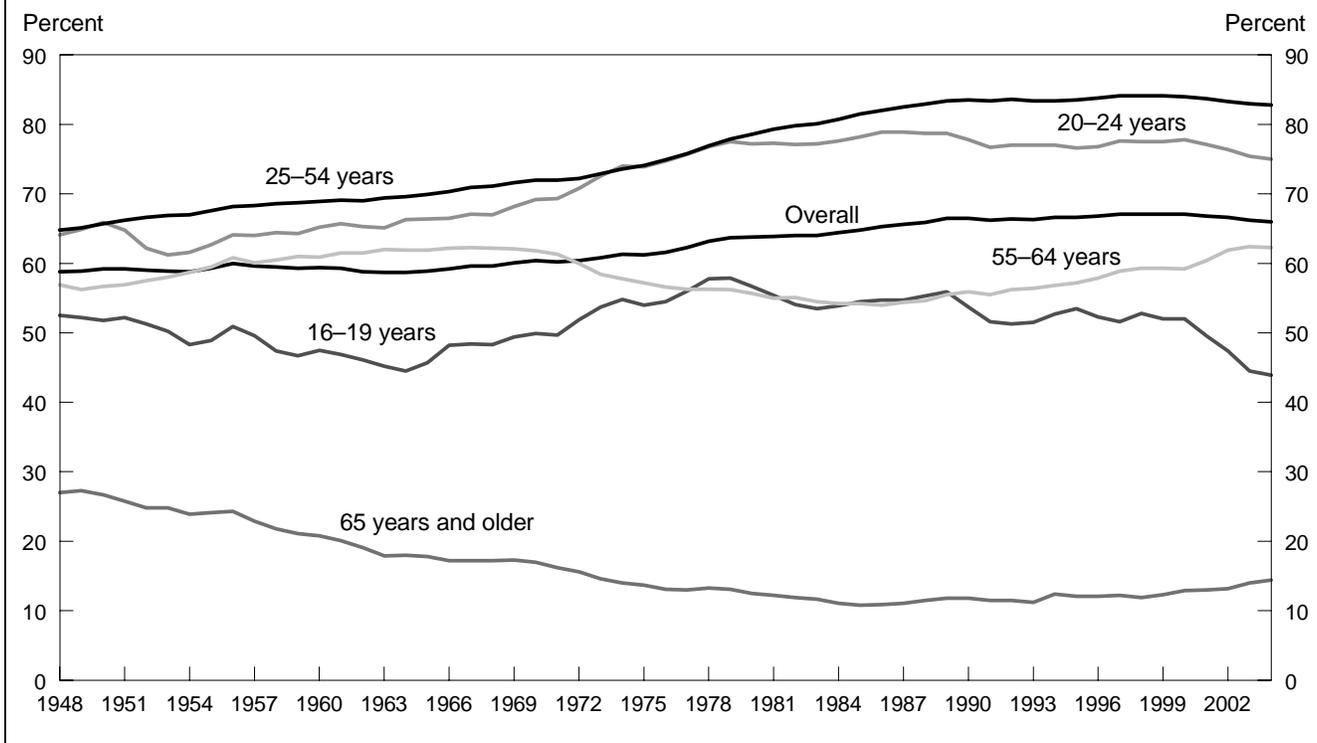
**Table 5. Civilian labor force participation rates by sex, age, race, and Hispanic origin, 1984, 1994, 2004, and projected 2014**

Group	Participation rate				Percentage-point change			Annual growth rate		
	1984	1994	2004	2014	1984-94	1994-2004	2004-14	1984-94	1994-2004	2004-14
Total, 16 years and older .....	64.4	66.6	66.0	65.6	2.2	-0.6	-0.4	0.3	-0.1	-0.1
16 to 24 years .....	67.7	66.4	61.1	59.1	-1.3	-5.3	-2.0	-2	-8	-3
16 to 19 years .....	53.9	52.7	43.9	39.3	-1.2	-8.8	-4.6	-2	-1.8	-1.1
20 to 24 years .....	77.6	77.0	75.0	73.8	-6	-2.0	-1.2	-1	-3	-0.2
25 to 54 years .....	80.7	83.4	82.8	83.5	2.7	-6	.7	.3	-1	.1
25 to 34 years .....	81.8	83.2	82.7	85.4	1.4	-5	2.7	.2	-1	.3
35 to 44 years .....	82.4	84.8	83.6	83.0	2.4	-1.2	-6	.3	-1	-1
45 to 54 years .....	76.5	81.7	81.8	82.3	5.2	.1	.5	.7	.0	.1
55 years and older .....	30.7	30.1	36.2	41.2	-6	6.1	5.0	-2	1.9	1.3
55 to 64 years .....	54.2	56.8	62.3	65.2	2.6	5.5	2.9	.5	.9	.5
65 years and older .....	11.1	12.4	14.4	19.7	1.3	2.0	5.3	1.1	1.5	3.2
65 to 74 years .....	15.3	17.2	21.9	26.9	1.9	4.7	5.0	1.2	2.4	2.1
75 years and older .....	4.3	5.4	6.1	9.6	1.1	.7	3.5	2.3	1.2	4.6
Men, 16 years and older .....	76.4	75.1	73.3	71.8	-1.3	-1.8	-1.5	-2	-2	-2
16 to 24 years .....	72.8	70.3	63.9	60.5	-2.5	-6.4	-3.4	-3	-9	-5
16 to 19 years .....	56.0	54.1	43.9	38.1	-1.9	-10.2	-5.8	-3	-2.1	-1.4
20 to 24 years .....	85.0	83.1	79.6	77.0	-1.9	-3.5	-2.6	-2	-4	-3
25 to 54 years .....	93.9	91.6	90.5	90.9	-2.3	-1.1	.4	-2	-1	.0
25 to 34 years .....	94.3	92.6	91.9	95.3	-1.7	-.7	3.4	-2	-1	.4
35 to 44 years .....	95.4	92.8	91.9	90.7	-2.6	-.9	-1.2	-3	-1	-1
45 to 54 years .....	91.2	89.1	87.5	86.6	-2.1	-1.6	-.9	-2	-2	-1
55 years and older .....	41.8	37.8	43.2	46.3	-4.0	5.4	3.1	-1.0	1.3	.7
55 to 64 years .....	68.5	65.5	68.7	68.7	-3.0	3.2	.0	-.4	.5	.0
65 years and older .....	16.3	16.9	19.0	24.6	.6	2.1	5.6	.4	1.2	2.6
65 to 74 years .....	20.9	21.7	26.7	31.5	.8	5.0	4.8	.4	2.1	1.7
75 years and older .....	7.5	8.6	9.0	13.1	1.1	.4	4.1	1.4	.5	3.8
Women, 16 years and older .....	53.6	58.8	59.2	59.7	5.2	.4	.5	.9	.1	.1
16 to 24 years .....	62.8	62.5	58.7	57.8	-.3	-3.8	-.9	.0	-.6	-.2
16 to 19 years .....	51.8	51.3	43.8	40.4	-.5	-7.5	-3.4	-.1	-1.6	-.8
20 to 24 years .....	70.4	71.0	70.5	70.6	.6	-.5	.1	.1	-.1	.0
25 to 54 years .....	68.2	75.3	75.3	76.3	7.1	.0	1.0	1.0	.0	.1
25 to 34 years .....	69.8	74.0	73.6	75.4	4.2	-.4	1.8	.6	-.1	.2
35 to 44 years .....	70.2	77.1	75.6	75.4	6.9	-1.5	-.2	.9	-.2	.0
45 to 54 years .....	62.9	74.6	76.5	78.1	11.7	1.9	1.6	1.7	.3	.2
55 years and older .....	22.2	24.0	30.5	36.8	1.8	6.5	6.3	.8	2.4	1.9
55 to 64 years .....	41.7	48.9	56.3	61.9	7.2	7.4	5.6	1.6	1.4	1.0
65 years and older .....	7.5	9.2	11.1	15.9	1.7	1.9	4.8	2.1	1.9	3.7
65 to 74 years .....	11.1	13.6	18.0	22.9	2.5	4.4	4.9	2.1	2.8	2.4
75 years and older .....	2.5	3.5	4.3	7.2	1.0	.8	2.9	3.4	2.1	5.3
White .....	64.6	67.1	66.3	65.9	2.5	-.8	-.4	.4	-.1	-.1
Men .....	77.1	75.9	74.1	72.7	-1.2	-1.8	-1.4	-.2	-.2	-.2
Women .....	53.3	58.9	58.9	59.3	5.6	.0	.4	1.0	.0	.1
Black, 16 years and older .....	62.2	63.4	63.8	63.4	1.2	.4	-.4	.2	.1	-.1
Men .....	70.8	69.1	66.7	64.7	-1.7	-2.4	-2.0	-.2	-.4	-.3
Women .....	55.2	58.7	61.5	62.3	3.5	2.8	.8	.6	.5	.1
Asian, 16 years and older <sup>1</sup> .....	64.3	65.3	65.9	65.7	1.0	.6	-.2	.2	.1	.0
Men .....	74.0	74.3	75.0	74.4	.3	.7	-.6	.0	.1	-.1
Women .....	55.6	56.9	57.6	58.1	1.3	.7	.5	.2	.1	.1
All other groups <sup>2</sup> .....	( <sup>3</sup> )	( <sup>3</sup> )	67.0	65.7	...	...	-1.3	...	...	-.2
Men .....	( <sup>3</sup> )	( <sup>3</sup> )	74.0	72.3	...	...	-1.7	...	...	-.2
Women .....	( <sup>3</sup> )	( <sup>3</sup> )	60.3	59.5	...	...	-.8	...	...	-.1
Hispanic origin, 16 years and older .....	64.9	66.1	68.6	69.2	1.2	2.5	-.6	.2	.4	.1
Men .....	80.6	79.2	80.4	78.6	-1.4	1.2	-1.8	-.2	-.2	-.2
Women .....	49.7	52.9	56.1	59.3	3.2	3.2	3.2	.6	.6	.6
Other than Hispanic origin, 16 years and older .....	64.3	67.0	65.6	64.9	2.7	-1.4	-.7	.4	-.2	-.1
Men .....	76.0	75.2	72.2	70.5	-.8	-3.0	-1.7	-.1	-.4	-.2
Women .....	54.0	62.1	63.7	59.7	8.1	1.6	-4.0	1.4	.3	-.6
White non-Hispanic, 16 years and older .....	64.6	67.2	65.9	65.3	2.6	-1.3	-.6	.4	-.2	-.1
Men .....	76.8	75.5	73.0	71.5	-1.3	-2.5	-1.5	-.2	-.3	-.2
Women .....	53.5	60.1	59.3	59.5	6.6	-.8	.2	1.2	-.1	.0

<sup>1</sup> There was a disruption in the series for "Asian and other" and "Asian only" as a result of changes in the definition of the race categories in the 2000 census. Data for 1984-94 represent the "Asian and other" race category with 1990 census weights. Data for 2004-14 represent the "Asian only" race category with 2000 census weights.

<sup>2</sup> The "All other groups" category includes (1) those classified as of multiple racial origin and (2) the race categories of (2a) American Indian and Alaska Native or (2b) Native Hawaiian and Other Pacific Islanders.

<sup>3</sup> Data for "All other groups" are not available for 1984 or 1994.

**Chart 1. Labor force participation rates, 1948–2004**

*Age: youths 16 to 24 years.* The youth labor market consists of the teenage group aged 16 to 19 years and young adults aged 20 to 24 years. Historically, the two groups have exhibited different labor force participation rates. The difference is partially explained by the differing shares of students and nonstudents in the two age groups. Students are less likely to participate in the labor force, so increases in school attendance at the secondary school and college level cause decreases in the participation of youth in the labor force. (See chart 2.)

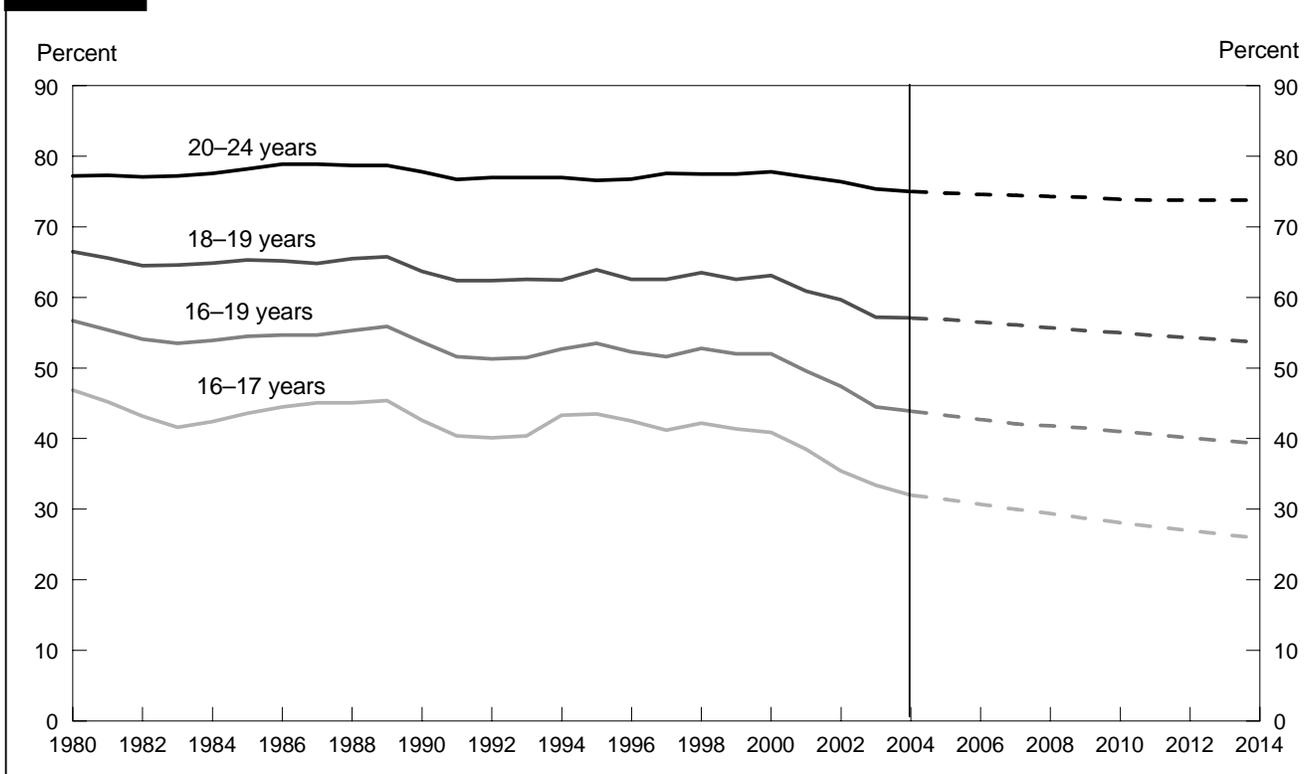
Of all the various age and sex categories of the labor force, 16- to 19-year-old men have experienced the largest decline in labor force participation and have had the most impact on the decrease in the overall participation rate. (See table 5.) Between 1994 and 2004, the overall participation rate of 16- to 19-year-olds fell from 52.7 percent to 43.9 percent, a decrease of 8.8 percentage points. Most of this decrease was the result of the drop in the labor force participation rate of 16- to 19-year-old men, a group that saw its participation rate decline from 54.1 percent in 1994 to 43.9 percent in 2004, a decrease of 10.2 percentage points for the decade. The Bureau projects that the downward trend in the participation of 16- to 19-year-old men will continue, reaching 38.1 percent in 2014, a decrease of an additional 5.8 percentage points from the 2004 value. As a result, the overall rate for 16- to 19-year-olds will drop to 39.3 percent in 2014.

The labor force participation rate of 16- to 19-year-old women was 51.3 percent in 1994 and 43.8 percent in 2004, a decrease of 7.5 percentage points over the 10-year period. The Bureau projects that the rate will decrease by a further 3.4 percentage points, to 40.4 percent, by 2014.

In the projected decline of overall labor force participation during the 2004–14 period, the continuing downward slope of the participation of the 16- to 19-year-old age group—for both sexes, but especially for men—is an important factor. As table 4 shows, the participation rate of teens declined significantly in the early 1990s, increased slightly for several years, and then declined quite steadily from 52.8 percent in 1998 to 43.9 percent in 2004. Table 3 shows that the proportion of the youth population enrolling in school increased considerably from 1994 to 2004. Youths 16 to 19 years especially increased their enrollment, a full 8 percentage points, from 65.6 percent in 1994 to 73.6 percent in 2004.

The increase in school enrollment of teens during 1994–2004, including enrollment in summer school, was sizable. The labor force participation rate of 16- to 24-year-olds enrolled in school in 1994 was 49.6 percent. In 2004, the rate fell to 43.8 percent. The labor force participation rate of 16- to 24-year-olds not enrolled in school in 1994 was 79.3 percent. By 2004, the rate had declined to 78.9 percent. The same trend held for teens not enrolled in

**Chart 2. Youth labor force participation rates, 1980–2004 and projected 2014**



school: their participation rate fell from 69.2 percent in 1994 to 66.8 percent in 2004. Other BLS research also points to the fact that the rise in teen enrollment in high schools and colleges, both in general and in the summer in particular, during the 1994–2004 timeframe contributed to the downward pressure on the teenage, as well as the overall, labor force participation rate.<sup>16</sup>

Another important factor in the participation rate of 16- to 24-year-olds is the relative shares of student and nonstudent populations in that age group. These two populations have different participation rates. The probability of nonstudents participating in the workforce is much higher. Thus, the participation rates of the 20- to 24-year-old age groups are higher than those of the 16- to 19-year-old age groups, because the former have a larger proportion of nonstudents among them and their attachment to the labor force is accordingly stronger.

The rise in school attendance rates during the past couple of decades is shown in table 3. These increasing rates have had a major impact on the labor force participation rate of both the 16- to 19-year-old group and the 20- to 24-year-old group. The projection of school enrollment rates suggests that the higher school enrollments are by no means transitory. More young people than ever are continuing their education, and these young age cohorts are staying in school longer in the hope of pursuing

better paying careers and becoming more marketable and competitive in the labor market. The participation rate of 20- to 24-year-olds, which stood at 75.0 percent in 2004, also is projected to decline, to 73.8 percent, in 2014. On the basis of both their current participation rates and their increasing trend of school attendance, the participation rates of these young groups are not projected to increase anytime soon.

*Age: prime-aged workers 25 to 54 years.* Of all the age groups, the prime-aged workers have the strongest ties to the labor market. As table 5 shows, the participation rate for this group was 83.4 percent in 1994 and 82.8 percent in 2004 and is projected to be at 83.5 percent in 2014.

The labor force participation of women increased drastically in the 1970s and 1980s. An array of social, economic, and demographic changes helped push women's participation rates to record levels. However, during the same timeframe, the men's labor force participation rate for this age group declined. Despite the decreasing participation of men, the increase in the labor force participation of women pushed the overall labor force participation rate upward. In the 1990s, the participation rate for men continued to fall, while the rate for women continued to rise steadily, such that the aggregate labor force grew to its highest level ever.

Both men and women are responsible for the rise in the overall labor force participation rate of this age group over the 2004–14 period. The participation rate of 25- to 54-year-old men is projected to increase slightly from its 2004 level of 90.5 percent, to reach 90.9 percent in 2014. The participation rate of women in the same age group, which was 75.3 percent in 2004, is projected to increase to 76.3 percent in 2014.

The baby boomers have been the main factor responsible for keeping the prime-aged group’s participation rates strong and steady. In 2000, approximately 78 million baby boomers were in the prime-aged group, the oldest 54 years and the youngest 36 years.

In addition, in the same year, the members of the baby-bust generation also were in the prime-aged workforce. The baby-bust population, which was between the ages of 25 and 35 in 2000, has attained more education and possesses more skills, on average, than the group’s earlier cohorts. Because educational attainment is positively linked to high participation in the workforce, the labor force participation rate of the 25- to 54-year-old age group still has room to expand in the next decade.

*Age: workers 55 years and older.* The labor force participation rate declines sharply once the population reaches the 55-years-and-older age groups. The participation rate of the older work-

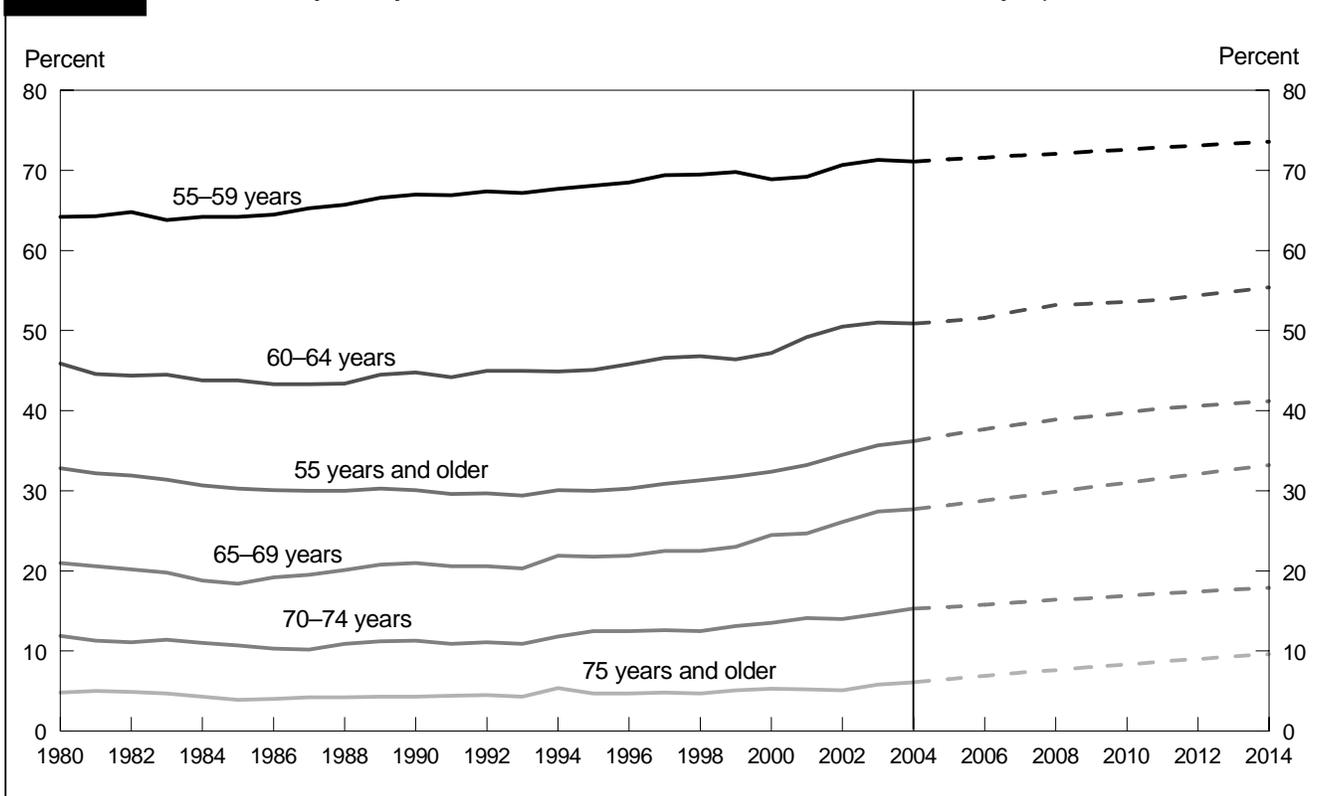
force is approximately half that of the prime-aged workers. Nevertheless, since the mid-1980s, the labor force participation rates of the older age groups have consistently increased, and they also are projected to increase in the 2004–14 period. (See chart 3.)

The participation rate of men 55 years and older stood at 43.2 percent in 2004, an increase of 5.4 percentage points over the 1994 figure. This group’s rate is expected to increase to 46.3 percent in 2014. The participation rate of women 55 years and older, 24.0 percent in 1994, reached 30.5 percent in 2004. The Bureau projects that, in 2014, the rate of this group will have increased by another 6.3 percentage points, to reach 36.8 percent.

The baby boomers’ exit from the prime-aged workforce (with the highest participation rates) into the 55-years-and-older age groups (with much lower participation rates) will ultimately lower the overall labor force participation rate, leading to a slowdown in the growth of the labor force. However, the projected increases in the participation rates of the older workforce during the next decade, coupled with the sheer size of the group, might partially offset the decrease in the overall participation rate.

The willingness of the 55-years-and-older age group to participate in the labor force in the future or to retire is a multidimensional decision. Factors relevant to a mature person’s decision to retire or to continue working include the individual’s

**Chart 3. Labor force participation of the mature workforce, 1980–2004 and projected 2014**



health, retirement income, pensions, savings, and amount of Social Security expected.

In 2000, the full retirement age for receiving the maximum Social Security benefit was raised, and the size of the benefit was lowered for each month a recipient is younger than the normal retirement age. Thus, since 2000, workers must decide either to continue working or to retire earlier with lower benefits. The increase in the full retirement age is one factor leading to the rise in the labor force participation rates of the older age groups.

One of the most important factors in the increase in the labor force participation rate of older workers has been governmental policies and legislation aimed at eliminating mandatory retirement and outlawing age discrimination in the workplace. In addition, the removal of age restrictions and taxes on the work of older individuals in 2000 further caused the labor force participation rate of this group to increase. Yet another factor is that higher income individuals may have more motivation to remain in the labor force, because their opportunity cost of retiring is greater than that of workers who earn a lower income.

*Sex.* Historically, men and women have had a different impact on the overall labor force participation rate. The men's participation rate, which reached its all-time high of 86.6 percent in 1948, has decreased gradually since then, registering 76.4 percent in 1984, 75.1 percent in 1994, 74.8 percent in 2000, and 73.3 percent in 2004. The decline was 1.8 percentage points between 1994 and 2004.

The labor force participation rate of women, which was 32.7 percent in 1948, increased by leaps and bounds to 53.6 percent in 1984 and 58.8 percent in 1994. In 1999, it peaked at 60 percent. Women's participation rates then declined to 59.2 percent in 2004, still an increase of 0.4 percentage point over the 1994–2004 period.

The overall labor force participation rate is formed from the joint contributions of the separate participation rates of men and women. Historically, the overall participation rate has grown due to large increases in the labor force participation of women, specifically during the 1970s and 1980s. The overall participation rate has increased even though the labor force participation rate of men has continually fallen. Among the many factors that have contributed to the growth and development of the U.S. labor force, none has been as important as the rise in the participation of women. From 1970 to 1980, the labor force participation rate of women in the 25- to 34-year age group increased by 20.5 percentage points. Similarly, the 35- to 44-year age group increased its labor force participation rate by 14.4 percentage points. The rapid growth of women's participation rates during the 1980s was unprecedented.<sup>17</sup> In sum, the far larger increases in the labor

force participation rate of women more than compensated for the decreasing participation rates of men during the same timeframes.

Because the men's participation rate has been decreasing, and the women's rate increasing, over the decades, the difference between the participation rates of men and women—the gender gap—has been decreasing steadily. (See table 5.) Still, although the women's participation rate has been increasing historically, it is now increasing at a decreasing rate. In the years to come, there will be only marginal increases in the participation rate of women, because there is little room for participation rate increases among the different age groups of women. Any future increases will not be large enough to compensate for the falling participation rate of men; thus, the overall labor force participation rate is projected to decrease further.

The labor force participation rate of men is projected to be 71.8 percent in 2014, 1.5 percentage points lower than its 2004 rate. The labor force participation rate of women that same year is projected to be 59.7 percent, 0.5 percentage point more than its rate in the previous decade.

*Race and Hispanic origin.* Differences in labor force participation by race and Hispanic origin are usually not as great as those observed by age and sex. However, changes in labor force participation rates over time differ among the various groups. When changes in participation rates are combined with different patterns of population growth, substantial differences in the future labor force result.

Hispanic men have the highest overall labor force participation rate. Hispanic women, by contrast, have the lowest participation in the workforce relative to other racial and ethnic categories. For blacks, the situation is reversed: black men have a lower participation rate than black women. The high labor force participation rate of Hispanic men reflects, in part, their age structure. Hispanics have a younger population relative to other race and ethnic groups, with a greater proportion at the ages of higher labor force participation. Thus, the overall labor force participation rate of each of the race and ethnic categories is a result of the age distribution of the population in each of those categories, as well as the labor force participation rates of the different race and ethnic groups within the various age categories.

In 2014, Hispanics once again will retain their first place in the ranking of the labor force participation rates of the racial groups. Asians are expected to achieve second place, followed by white non-Hispanics and blacks.

## The projected labor force

The labor force experienced its strongest growth in the 1984–94 period, with a 1.4-percent annual growth rate (see table 6), mainly

**Table 6. Civilian labor force by sex, age, race, and Hispanic origin, 1984, 1994, 2004, and projected 2014**

[Numbers in thousands]

Group	Level				Change			Percent change			Percent distribution				Annual growth rate (percent)		
	1984	1994	2004	2014	1984-94	1994-2004	2004-14	1984-94	1994-2004	2004-14	1984	1994	2004	2014	1984-94	1994-2004	2004-14
Total, 16 years and older .....	113,544	131,056	147,401	162,100	17,512	16,345	14,699	15.4	12.5	10.0	100.0	100.0	100.0	100.0	1.4	1.2	1.0
16 to 24 years .....	23,989	21,612	22,268	22,158	-2,377	656	-110	-9.9	3.0	-5	21.1	16.5	15.1	13.7	-1.0	.3	.0
16 to 19 years .....	7,943	7,481	7,114	6,243	-462	-367	-871	-5.8	-4.9	-12.2	7.0	5.7	4.8	3.9	-6	-5	-1.3
20 to 24 years .....	16,046	14,131	15,154	15,915	-1,915	1,023	761	-11.9	7.2	5.0	14.1	10.8	10.3	9.8	-1.3	.7	.5
25 to 54 years .....	74,661	93,898	102,122	105,627	19,237	8,224	3,505	25.8	8.8	3.4	65.8	71.6	69.3	65.2	2.3	.8	.3
25 to 34 years .....	32,723	34,353	32,207	36,755	1,630	-2,146	4,548	5.0	-6.2	14.1	28.8	26.2	21.8	22.7	.5	-6	1.3
35 to 44 years .....	24,933	35,226	36,158	33,345	10,293	932	-2,813	41.3	2.6	-7.8	22.0	26.9	24.5	20.6	3.5	.3	-8
45 to 54 years .....	17,006	24,318	33,758	35,527	7,312	9,440	1,769	43.0	38.8	5.2	15.0	18.6	22.9	21.9	3.6	3.3	.5
55 years and older ..	14,894	15,546	23,011	34,315	652	7,465	11,304	4.4	48.0	49.1	13.1	11.9	15.6	21.2	.4	4.0	4.1
55 to 64 years .....	11,961	11,713	18,013	25,629	-248	6,300	7,616	-2.1	53.8	42.3	10.5	8.9	12.2	15.8	-2	4.4	3.6
65 years and older .....	2,933	3,834	4,998	8,687	901	1,164	3,689	30.7	30.4	73.8	2.6	2.9	3.4	5.4	2.7	2.7	5.7
65 to 74 years ..	2,494	3,140	3,990	6,942	646	850	2,952	25.9	27.1	74.0	2.2	2.4	2.7	4.3	2.3	2.4	5.7
75 years and older .....	498	694	1,007	1,745	196	313	738	39.4	45.1	73.3	.4	.5	.7	1.1	3.4	3.8	5.7
Men, 16 years and older .....	63,835	70,817	78,980	86,194	6,982	8,163	7,214	10.9	11.5	9.1	56.2	54.0	53.6	53.2	1.0	1.1	.9
16 to 24 years .....	12,728	11,435	11,673	11,389	-1,293	238	-284	-10.2	2.1	-2.4	11.2	8.7	7.9	7.0	-1.1	.2	-2
16 to 19 years .....	4,134	3,896	3,616	3,057	-238	-280	-559	-5.8	-7.2	-15.5	3.6	3.0	2.5	1.9	-6	-7	-1.7
20 to 24 years .....	8,594	7,540	8,057	8,332	-1,054	517	275	-12.3	6.9	3.4	7.6	5.8	5.5	5.1	-1.3	.7	.3
25 to 54 years .....	42,302	50,782	60,773	56,988	8,480	9,991	-3,785	20.0	19.7	-6.2	37.3	38.7	41.2	35.2	1.8	1.8	-6
25 to 34 years .....	18,488	18,854	17,798	20,565	366	-1,056	2,767	2.0	-5.6	15.5	16.3	14.4	12.1	12.7	.2	-6	1.5
35 to 44 years .....	14,037	18,966	19,539	18,068	4,929	573	-1,471	35.1	3.0	-7.5	12.4	14.5	13.3	11.1	3.1	.3	-8
45 to 54 years .....	9,776	12,962	17,635	18,355	3,186	4,673	720	32.6	36.1	4.1	8.6	9.9	12.0	11.3	2.9	3.1	.4
55 years and older ..	8,805	8,600	12,334	17,817	-205	3,734	5,483	-2.3	43.4	44.5	7.8	6.6	8.4	11.0	-2	3.7	3.7
55 to 64 years .....	7,050	6,423	9,547	13,022	-627	3,124	3,475	-8.9	48.6	36.4	6.2	4.9	6.5	8.0	-9	4.0	3.2
65 years and older .....	1,755	2,177	2,787	4,795	422	610	2,008	24.0	28.0	72.0	1.5	1.7	1.9	3.0	2.2	2.5	5.6
65 to 74 years ..	1,476	1,763	2,211	3,834	287	448	1,623	19.4	25.4	73.4	1.3	1.3	1.5	2.4	1.8	2.3	5.7
75 years and older .....	279	414	576	961	135	162	385	48.4	39.1	66.8	.2	.3	.4	.6	4.0	3.4	5.3
Women, 16 years and older .....	49,709	60,239	68,421	75,906	10,530	8,182	7,485	21.2	13.6	10.9	43.8	46.0	46.4	46.8	1.9	1.3	1.0
16 to 24 years .....	11,261	10,177	10,595	10,769	-1,084	418	174	-9.6	4.1	1.6	9.9	7.8	7.2	6.6	-1.0	.4	.2
16 to 19 years .....	3,810	3,585	3,498	3,186	-225	-87	-312	-5.9	-2.4	-8.9	3.4	2.7	2.4	2.0	-6	-2	-9
20 to 24 years .....	7,451	6,592	7,097	7,583	-859	505	486	-11.5	7.7	6.8	6.6	5.0	4.8	4.7	-1.2	.7	.7
25 to 54 years .....	32,360	43,116	47,150	48,639	10,756	4,034	1,489	33.2	9.4	3.2	28.5	32.9	32.0	30.0	2.9	.9	.3
25 to 34 years .....	14,234	15,499	14,409	16,190	1,265	-1,090	1,781	8.9	-7.0	12.4	12.5	11.8	9.8	10.0	.9	-7	1.2
35 to 44 years .....	10,896	16,259	16,619	15,277	5,363	360	-1,342	49.2	2.2	-8.1	9.6	12.4	11.3	9.4	4.1	.2	-8
45 to 54 years .....	7,230	11,357	16,123	17,172	4,127	4,766	1,049	57.1	42.0	6.5	6.4	8.7	10.9	10.6	4.6	3.6	.6
55 years and older ..	6,088	6,947	10,676	16,498	859	3,729	5,822	14.1	53.7	54.5	5.4	5.3	7.2	10.2	1.3	4.4	4.4
55 to 64 years .....	4,911	5,289	8,466	12,606	378	3,177	4,140	7.7	60.1	48.9	4.3	4.0	5.7	7.8	.7	4.8	4.1
65 years and older .....	1,177	1,658	2,211	3,892	481	553	1,681	40.9	33.4	76.0	1.0	1.3	1.5	2.4	3.5	2.9	5.8
65 to 74 years ..	1,018	1,377	1,780	3,108	359	403	1,328	35.3	29.3	74.6	.9	1.1	1.2	1.9	3.1	2.6	5.7
75 years and older .....	159	281	431	784	122	150	353	76.7	53.4	81.9	.1	.2	.3	.5	5.9	4.4	6.2
White .....	98,492	111,082	121,086	129,936	12,590	10,004	8,850	12.8	9.0	7.3	86.7	84.8	82.1	80.2	1.2	.9	.7
Men .....	56,062	60,727	65,994	70,335	4,665	5,267	4,341	8.3	8.7	6.6	49.4	46.3	44.8	43.4	.8	.8	.6
Women .....	42,431	50,356	55,092	59,601	7,925	4,736	4,509	18.7	9.4	8.2	37.4	38.4	37.4	36.8	1.7	.9	.8
Black .....	12,033	14,502	16,638	19,434	2,469	2,136	2,796	20.5	14.7	16.8	10.6	11.1	11.3	12.0	1.9	1.4	1.6
Men .....	6,126	7,089	7,773	9,075	963	684	1,302	15.7	9.6	16.8	5.4	5.4	5.3	5.6	1.5	.9	1.6
Women .....	5,907	7,413	8,865	10,359	1,506	1,452	1,494	25.5	19.6	16.9	5.2	5.7	6.0	6.4	2.3	1.8	1.6
Asian <sup>1</sup> .....	3,019	5,472	6,271	8,304	2,456	799	2,033	81.4	14.6	32.4	2.7	4.2	4.3	5.1	6.1	1.4	2.8
Men .....	1,647	3,002	3,396	4,411	1,355	394	1,015	82.3	13.1	29.9	1.5	2.3	2.3	2.7	6.2	1.2	2.6
Women .....	1,369	2,472	2,876	3,893	1,103	404	1,017	80.6	16.3	35.4	1.2	1.9	2.0	2.4	6.1	1.5	3.1
All other groups <sup>2</sup> .....	( <sup>3</sup> )	( <sup>3</sup> )	3,406	4,427	...	...	1,021	...	...	30.0	...	...	2.3	2.7	...	...	2.7
Men .....	( <sup>3</sup> )	( <sup>3</sup> )	1,817	2,373	...	...	556	...	...	30.6	...	...	1.2	1.5	...	...	2.7
Women .....	( <sup>3</sup> )	( <sup>3</sup> )	1,589	2,054	...	...	465	...	...	29.3	...	...	1.1	1.3	...	...	2.6

See footnotes at end of table.

**Table 6. Continued—Civilian labor force by sex, age, race, and Hispanic origin, 1984, 1994, 2004, and projected 2014**

[Numbers in thousands]

Group	Level				Change			Percent change			Percent distribution				Annual growth rate (percent)		
	1984	1994	2004	2014	1984–94	1994–2004	2004–14	1984–94	1994–2004	2004–14	1984	1994	2004	2014	1984–94	1994–2004	2004–14
Hispanic origin ..	7,451	11,975	19,272	25,760	4,524	7,297	6,488	60.7	60.9	33.7	6.6	9.1	13.1	15.9	4.9	4.9	2.9
Men .....	4,563	7,210	11,587	14,921	2,647	4,377	3,334	58.0	60.7	28.8	4.0	5.5	7.9	9.2	4.7	4.9	2.6
Women .....	2,888	4,765	7,685	10,839	1,877	2,920	3,154	65.0	61.3	41.0	2.5	3.6	5.2	6.7	5.1	4.9	3.5
Other than Hispanic origin .....	106,093	119,081	128,129	136,340	12,988	9,048	8,211	12.2	7.6	6.4	93.4	90.9	86.9	84.1	1.2	.7	.6
Men .....	59,272	63,607	67,393	71,273	4,335	3,786	3,880	7.3	6.0	5.8	52.2	48.5	45.7	44.0	.7	.6	.6
Women .....	46,821	55,474	60,736	65,067	8,653	5,262	4,331	18.5	9.5	7.1	41.2	42.3	41.2	40.1	1.7	.9	.7
White Non-Hispanic .....	91,296	100,462	103,202	106,373	9,166	2,740	3,171	10.0	2.7	3.1	80.4	76.7	70.0	65.6	1.0	.3	.3
Men .....	51,650	54,306	55,186	56,615	2,656	880	1,429	5.1	1.6	2.6	45.5	41.4	37.4	34.9	.5	.2	.3
Women .....	39,646	46,157	48,017	49,758	6,511	1,860	1,741	16.4	4.0	3.6	34.9	35.2	32.6	30.7	1.5	.4	.4

<sup>1</sup> There was a disruption in the series for "Asian and other" and "Asian only" as a result of changes in the definition of the race categories in the 2000 census. Data for 1984–94 represent the "Asian and other" race category with 1990 census weights. Data for 2004–14 represent the "Asian only" race category with 2000 census weights.

<sup>2</sup> The "All other groups" category includes (1) those classified as of multiple racial origin and (2) the race categories of (2a) American Indian and Alaska Native or (2b) Native Hawaiian and Other Pacific Islanders.

<sup>3</sup> Data for "All other groups" are not available for 1984 or 1994.

the result of a significant expansion of the overall participation rate. However, the growth of the labor force has declined with each consecutive decade, decreasing to 1.2 percent during the 1994–2004 timeframe. From 2004 to 2014, the various age, sex, race, and ethnic groups will experience different rates of change both in their populations and in their labor force participation rates, leading to changes in the composition of the labor force. The Bureau projects that, during the 2004–14 period, as a result of the gradual decrease in the labor force participation rate, the growth rate of the labor force will slow to 1.0 percent, the same as the growth rate of the population.

*Looking at the labor force by age.* The youth labor force, which consisted of nearly 24 million people in 1984, experienced a considerable drop of 9.9 percentage points and decreased to 21.6 million in 1994. Then, between 1994 and 2004, the group grew by 3.0 percentage points, increasing to 22.3 million. The Bureau projects that, by 2014, the youth labor force will remain about the same in numbers, settling out at 22.2 million that year.

The prime-aged labor force was 74.6 million in 1984 and 93.9 million in 1994, an increase of more than 19 million between those years. In 2004, this age group reached 102.2 million, an increase of more than 8 million. The Bureau projects that, by 2014, the labor force of 25- to 54-year-olds will increase by a further 3.5 million, to 105.6 million.

The labor force of those aged 25 to 34 years dropped by 2.1 million from 1994 to 2004. This age group is in the baby-bust cohort of the population and will further decrease the labor force

of the 35- to 44-year age group during the 2004–14 period. The 25- to 34-year age group is expected to increase by 4.5 million from 2004 to 2014 and will reach nearly 37 million in the latter year.

During the 1984–94 period, the 35- to 44-year age group increased by more than 10 million. Over the next 10 years, the 45- to 54-year age group also increased its labor force population by 9.4 million.

The huge labor force tide in these categories is once again a result of the baby-boom generation, which increases the size of the labor force whichever age category it ends up in. During the 2004–14 timeframe, the 45- to 54-year age group, made up of the younger baby boomers, is expected to increase at a slower rate than it once did.

The annual growth rate of the 55-years-and-older group is projected to be nearly 4 times that of the overall labor force. This age group is anticipated to grow by 11.3 million during the 2004–14 period, the fastest growth among all age groups. Within the group, the 55- to 64-year-olds are expected to add 7.6 million to the labor force, exhibiting an annual growth rate of 3.6 percent. The 65- to 74-year-olds are expected to grow at an annual growth rate of 5.7 percent and reach nearly 7 million in 2014.

*Looking at the labor force by gender.* The labor force growth of women was much faster than that of men in both the 1984–94 and 1994–2004 period. The Bureau projects that, from 2004 to 2014, the labor force growth rate of women will still be slightly higher than that of men. The sizable increase in the growth rate of the women's labor force over the past three decades has greatly

increased the share of women in the labor force and has contributed to the narrowing of the gender gap in labor force participation.

The Bureau projects that the men's labor force will grow by 0.9 percent annually from 2004 to 2014 and reach more than 86 million in the latter year. The women's labor force is expected to have 1.0-percent annual growth over the 2004–14 period and reach nearly 76 million in 2014. This small difference between the projected labor force growth rates of men and women will result in the women's share of the labor force increasing slightly from 46.4 percent to 46.8 percent, while the men's share will decrease from 53.6 percent to 53.2 percent.

*Looking at the labor force by race and ethnicity.* During the 2004–14 period, the U.S. labor force will become yet more diverse. With immigration being the main driver of population growth, and with the high labor force participation rates of the Hispanic and Asian groups, the share of minorities in the workforce will expand more than ever before.

The Hispanic labor force is projected to grow by 2.9 percent annually over the 2004–14 period and reach 25.8 million. Hispanics will constitute nearly 16.0 percent of the labor force in 2014. The Asian labor force is expected to grow at a comparable 2.8 percent, reaching more than 8.0 million in 2014. The black labor force is projected to have an annual growth rate of 1.6 percent from 2004 to 2014 and reach 19.4 million in the latter year.

## Implications of labor force dynamics

The labor force is expected to grow by nearly 15 million persons during the 2004–14 timeframe. This increase masks the more dynamic underlying process of the movement of workers into and out of the labor force. The dynamics of labor force change from 2004 through 2014 emerge from three distinct groups: entrants—those who will be in the labor force in 2014, but who were not in it in 2004; leavers—those who will exit the labor force after 2004 and before 2014; and stayers—those who were in the labor force in 2004 and who will remain through 2014.<sup>18</sup> To the extent that the demographic composition of labor force entrants and leavers between 2004 and 2014 will be different from the composition of those now in the labor force, the 2014 labor force will be different from today's labor force. Thus, the labor force of 2014 may be regarded as consisting of the labor force of 2004, plus the entrants, minus the leavers.

The Bureau projects that, between 2004 and 2014, 39 million workers will enter the labor force and more than 24 million will leave. These figures compare with nearly 33 million entrants and more than 19 million leavers over the 1994–2004 period. (See table 7.) During 1994–2004 and also 2004–14, entrants were more likely to be men. Leavers also were more likely to be

men, because the men's labor force was, and still is, older than the women's.

According to BLS projections, by 2014, 20.8 million men will have joined the 2004 men's labor force of nearly 79 million, and 13.6 million men will have left the labor force, resulting in a labor force of 86 million men in 2014. Similarly, more than 18 million women are expected to enter the labor force over the 2004–14 period, while 10.7 million women are projected to leave.

The largest share of the 2004 labor force—82.1 percent—was made up of whites. The Bureau projects that nearly 75 percent of the population entering the labor force between 2004 and 2014 will be white, a share smaller than the group's 81.6-percent share of entrants over the 1994–2004 period. These proportions are also smaller than whites' share of the workforce, reflecting the group's lower labor force growth. As a result of the nearly 29 million whites entering the labor force and the 20 million leaving over the 2004–14 period, the share of whites in the labor force is projected to be 80.2 percent in 2014, a drop of 4.6 percentage points from 1994. In the 1994–2004 period, white men supplied the most entrants, 46 percent. However, they also supplied most of those leaving, nearly 49 percent.

The slower growth of the white labor force reflects the group's lower birthrates and lower rates of migration to the United States, as well as—and, indeed, especially—the constant decrease in the labor force participation rate of white men compared with other population groups. This combination results in relatively fewer labor force entrants and relatively more labor force leavers—a reflection of the aging of the white male labor force.

Blacks made up 11.3 percent of the labor force, or a total of 16.6 million, in 2004. Blacks are expected to add 5.7 million entrants to the labor force between 2004 and 2014. Even with the nearly 3 million blacks projected to leave the labor force during the 2004–14 period, the group will increase its numbers and is expected to have a 12.0-percent share of the labor force in 2014.

In 2004, Hispanics represented 13 percent of the labor force, with more than 19 million workers. Because of their higher levels of migration, more than 8 million Hispanics are projected to enter the labor force during the 2004–14 period. Reflecting their relatively young age composition, only 1.9 million Hispanics are expected to leave the labor force, so the number of Hispanics in the labor force is projected to grow by more than 6.5 million. By 2014, the Hispanic labor force is anticipated to reach 25.8 million, 6.3 million more than the black labor force.

The Hispanic share of the labor force is expected to grow, a result of the group's overall population growth, which will come about through large numbers of immigrants and higher birthrates in the young Hispanic population. Also, the very high labor force participation rate of Hispanic men is a major contributor to their high labor force growth.

**Table 7. Civilian labor force, 1994, 2004, and projected 2014; and entrants and leavers, 1994–2004 and projected 2004–14**

[Number in thousands]

Group	1994	1994–2004			2004	2004–14			
		Entrants	Leavers	Stayers		Entrants	Leavers	Stayers	2014
<b>Number, 16 years and older</b>									
Total .....	131,056	32,638	19,699	111,357	147,401	39,048	24,352	123,049	162,100
Men .....	70,817	17,633	11,287	59,531	78,980	20,829	13,617	65,363	86,194
Women .....	60,239	15,005	8,412	51,826	68,421	18,219	10,735	57,686	75,906
White .....	111,082	26,634	16,629	94,453	121,086	29,190	20,343	100,743	129,936
Men .....	60,727	14,869	9,601	51,126	65,994	16,073	11,734	54,260	70,335
Women .....	50,355	11,765	7,028	43,327	55,092	13,117	8,609	45,483	59,601
Black .....	14,502	4,379	2,243	12,259	16,638	5,795	2,999	13,639	19,433
Men .....	7,089	1,902	1,218	5,871	7,773	2,683	1,381	6,392	9,075
Women .....	7,413	2,477	1,025	6,388	8,865	3,112	1,618	7,247	10,358
Asian <sup>1</sup> .....	5,472	1,625	827	4,645	6,271	2,697	665	5,606	8,304
Men .....	3,002	862	468	2,534	3,396	1,353	338	3,058	4,411
Women .....	2,470	763	359	2,111	2,875	1,344	327	2,548	3,893
All other groups <sup>2</sup> .....	( <sup>3</sup> )	...	...	...	3,406	1,366	345	3,061	4,427
Men .....	( <sup>3</sup> )	...	...	...	1,817	720	164	1,653	2,373
Women .....	( <sup>3</sup> )	...	...	...	1,589	646	181	1,408	2,054
Hispanic origin .....	11,975	8,283	986	10,989	19,272	8,378	1,892	17,380	25,760
Men .....	7,210	4,952	575	6,635	11,587	4,501	1,169	10,418	14,921
Women .....	4,765	3,331	411	4,354	7,685	3,877	723	6,962	10,839
Other than Hispanic .....	119,081	24,355	18,713	100,368	128,129	30,670	22,460	105,669	136,340
Men .....	63,607	12,681	10,712	52,896	67,393	16,328	12,448	54,945	71,273
Women .....	55,474	11,674	8,001	47,472	60,736	14,342	10,012	50,724	65,067
<b>Share (percent), 16 years and older</b>									
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Men .....	54.0	54.0	57.3	53.5	53.6	53.3	55.9	53.1	53.2
Women .....	46.0	46.0	42.7	46.5	46.4	46.7	44.1	46.9	46.8
White .....	84.8	81.6	84.4	84.8	82.1	74.8	83.5	81.9	80.2
Men .....	46.3	45.6	48.7	45.9	44.8	41.2	48.2	44.1	43.4
Women .....	38.4	36.0	35.7	38.9	37.4	33.6	35.4	37.8	36.8
Black .....	11.1	13.4	11.4	11.0	11.3	14.8	12.3	11.1	12.0
Men .....	5.4	5.8	6.2	5.3	5.3	6.9	5.7	5.2	5.6
Women .....	5.7	7.6	5.2	5.7	6.0	8.0	6.6	5.9	6.4
Asian <sup>1</sup> .....	4.2	5.0	4.2	4.2	4.3	6.9	2.7	4.6	5.1
Men .....	2.3	2.6	2.4	2.3	2.3	3.5	1.4	2.5	2.7
Women .....	1.9	2.3	1.8	1.9	2.0	3.4	1.3	2.1	2.4
All other groups <sup>2</sup> .....	( <sup>3</sup> )	...	...	...	2.3	3.5	1.4	2.5	2.7
Men .....	( <sup>3</sup> )	...	...	...	1.2	1.8	.7	1.3	1.5
Women .....	( <sup>3</sup> )	...	...	...	1.1	1.7	.7	1.1	1.2
Hispanic origin .....	9.1	25.4	5.0	9.9	13.1	21.5	7.8	14.1	15.9
Men .....	5.5	15.2	2.9	6.0	7.9	11.5	4.8	8.5	9.2
Women .....	3.6	10.2	2.1	3.9	5.2	9.9	3.0	5.7	6.7
Other than Hispanic .....	90.9	74.6	95.0	90.1	86.9	78.5	92.2	85.9	84.1
Men .....	48.5	38.9	54.4	47.5	45.7	41.8	51.1	44.7	44.0
Women .....	42.3	35.8	40.6	42.6	41.2	36.7	41.1	41.2	40.1

<sup>1</sup> There was a disruption in the series for "Asian and other" and "Asian only" as a result of changes in the definition of the race categories in the 2000 census. Data for 1984–94 represent the "Asian and other" race category with 1990 census weights. Data for 2004–14 represent the "Asian only" race category with 2000 census weights.

<sup>2</sup> The "All other groups" category includes (1) those classed as of multiple racial origin and (2) the race categories of (2a) American Indian and Alaska Native or (2b) Native Hawaiian and Other Pacific Islanders.

<sup>3</sup> Data for "All other groups" are not available for 1984 or 1994.

In 2004, the Asian labor force totaled 6 million. About 2.7 million members of this group are expected to enter the labor force over the 2004–14 period. During the same timeframe, the number of leavers in the group will be small, so the Asian labor force is expected to number more than 8 million by 2014.

### Implications of an aging labor force

*Median age.* Populations age when their life expectancies increase or their fertility rates decrease over time, as has been happening in the United States. The median age is one of the ways by which the age of the population or that of the labor force can be measured. The median age of the labor force peaked at 40.6 years in 1962. As the baby-boom generation entered the labor force, the median age of the labor force decreased steadily until 1980. Since then, as the baby boomers have aged, so has the labor force. However, the combined effects of increasing longevity and decreasing fertility over time are changing the age structure of the population and labor force toward higher age groups. Even after all the baby boomers have exited the labor force, the increase in life expectancy and decrease in fertility rates will result in an aging of both the population and the labor force. This in turn will raise the median age of the labor force, causing it to reach unprecedented levels by 2014. (See table 8.)

The growth of the older population, combined with the increase in the group’s participation rate, will result in a projected increase of 1.3 years in the median age of the total labor force in 2014. Historically, the white labor force—especially the white non-Hispanic participants—have been older than the rest of the labor force. This disparity is projected to continue into 2014.

Compared with the white labor force, the black and, especially, the Hispanic segments of the labor force are younger and have higher fertility rates. As a result, young black and Hispanic workers—those between 16 and 24 years—are expected to

increase their shares of the labor force. Historically, black participants in the labor force have been about 1.5 to 3.0 years younger than the overall labor force, a gap that is projected to continue through 2014.

Hispanic participants generally have been younger due to their higher levels of migration at younger ages. Hispanics are projected to continue having a lower median age than that of the overall labor force, but to age from a median of 35.0 years in 2004 to 37.4 years in 2014, reflecting the aging of earlier immigrants. Overall, the median ages of all racial and Hispanic groups are expected to increase during the 2004–14 period. In 2004, the median age of Asian labor force participants was 1.0 year less than that of the overall labor force; the difference is expected to decrease to 0.4 year by 2014.

*Age composition.* Another way to measure the age of the labor force is by examining its age composition and structure. The labor force is getting older if the proportion of the 55-years-and-older age groups is increasing or if the share of those under 25 years is decreasing. Table 9 presents such information for the population and labor force aged 16 years and older, by sex and age groups. From 1994 to 2004, the proportion of those 55 years and older, both in the population and in the labor force, increased. The group’s proportion in the labor force is expected to rise to 21.2 percent by 2014. Also, during 1984–2004, the proportion of those 45 years and older increased both in the population and in the labor force. The increase in the share of those 45 years and older in the labor force and in the population is projected to continue in the future. The proportion of persons 16 to 24 years old in the labor force decreased over the 1984–2004 period and is expected to decline further by 2014. On the basis of both median age and age composition, the population and the labor force are getting older.

**Table 8. Median age of the labor force by sex, race, and ethnic origin, 1984, 1994, 2004, and projected 2014**

Group	1984	1994	2004	2014
Total .....	35.0	37.7	40.3	41.6
Men .....	35.5	37.7	40.1	41.2
Women .....	34.6	37.7	40.5	42.2
White .....	35.3	38.0	40.8	42.3
Black .....	32.9	36.0	38.6	38.6
Asian <sup>1</sup> .....	34.9	36.6	39.3	41.2
Hispanic origin .....	30.7	33.2	35.0	37.4
White non-Hispanic .....	35.6	38.5	41.8	43.8

<sup>1</sup> There was a disruption in the series for “Asian and other” and “Asian only” as a result of changes in the definition of the race categories in the 2000 census. Data for 1984–94 represent the “Asian and other” race category

with 1990 census weights. Data for 2004–14 represent the “Asian only” race category with 2000 census weights.

*Economic dependency.* The economic dependency ratio is the number of persons in the total population (including the Armed Forces and children) who are *not* in the labor force, per 100 of those who are in the labor force. Table 10 shows the economic dependency ratio by age for selected years from 1975 to 2004 and projected for 2014.

For every 100 persons in the 2004 labor force, about 98 were not in the labor force. Of those 98, 44 were children, 33 were 16 to 64 years of age, and 21 were 65 years and older. In 1984, for the first time ever, more Americans were in the labor force than were not. This trend is expected to continue throughout the entire projection period, with the estimated number of persons not working falling to 96 per 100 workers in 2014.

Over the last three decades, as the number of births diminished and the baby boomers moved to ages older than 16, the economic dependency ratio decreased. Most of the 28-percentage-point decrease for the total population between 1975 and 2004 stemmed from the decline in the number of births. The portion of the ratio attributed to children is projected to continue its downward slide. The 16- to 64-year-old age group also experienced a decrease, of 11 points, from 44 per hundred in the labor force in 1975 to 33 per hundred in 2004. The economic dependency ratio for this group is projected to continue decreasing and reach 31 in 2014.

The part of the dependency ratio that had been steadily increasing is the portion attributable to those 65 years and older. In 1975, this age group constituted the smallest part of the dependency ratio. During the 1975–94 period, the dependency ratio of the group grew by 2 percentage points. In 2004, it fell to 21 per 100, representing the entry of the birth-dearth cohort of the 1930s into the 65-and-older group. The dependency of the 65-years-and-older group, which is projected to be the smallest group in 2014, is expected to rise slightly to 22 that year.

OVER THE 2004–14 PERIOD, changes in the growth and composition of the population, in addition to the different growth patterns in the labor force participation rate among the various age, sex, race, and ethnic groups, will result in alterations in the composition and growth rate of the various segments of the labor force. The annual growth rate of the labor force will slow to 1.0 percent. The U.S. labor force in 2014 is projected to be 162.1 million, an increase of nearly 15.0 million over the 2004 level.

In 2014, the labor force is projected to be older and to become more diverse. During the past several decades, a combination of decreasing fertility rates and increasing life expectancies has aged the U.S. population and labor force. The median age of the labor force is expected to rise over the projection period.

**Table 9. Distribution of the population and labor force by age and sex, 1984, 1994, 2004, and projected 2014**

Group	Labor force				Population			
	1984	1994	2004	2014	1984	1994	2004	2014
Total, 16 years and older .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16 to 24 years .....	21.1	16.5	15.1	13.7	20.1	16.5	16.3	15.2
25 to 34 years .....	28.8	26.2	21.8	22.7	22.7	21.0	17.4	17.4
35 to 44 years .....	22.0	26.9	24.5	20.6	17.2	21.1	19.4	16.2
45 years and older .....	28.1	30.4	38.5	43.1	40.1	41.4	46.9	51.2
55 years and older .....	13.1	11.9	15.6	21.2	27.5	26.2	28.4	33.7
65 years and older .....	2.6	2.9	3.4	5.4	15.0	15.8	15.5	17.8
75 years and older .....	.4	.5	.7	1.1	5.8	6.5	7.4	7.4
Men, 16 years and older .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16 to 24 years .....	19.9	16.1	14.8	13.2	20.9	17.3	17.0	15.7
25 to 34 years .....	29.0	26.6	22.5	23.9	23.4	21.6	18.0	18.0
35 to 44 years .....	22.0	26.8	24.7	21.0	17.6	21.7	19.7	16.6
45 years and older .....	29.1	30.4	37.9	42.0	38.0	39.5	45.2	49.7
55 years and older .....	13.8	12.1	15.6	20.7	25.2	24.1	26.5	32.0
65 years and older .....	2.7	3.1	3.5	5.6	12.9	13.7	13.6	16.3
75 years and older .....	.4	.6	.7	1.1	4.4	5.1	5.9	6.1
Women, 16 years and older .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16 to 24 years .....	22.7	16.9	15.5	14.2	19.3	15.9	15.6	14.6
25 to 34 years .....	28.6	25.7	21.1	21.3	22.0	20.4	16.9	16.9
35 to 44 years .....	21.9	27.0	24.3	20.1	16.7	20.6	19.0	15.9
45 years and older .....	26.8	30.4	39.2	44.4	41.9	43.1	48.5	52.6
55 years and older .....	12.2	11.5	15.6	21.7	29.5	28.2	30.2	35.3
65 years and older .....	2.4	2.8	3.2	5.1	16.9	17.7	17.2	19.3
75 years and older .....	.3	.5	.6	1.0	6.9	7.8	8.7	8.6

**Table 10. Economic dependency ratio by age, 1975–2004 and projected 2014**

[Per hundred in the labor force]

Group	1975	1984	1994	2004	2014
Total population .....	126.3	98.3	99.2	98.3	96.3
Under 16 years .....	61.4	45.8	47.7	44.1	42.1
16 to 64 years .....	44.2	30.5	28.8	33.0	31.5
65 years and older .....	20.7	22.1	22.7	21.2	22.6

Hispanics and Asians are projected to continue their high growth rates in the labor force. Hispanics will continue to be the largest minority group in the labor force. The participation rate of Hispanics will continue to increase.

A combination of structural, cyclical, and demographic/compositional factors will affect the detailed labor force participation rates of the various age, sex, race, and ethnic groups, resulting in changes in the future overall labor force participation rate.

In its past labor force projections, the Bureau has stated, “The participation rates of women are projected to increase

and those of men are expected to decrease. The net effect was projected to be an increase in the overall participation rate during the projection period.”<sup>19</sup> Although this trend may still hold to a certain extent in the future, the rate of change in the women’s participation rate appears to have peaked, and any future increases in the women’s labor force participation rate are expected to be small relative to the rapid changes of the last 50 years. In addition, the aging of the baby boomers over the next decade will decrease the overall labor force participation rate and, ultimately, slow the growth of the labor force. □

## Notes

<sup>1</sup> The civilian labor force consists of employed and unemployed persons in the civilian noninstitutional population.

<sup>2</sup> The civilian labor force participation rate is defined as the proportion of the civilian noninstitutional population that is in the labor force.

<sup>3</sup> See Michael W. Horrigan, “Employment projections to 2012: concept and context,” *Monthly Labor Review*, February 2004, pp. 3–22.

<sup>4</sup> All of the information on the Census Bureau’s interim projections is from the Census Projections home page, under the label of “Interim Projections consistent with Census 2000”; on the Internet at <http://www.census.gov/population/www/projections/popproj.html>.

<sup>5</sup> Census Bureau information; on the Internet at <http://www.census.gov/ipc/www/usinterimproj/ibsummeth.html>.

<sup>6</sup> John Long, *The Relative Effects of Fertility, Mortality and Immigration on Projected Population Age Structure* (Bureau of the Census, 1989).

<sup>7</sup> Howard N Fullerton, Jr., “New labor force projections, spanning 1988 to 2000,” *Monthly Labor Review*, November 1989, pp. 3–12.

<sup>8</sup> According to the Census Bureau, the fertility assumptions for this round of interim projections are a weighted average combining 0.921 of the middle-fertility series with 0.079 of the low-fertility series developed for the original projections. In 1999, the total fertility rate was 2,048 births per 1,000 women. Census Bureau projections indicate that, during the next 10 years, the total fertility rate will range from 2,083.2 in 2005 to 2,134.8 in 2015.

<sup>9</sup> For the current round of population projections, according to the Census Bureau’s assumptions, average life expectancy at birth will increase from 77.82 in 2005 to 79.21 in 2015.

<sup>10</sup> On the basis of the Census Bureau’s interim projections, annual migration from these source countries to the United States is projected

to be at the 926.4 thousand level in 2005, decrease to around 779.2 thousand in 2011, and then again continue its increasing trend to 801.6 thousand in 2015.

<sup>11</sup> Abraham T. Mosisa, “The role of foreign-born workers in the U.S. economy,” *Monthly Labor Review*, May 2002, pp. 3–14.

<sup>12</sup> *Participation in the World of Work*, Bulletin KILM 1-ILO (Geneva, International Labor Organization, no date); on the Internet at <http://www.ilo.org/public/english/employment/gems/eoo/download/kilm01.pdf>.

<sup>13</sup> Steven Hipple, “Labor force during recent labor market downturns,” *Issues in Labor Statistics*, Summary 03–03 (Bureau of Labor Statistics, September 2003).

<sup>14</sup> Katie Kirkland, “Declining teen labor force participation,” *Issues in Labor Statistics*, Summary 02–06 (Bureau of Labor Statistics, September 2002).

<sup>15</sup> Betty Su, “The U.S. economy to 2012: signs of growth,” *Monthly Labor Review*, February 2004, pp. 23–36.

<sup>16</sup> Hipple, “Labor force during recent labor market downturns.”

<sup>17</sup> Mitra Toossi, “A century of change: the U.S labor force, 1950–2050,” *Monthly Labor Review*, May 2002, pp. 15–28.

<sup>18</sup> Entrants and leavers are computed by comparing the labor force numbers for birth cohorts at two points in time. If the number at the second point is larger, the difference is termed the “entrants.” If the number at the second point is smaller, the difference is the “leavers.” These concepts understate the numbers likely to enter and leave the labor force over the period covered by the two points in time, but are still a valid comparison. For a further discussion of the method involved, see Howard N Fullerton, Jr., “Measuring Rates of Labor Force Dynamics,” *Proceedings of the Social Statistics Section* (Alexandria, VA, American Statistical Association, 1993).

<sup>19</sup> Howard N Fullerton, Jr., “The 2005 labor force: growing, but slowly,” *Monthly Labor Review*, November 1995, pp. 29–44.