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LABOR FORCE PROJECTIONS BY COLOR, 1970-80. SPECIAL LABOR
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THE PROJECTIONS ARE BASED ON BUREAU OF THE CENSUS UNPUBLISHED POPULATION PROJECTIONS BY COLOR AND ON THE ASSUMPTIONS THAT PAST TRENDS IN LABOR FORCE PARTICIPATION RATES WILL CONTINUE, THAT THE SIZE OF THE ARMED FORCES WILL NOT CHANGE SIGNIFICANTLY, AND THAT THE ECONOMY WILL OPERATE AT RELATIVELY HIGH LEVELS CONSISTENT WITH AN UNEMPLOYMENT RATE OF ABOUT 4 PERCENT. RECOGNIZING THE UNCERTAINTY OF THE PROJECTIONS, IT IS ESTIMATED THAT BETWEEN 1965 AND 1980 -- (1) THE TOTAL NONWHITE LABOR FORCE WILL HAVE RISEN BY 41 PERCENT COMPARED WITH ONLY A 28 PERCENT INCREASE IN WHITE WORKERS, (2) THE NUMBER OF NONWHITE WORKERS WILL INCREASE FROM 8.7 MILLION TO 12.3 MILLION WHILE WHITES WILL INCREASE FROM 69.7 MILLION TO 89.1 MILLION, (3) THE EXPECTED GROWTH OF THE TOTAL POPULATION ACCOUNTS FOR 86 PERCENT OF THE PROJECTED LABOR FORCE INCREASE, (4) THE NUMBER OF YOUNG, AGES 14 TO 24, NONWHITE WORKERS WILL INCREASE BY NEARLY 30 PERCENT AND YOUNG WHITE WORKERS BY 20 PERCENT, AND (5) AMONG WORKERS AGED 25 TO 54, THE NUMBER OF WHITE WOMEN WILL INCREASE BY ABOUT 31 PERCENT, NONWHITE BY 27 PERCENT, NONWHITE MEN BY 3 PERCENT, AND WHITE MEN WILL NOT INCREASE. FOR BOTH COLOR GROUPS, BOTH SEXES, AND ALL AGE GROUPS, ACTUAL FIGURES FOR THE 1960 AND 1965 AND PROJECTED FIGURES FOR THE 1970, 1975, AND 1980 POPULATION, LABOR FORCE, AND LABOR FORCE PARTICIPATION RATES ARE GIVEN. THIS DOCUMENT APPEARED IN "MONTHLY LABOR REVIEW," SEPTEMBER 1966, AND IS AVAILABLE FROM U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS, WASHINGTON, D.C. 20210. (ET)

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SPECIAL LABOR FORCE REPORT NO. 73

LABOR FORCE PROJECTIONS BY COLOR, 1970-80

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UNITED STATES DEPARTMENT OF LABOR W. Willard Wirtz, Secretary
BUREAU OF LABOR STATISTICS • Arthur M. Ross, Commissioner

Labor Force Projections, by Color, 1970-80

SOPHIA COOPER AND DENIS F. JOHNSTON*

BETWEEN 1965 and 1980, the relative increase in the number of nonwhite workers is expected to be much greater than that of the white labor force. By 1980, the total nonwhite labor force will have risen by 41 percent compared with only a 28-percent increase in white workers.¹ This projected difference in growth rates is primarily attributable to the expected greater rate of population growth among nonwhite youth. Judgments as to the probable effects of changing social and economic conditions in reducing present differences between white and nonwhite labor force participation rates were also included in these estimations.

The number of nonwhite workers is expected to increase from 8.7 million in 1965 to 12.3 million during the next 15 years; the number of white workers may increase from 69.7 million to 89.1 million by 1980. (See table 1.)

The expected growth of the total population accounts for 86 percent of the projected 1965-80 increase in the labor force. Changes in the labor force participation rates of white men and nonwhite women over the projected period will be minor; for nonwhite men, the assumed changes are expected to contribute about 7 percent to their projected labor force growth. The remaining group—white women—is the only one in which the projection is substantially affected by assumed changes in labor force participation rates. They account for about 38 percent.

Before examining these projections further, a few precautions should be noted. In the first place, recent legislation aimed at providing equality of opportunity and reducing the effects of past disparities in education will, in the long run, have more effect on the social and economic status of nonwhites than whites. But it is not easy to esti-

mate this effect on future labor force activity of nonwhite men and women.

Second, the reported rates of labor force participation for most of the age and sex groups of the nonwhite population show greater changes than those of the whites. Much of this fluctuation can be attributed to the greater sampling variability associated with the smaller numbers of nonwhites, but it is also likely that sensitivity to changes in the economic situation may be disproportionately strong among nonwhite workers.

Third, these projections have not been developed in the same detail as the overall National projections issued in 1965. A breakdown by color of past trends and projections of school enrollment of persons under 25 years of age, and of marriage and fertility of women in the child-bearing ages, was not available in a form useful in developing detailed projections of labor force participation rates.

Fourth, the size and age distributions of the projected nonwhite population are subject to greater uncertainty than those of the whites, in view of the evidence of serious undercounting, especially of adult nonwhite males. Also, any bias which may exist in age reporting is carried forward in the projection and is therefore reflected in the projected nonwhite labor force.²

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¹ The projections are based upon unpublished population projections by color which are consistent with Series B in "Projections of the Population of the United States, by Age and Sex: 1964 to 1985," *Current Population Reports*, Series P-25, No. 286 (U.S. Bureau of the Census, 1964).

Material presented here is consistent with the projections for all classes published in 1965. (See Sophia Cooper and Denis F. Johnston, "Labor Force Projections for 1970-80," *Monthly Labor Review*, February 1965, pp. 129-140, reprinted as Special Labor Force Report No. 49.)

² The magnitude of the undercount of the nonwhite population in the 1960 Census is itself uncertain. One estimate yields an undercount of 8 percent for nonwhite males and about 4 percent for nonwhite females. According to this estimate, the male undercount was as high as 14 percent in the 20- to 44-year-old group. See Donald J. Bogue et al, "A New Estimate of the Negro Population and Negro Vital Rates in the United States, 1930-60," *Demography* Vol. 1, No. 1, 1964, pp. 339-358. For a critique of this estimating procedure, see Melvin Zelnik, "An Evaluation of New Estimates of the Negro Population," *Demography*, Vol. 2, 1965, pp. 630-639.

TABLE 1. POPULATION, TOTAL LABOR FORCE, AND LABOR FORCE PARTICIPATION RATES, BY AGE, SEX, AND COLOR, ACTUAL 1960 AND 1965, AND PROJECTED 1970, 1975, AND 1980

Age, sex, and color	Total population, July 1 (thousands)					Total labor force, annual averages (thousands)					Labor force participation rates annual averages (percent)				
	Actual		Projected			Actual		Projected			Actual		Projected		
	1960	1965	1970	1975	1980	1960	1965	1970	1975	1980	1960	1965	1970	1975	1980
TOTAL															
<i>Both sexes</i>															
14 years and over.....	127,327	138,261	149,691	162,046	173,908	73,081	78,357	85,999	93,646	101,408	57.4	56.7	57.4	57.8	58.3
<i>Male</i>															
14 years and over.....	62,216	67,205	72,539	78,408	84,123	49,563	51,705	55,844	60,281	64,981	79.7	76.9	77.0	76.9	77.2
14 to 19 years.....	8,194	10,478	11,641	12,583	12,809	3,792	4,591	5,164	5,589	5,744	46.3	43.8	44.4	44.4	44.8
20 to 24 years.....	5,553	6,872	8,321	9,609	10,394	4,939	5,926	7,466	8,331	9,065	88.9	83.2	86.6	86.7	87.2
25 to 34 years.....	11,347	11,091	12,540	15,557	18,285	10,940	10,653	12,062	14,966	17,590	96.4	96.0	96.2	96.2	96.2
35 to 44 years.....	11,878	11,961	11,303	11,068	12,496	11,454	11,504	10,929	10,703	12,084	96.4	96.2	96.7	96.7	96.7
45 to 54 years.....	10,148	10,741	11,289	11,379	10,757	9,568	10,131	10,724	10,809	10,219	94.3	94.3	95.0	95.0	95.0
55 to 64 years.....	7,564	8,131	8,759	9,287	9,776	6,445	6,768	7,388	7,795	8,185	85.2	83.2	84.3	83.9	83.7
65 years and over.....	7,530	7,931	8,385	8,923	9,606	2,425	2,131	2,108	2,087	2,096	32.2	26.9	25.1	23.4	21.8
<i>Female</i>															
14 years and over.....	65,111	71,056	77,152	83,638	89,785	23,518	26,653	30,155	33,365	36,427	36.1	37.5	39.1	39.9	40.6
14 to 19 years.....	7,989	10,159	11,299	12,219	12,357	2,408	2,940	3,408	3,739	3,832	30.1	28.9	30.2	30.6	31.0
20 to 24 years.....	5,547	6,795	8,483	9,446	10,230	2,558	3,375	4,267	4,865	5,380	46.1	49.7	50.3	51.5	52.6
25 to 34 years.....	11,605	11,267	12,680	15,582	18,232	4,159	4,336	4,893	6,124	7,347	35.8	38.5	38.6	39.3	40.3
35 to 44 years.....	12,348	12,470	11,694	11,391	12,771	5,325	5,724	5,555	5,582	6,386	43.1	45.9	47.5	49.0	50.0
45 to 54 years.....	10,438	11,303	12,071	12,195	11,437	5,150	5,714	6,675	7,024	6,805	49.3	50.6	55.3	57.6	59.5
55 to 64 years.....	8,070	8,835	9,741	10,558	11,279	2,964	3,587	4,267	4,826	5,337	36.7	40.6	43.8	45.7	47.3
65 years and over.....	9,115	10,225	11,186	12,248	13,481	954	976	1,091	1,205	1,340	10.5	9.5	9.8	9.8	9.9
WHITE															
<i>Both sexes</i>															
14 years and over.....	114,088	123,508	133,252	143,574	153,216	65,057	69,678	76,272	82,714	89,137	57.0	56.4	57.2	57.6	58.2
<i>Male</i>															
14 years and over.....	55,854	60,150	64,713	69,625	74,275	44,666	46,531	50,027	53,737	57,596	80.0	77.4	77.3	77.2	77.5
14 to 19 years.....	7,209	9,151	10,081	10,814	10,856	3,348	4,067	4,492	4,824	4,896	46.4	44.4	44.6	44.6	45.1
20 to 24 years.....	4,905	6,062	7,599	8,370	8,998	4,370	5,223	6,592	7,278	7,876	89.1	86.2	86.7	87.0	87.5
25 to 34 years.....	10,092	9,833	11,074	13,720	16,000	9,777	9,503	10,711	13,269	15,474	96.9	96.6	96.7	96.7	96.7
35 to 44 years.....	10,675	10,723	10,111	9,843	11,082	10,346	10,379	9,821	9,561	10,763	96.9	96.8	97.1	97.1	97.1
45 to 54 years.....	9,166	9,709	10,194	10,252	9,662	8,690	9,209	9,725	9,772	9,205	94.8	94.8	95.4	95.3	95.3
55 to 64 years.....	6,874	7,382	7,965	8,450	8,882	5,892	6,192	6,749	7,116	7,455	85.7	83.9	84.7	84.2	83.9
65 years and over.....	6,933	7,290	7,689	8,176	8,795	2,243	1,958	1,937	1,917	1,927	32.4	26.9	25.2	23.4	21.9
<i>Female</i>															
14 years and over.....	58,234	63,358	68,539	73,949	78,941	20,391	23,147	26,245	28,977	31,541	35.0	36.5	38.3	39.2	40.0
14 to 19 years.....	6,993	8,830	9,703	10,408	10,377	2,153	2,655	3,004	3,254	3,283	30.8	30.1	31.0	31.3	31.6
20 to 24 years.....	4,842	5,964	7,402	8,133	8,750	2,215	2,920	3,695	4,174	4,604	45.7	49.0	49.9	51.3	52.6
25 to 34 years.....	10,172	9,850	11,131	13,664	15,855	3,451	3,575	4,084	5,148	6,155	33.9	36.3	36.7	37.7	38.9
35 to 44 years.....	11,017	11,047	10,285	9,996	11,249	4,537	4,880	4,744	4,779	5,510	41.2	44.2	46.1	47.8	49.0
45 to 54 years.....	9,404	10,163	10,324	10,865	10,114	4,532	5,034	5,891	6,178	5,960	48.2	49.5	54.4	56.9	58.9
55 to 64 years.....	7,357	8,040	8,856	9,577	10,200	2,633	3,203	3,833	4,342	4,802	35.8	39.8	43.3	45.3	47.1
65 years and over.....	8,449	9,465	10,338	11,306	12,416	870	879	994	1,102	1,227	10.3	9.3	9.6	9.7	9.9
NONWHITE															
<i>Both sexes</i>															
14 years and over.....	13,239	14,753	16,440	18,472	20,694	8,024	8,680	9,725	10,931	12,273	60.6	58.8	59.2	59.2	59.3
<i>Male</i>															
14 years and over.....	6,361	7,000	7,825	8,782	9,848	4,897	5,174	5,815	6,543	7,387	77.0	73.3	74.3	74.5	75.0
14 to 19 years.....	985	1,320	1,560	1,770	1,953	444	525	672	765	848	45.1	39.5	43.1	43.2	43.4
20 to 24 years.....	648	810	1,022	1,239	1,396	569	702	874	1,053	1,189	87.8	86.7	85.5	85.0	85.2
25 to 34 years.....	1,255	1,258	1,466	1,837	2,285	1,163	1,150	1,351	1,697	2,116	92.7	91.4	92.2	92.4	92.6
35 to 44 years.....	1,203	1,239	1,192	1,225	1,414	1,108	1,126	1,109	1,142	1,321	92.1	90.9	93.0	93.2	93.4
45 to 54 years.....	982	1,031	1,095	1,127	1,095	878	923	999	1,037	1,014	89.4	89.5	91.2	92.0	92.6
55 to 64 years.....	690	749	794	837	894	553	575	639	679	730	80.1	78.8	80.5	81.1	81.7
65 years and over.....	598	641	696	747	811	182	173	171	170	169	30.4	27.0	24.6	22.8	20.8
<i>Female</i>															
14 years and over.....	6,878	7,698	8,615	9,690	10,846	3,127	3,506	3,910	4,388	4,886	45.5	45.6	45.4	45.3	45.0
14 to 19 years.....	996	1,329	1,596	1,811	1,980	255	286	402	485	549	25.6	21.5	25.2	26.8	27.7
20 to 24 years.....	705	832	1,081	1,313	1,480	343	455	572	691	776	48.7	54.7	52.9	52.6	52.4
25 to 34 years.....	1,433	1,418	1,549	1,918	2,397	708	762	810	976	1,192	49.4	53.7	52.3	50.9	49.7
35 to 44 years.....	1,331	1,423	1,409	1,395	1,522	788	844	811	803	876	59.2	59.3	57.6	57.6	57.6
45 to 54 years.....	1,034	1,141	1,247	1,330	1,323	618	680	784	846	845	59.8	59.6	62.9	63.6	63.9
55 to 64 years.....	713	795	885	981	1,079	331	383	434	484	535	46.4	48.2	49.0	49.3	49.6
65 years and over.....	666	760	848	942	1,065	84	96	97	103	113	12.6	12.6	11.4	10.9	10.6

Finally, the projection of labor force by color is subject to the same uncertainties as the projection of total labor force,³ the primary one being that they are based on judgments as to future changes in labor force participation rates. These judgments are that past trends will continue, that there will be no significant change in the size of the Armed Forces, and that the economy will operate at relatively high levels consistent with an unemployment rate of about 4 percent.

In view of the lack of precision that is necessarily introduced into the projections by the above factors, neither a mathematical nor a judgmental approach can be relied upon to yield a definitive picture of the future growth of the nonwhite labor force. Consequently, divergencies of actual labor force from these projected levels should not be interpreted as a deficiency in the performance of the economy.

Younger Workers

Nearly half of the projected increase in the entire labor force between 1965 and 1970 (3.5 out of 7.6 million) will occur among workers 14 to 24 years old (table 2). Young nonwhite workers are expected to add a disproportionate share to this rise, with an increase of nearly 30 percent compared with a 20-percent increase in young white workers (chart 1).

After 1970, the increase among young workers will not be as great as it is at present. Between 1970 and 1980, about 3.7 out of the 15.4 million in total labor force increase will occur among workers under 25 years of age, which means that young workers will maintain their share of the labor force in 1970, or about one-fourth of the total (table 3).

Younger nonwhite workers (14 to 24 years) may show about twice the rate of increase of white youths during the 1970 decade. Their number is projected to increase by nearly a third between 1970 and 1980, while the number of white workers 14 to 24 may increase by only 16 percent.

³ Sophia Cooper and Denis Johnston, *op cit.*, p. 134.

⁴ Postwar trends in annual average civilian labor force participation rates of selected population groups are shown on chart 2.

⁵ The fertility differentials between whites and nonwhites since 1920 are summarized in Anders S. Lunde, "White-Nonwhite Fertility Differentials in the United States," U.S. Department of Health, Education and Welfare, *Indicators*, September 1965, pp. 23-38.

These projected differences in labor force growth among younger whites and nonwhites are explained by the interaction of several factors. Among these, the most important are the differential rates of fertility during the period since World War II, trends in school enrollment, and differences between the two color groups in labor force participation rates.⁴ The fertility rate of nonwhites has been at least one-third higher than that of the whites during most of the years since World War II. This difference implies that a relatively greater number of nonwhite persons will be moving into the labor force during the rest of the 1960's.⁵ In recent years, the actual labor force rates of nonwhite teenagers, particularly the girls, have been considerably lower than those of white teenagers, and have been declining much more rapidly. The expected increases in school enrollment of nonwhite teenagers will serve as a dampener to this group's labor force participation rates. On the other hand, part of the recent declines in the rates can be explained by the failure of some nonwhite teenagers to find entry-level jobs, a condition which should not persist under the assumptions of a high level of aggregate demand. On balance, therefore, labor force growth is expected to be greater proportionally among young nonwhite workers than among white workers. By 1980, nonwhite youths are expected to account for 14 percent of the total labor force under 25 years of age, up from 12.3 percent in 1960.

Among both white and nonwhite groups nearly 2 out of every 5 young workers are women, and this proportion is expected to remain fairly constant to 1980.

Adult Women

Between 1965 and 1980, the number of white working women 25 to 54 years old may increase by about 31 percent, compared with an increase of 27 percent among nonwhite women in this age group. The expectation is that rates of these two groups will tend to converge. For example, the projected increase in the labor force rate of white women 45 to 54 years old is from 50 percent in 1965 to 59 percent in 1980, while the rate for nonwhite women rises from 60 percent to 64 percent during the next 15 years (chart 2).

One reason for assuming this convergence is that the labor force rates for adult nonwhite women

TABLE 2. CHANGES IN TOTAL LABOR FORCE, BY AGE, SEX, AND COLOR, ACTUAL 1965 TO PROJECTED 1970, 1975, AND 1980
 [Numbers in thousands]

Age, sex, and color	Total labor force				Change					
	Actual 1965	Projected			1965 to 1970		1970 to 1975		1975 to 1980	
		1970	1975	1980	Number	Percent	Number	Percent	Number	Percent
TOTAL										
<i>Both sexes</i>										
14 years and over.....	78,357	85,999	93,646	101,408	7,642	9.8	7,647	8.9	7,762	8.7
14 to 24 years.....	16,832	20,305	22,524	24,021	3,473	20.6	2,219	10.9	1,497	6.6
25 to 44 years.....	32,217	33,439	37,375	43,407	1,222	3.8	3,936	11.8	6,032	16.1
45 years and over.....	29,307	32,253	33,747	33,982	2,946	10.1	1,494	4.6	235	.7
45 to 64 years.....	26,200	29,054	30,454	30,546	2,854	10.9	1,400	4.8	92	.3
65 years and over.....	3,107	3,199	3,293	3,436	92	3.0	94	2.9	143	4.3
<i>Male</i>										
14 years and over.....	51,705	55,844	60,281	64,981	4,139	8.0	4,437	7.9	4,700	7.8
14 to 24 years.....	10,517	12,630	13,920	14,809	2,113	20.1	1,290	10.2	889	6.4
25 to 44 years.....	22,157	22,991	25,669	29,674	834	3.8	2,678	11.6	4,005	15.6
45 years and over.....	19,030	20,220	20,692	20,600	1,190	6.3	472	2.3	-192	-9.9
45 to 64 years.....	16,899	18,112	18,604	18,404	1,213	7.2	492	2.7	-200	-1.1
65 years and over.....	2,131	2,108	2,088	2,096	-23	-1.1	-20	-9.9	8	.4
<i>Female</i>										
14 years and over.....	26,653	30,155	33,365	36,427	3,502	13.1	3,210	10.6	3,062	9.2
14 to 24 years.....	6,315	7,675	8,604	9,212	1,360	21.5	929	12.1	608	7.1
25 to 44 years.....	10,060	10,443	11,706	13,733	388	3.9	1,258	12.0	2,027	17.3
45 years and over.....	10,277	12,033	13,055	13,482	1,766	17.1	1,022	8.5	427	3.3
45 to 64 years.....	9,301	10,942	11,850	12,142	1,641	17.6	908	8.3	292	2.5
65 years and over.....	976	1,091	1,205	1,340	115	11.8	114	10.4	135	11.2
WHITE										
<i>Both sexes</i>										
14 years and over.....	69,678	76,272	82,714	89,137	6,594	9.5	6,442	8.4	6,423	7.8
14 to 24 years.....	14,865	17,783	19,530	20,659	2,918	19.6	1,747	9.8	1,129	5.8
25 to 44 years.....	28,337	29,360	32,757	37,902	1,023	3.6	3,397	11.6	5,145	15.7
45 years and over.....	26,475	29,129	30,427	30,576	2,654	10.0	1,298	4.6	149	.5
45 to 64 years.....	23,638	26,198	27,408	27,422	2,560	10.8	1,210	4.5	14	.1
65 years and over.....	2,837	2,837	3,019	3,154	94	3.3	88	3.0	135	4.5
<i>Male</i>										
14 years and over.....	46,531	50,027	53,737	57,596	3,496	7.5	3,710	7.4	3,859	7.2
14 to 24 years.....	9,290	11,804	12,102	12,772	1,794	19.3	1,018	9.2	670	5.5
25 to 44 years.....	19,882	20,532	22,830	26,237	650	3.3	2,298	11.2	3,407	14.9
45 years and over.....	17,359	18,411	18,805	18,587	1,052	6.1	394	2.1	-218	-1.2
45 to 64 years.....	15,401	16,474	16,888	16,660	1,073	7.0	414	2.5	-228	-1.4
65 years and over.....	1,958	1,937	1,917	1,927	-21	-1.1	-20	-1.0	10	.5
<i>Female</i>										
14 years and over.....	23,147	26,245	28,977	31,541	3,098	13.4	2,732	10.4	2,564	8.8
14 to 24 years.....	5,575	6,699	7,428	7,887	1,124	20.2	729	10.9	459	6.2
25 to 44 years.....	8,455	8,828	9,927	11,665	373	4.4	1,099	12.4	1,738	17.5
45 years and over.....	9,116	10,718	11,622	11,989	1,602	17.6	904	8.4	367	3.2
45 to 64 years.....	8,237	9,724	10,520	10,762	1,487	18.1	796	8.2	242	2.3
65 years and over.....	879	994	1,102	1,227	115	13.1	108	10.9	125	11.3
NONWHITE										
<i>Both sexes</i>										
14 years and over.....	8,680	9,725	10,931	12,273	1,045	12.0	1,206	12.4	1,342	12.3
14 to 24 years.....	1,968	2,520	2,994	3,362	552	28.0	474	18.8	368	12.3
25 to 44 years.....	3,882	4,081	4,618	5,505	199	5.1	537	13.2	887	19.2
45 years and over.....	2,830	3,124	3,319	3,406	294	10.4	195	6.2	87	2.6
45 to 64 years.....	2,561	2,856	3,046	3,124	295	11.5	190	6.7	78	2.6
65 years and over.....	269	268	273	282	-1	-4	5	1.9	9	3.3
<i>Male</i>										
14 years and over.....	5,174	5,815	6,543	7,387	641	12.4	728	12.5	844	12.9
14 to 24 years.....	1,227	1,545	1,818	2,037	319	26.0	272	17.6	219	12.0
25 to 44 years.....	2,276	2,460	2,839	3,437	184	8.1	379	15.4	598	21.1
45 years and over.....	1,671	1,809	1,886	1,913	138	8.3	77	4.3	27	1.4
45 to 64 years.....	1,498	1,638	1,716	1,744	140	9.3	78	4.8	28	1.6
65 years and over.....	173	171	170	169	-2	-1.2	-1	-6	-1	-6
<i>Female</i>										
14 years and over.....	3,506	3,910	4,388	4,886	404	11.5	478	12.2	498	11.3
14 to 24 years.....	741	974	1,176	1,325	233	31.4	202	20.7	149	12.7
25 to 44 years.....	1,606	1,621	1,779	2,068	15	.9	158	9.7	289	16.2
45 years and over.....	1,159	1,315	1,433	1,493	156	13.5	118	9.0	60	4.2
45 to 64 years.....	1,063	1,218	1,330	1,380	155	14.6	112	9.2	50	3.8
65 years and over.....	96	97	103	113	1	1.0	6	6.2	10	9.7

are already very high, mostly because of their need to improve family income. If the expected improvement in employment prospects of nonwhite men is realized, some of the economic reasons for the higher labor force rates of nonwhite women may be removed. A more general assumption which underlies this projection is that existing social and economic differences between whites and nonwhites will be reduced somewhat during the next 15 years, and thus bring about a leveling off of labor force participation of nonwhite women.

Adult Men

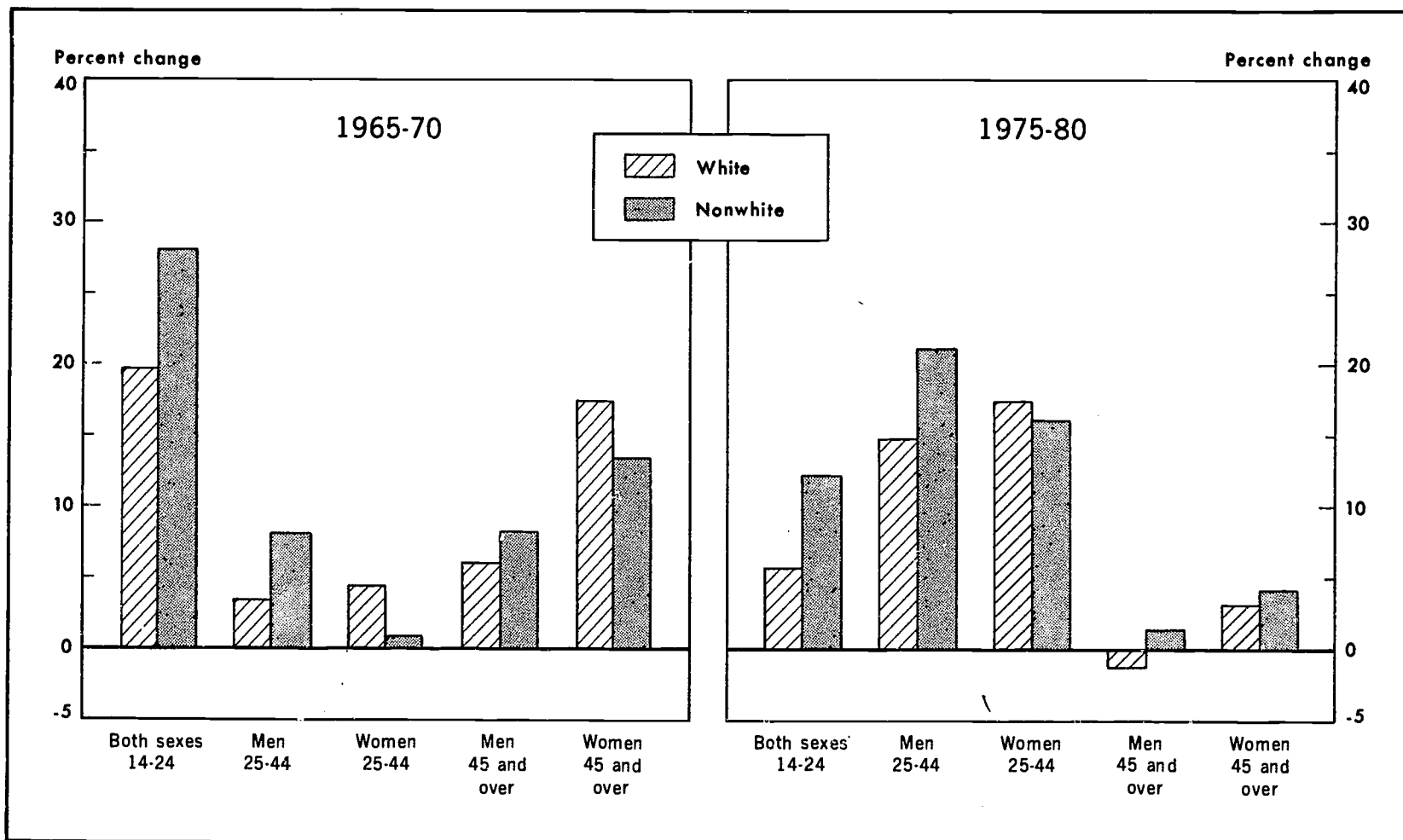
Male workers in the central age group (25 to 54 years) will continue to be the most stable part of the Nation's labor force, about 40 percent of it in both 1965 and 1980. In projecting to 1980, the worker rates for white men in this central age group were held constant at or near the levels observed during the 1955-57 period, about 96 percent, when the overall unemployment rate was close to 4 percent. The rates for nonwhite men in this

age group were assumed to come nearer to the white rates, moving from 90 to 93 percent between 1965 and 1980.

There are several factors which help to explain the differing labor force participation rates between white and nonwhite males. For example, there is a greater incidence of disability among nonwhites. Also, a higher proportion of nonwhite workers have irregular employment and therefore tend to withdraw from the labor force during periods of seasonal slack work or prolonged unemployment. A third factor is the number of inmates in institutions who are by definition excluded from the labor force. In the 1960 Census, 3.7 percent of the nonwhite males 25 to 54 were reported in institutions, compared with 1.1 percent of the corresponding group of white males.

In assuming a gradual convergence in these rates, with nonwhite rates increasing to meet the fairly constant rates for white workers, we recognize that the factors mentioned above are not easily susceptible to sudden or drastic change. Nevertheless, if the general trend toward greater

Chart 1. Percent Change in Total Labor Force, by Age, Sex, and Color, 1965-70 and 1975-80



equality of opportunity continues, it should eventually produce some reduction in the present differences between the two color groups with respect to all of these factors.

Older Workers

The projection for men 55 to 64 years old represents the net effect of three assumptions: Labor force participation rates for men 55 to 59 years old will remain approximately constant at or near the levels observed during the 1955-57 period, when overall unemployment was about 4 percent; labor force participation rates for men 60 to 64 years old will decline only moderately, as the trend toward early retirement begins to slightly outweigh the assumed continuing demand for the skills and experience of working men in this age group; and worker rates for nonwhite men age 55 to 64 years will move upward to converge with those of the whites, since the lower nonwhite rates of labor force participation throughout the postwar period may have been associated with lack of equal employment opportunities, or limited education and training. The assumed gradual improvement in the relative status of nonwhites implies a reduction in the white-nonwhite differentials in labor force participation rates.

On balance, the projections yield little change in the labor force participation rate of white males 55 to 64 years old. It is assumed to remain close to 85 percent during the next 15 years. However, the rate for nonwhite men in this age group is expected to rise from about 77 percent in 1965 to about 82 percent by 1980.

The projections for men 65 and over assume a continuation of the steady declines in labor force participation which have been observed throughout the postwar period, but at a reduced rate. Since the worker rates of men in this age group have generally tended to move downward in periods of economic recovery as well as in recessions, it is assumed that these declines are essentially a manifestation of long-term secular trends, similar to those which have been observed in other industrial nations. It is expected that rates for white and nonwhite men 65 and over will move in a nearly parallel manner, the white rate declining from 27 percent in 1965 to 22 percent in 1980, the nonwhite from 27 to about 21 percent.

Projections for women workers 55 to 64 years old, however, indicate a quite different trend than that expected for men. The participation rate for white women in this age group increased from 33 to 40 percent between 1960 and 1965, and is pro-

TABLE 3. PERCENT DISTRIBUTION OF THE TOTAL LABOR FORCE, BY AGE, SEX, AND COLOR, ACTUAL 1960 AND 1965, AND PROJECTED 1970, 1975, AND 1980

Age and sex	1960			1965			1970			1975			1980		
	Total	White	Non-white	Total	White	Non-white	Total	White	Non-white	Total	White	Non-white	Total	White	Non-white
BOTH SEXES															
14 years and over															
Number in thousands...	73,081	65,057	8,024	78,357	69,678	8,680	85,999	76,272	9,725	93,646	82,714	10,931	101,408	89,137	12,273
Percent distribution....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
14 to 24 years.....	18.7	18.6	20.1	21.5	21.3	22.7	23.6	23.3	25.9	24.1	23.6	27.4	23.7	23.2	27.4
25 to 44 years.....	43.6	43.2	46.9	41.1	40.7	44.7	38.9	38.5	42.0	39.9	39.6	42.2	42.8	42.5	44.9
45 to 64 years.....	33.0	33.4	29.7	33.4	33.9	29.5	33.8	34.3	29.4	32.5	33.1	27.9	30.1	30.8	25.5
65 years and over....	4.6	4.8	3.3	4.0	4.1	3.1	3.7	3.8	2.8	3.5	3.6	2.5	3.4	3.5	2.3
MALE															
14 years and over															
Number in thousands...	49,563	44,666	4,897	51,705	46,531	5,174	55,844	50,027	5,815	60,281	53,737	6,543	64,981	57,596	7,387
Percent distribution....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
14 to 24 years.....	17.6	17.3	20.7	20.3	20.0	23.7	22.6	22.2	26.6	23.1	22.5	27.8	22.8	22.2	27.6
25 to 44 years.....	45.2	45.1	46.4	42.9	42.7	44.0	41.2	41.0	42.3	42.6	42.5	43.4	45.7	45.6	46.5
45 to 64 years.....	32.3	32.6	29.2	32.7	33.1	29.0	32.4	32.9	28.2	30.9	31.4	26.2	28.3	28.9	23.6
65 years and over....	4.9	5.0	3.7	4.1	4.2	3.3	3.8	3.9	2.9	3.5	3.6	2.6	3.2	3.3	2.3
FEMALE															
14 years and over															
Number in thousands...	23,518	20,391	3,127	26,653	23,147	3,506	30,155	26,245	3,910	33,365	28,977	4,388	36,427	31,541	4,886
Percent distribution....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
14 to 24 years.....	21.1	21.4	19.1	23.7	24.1	21.1	25.4	25.5	24.9	25.8	25.6	26.8	25.3	25.0	27.1
25 to 44 years.....	40.3	39.2	47.8	37.7	36.5	45.8	34.6	33.6	41.5	35.1	34.3	40.5	37.7	37.0	42.3
45 to 64 years.....	34.5	35.1	30.3	34.9	35.6	30.3	36.3	37.0	31.2	35.5	36.3	30.3	33.3	34.1	28.2
65 years and over....	4.1	4.3	2.7	3.7	3.8	2.7	3.6	3.8	2.5	3.6	3.8	2.3	3.7	3.9	2.3

Chart 2. Civilian Labor Force Participation Rates for Selected Groups by Color, Actual 1948-65 and Projected 1970, 1975, and 1980

[Annual Averages]

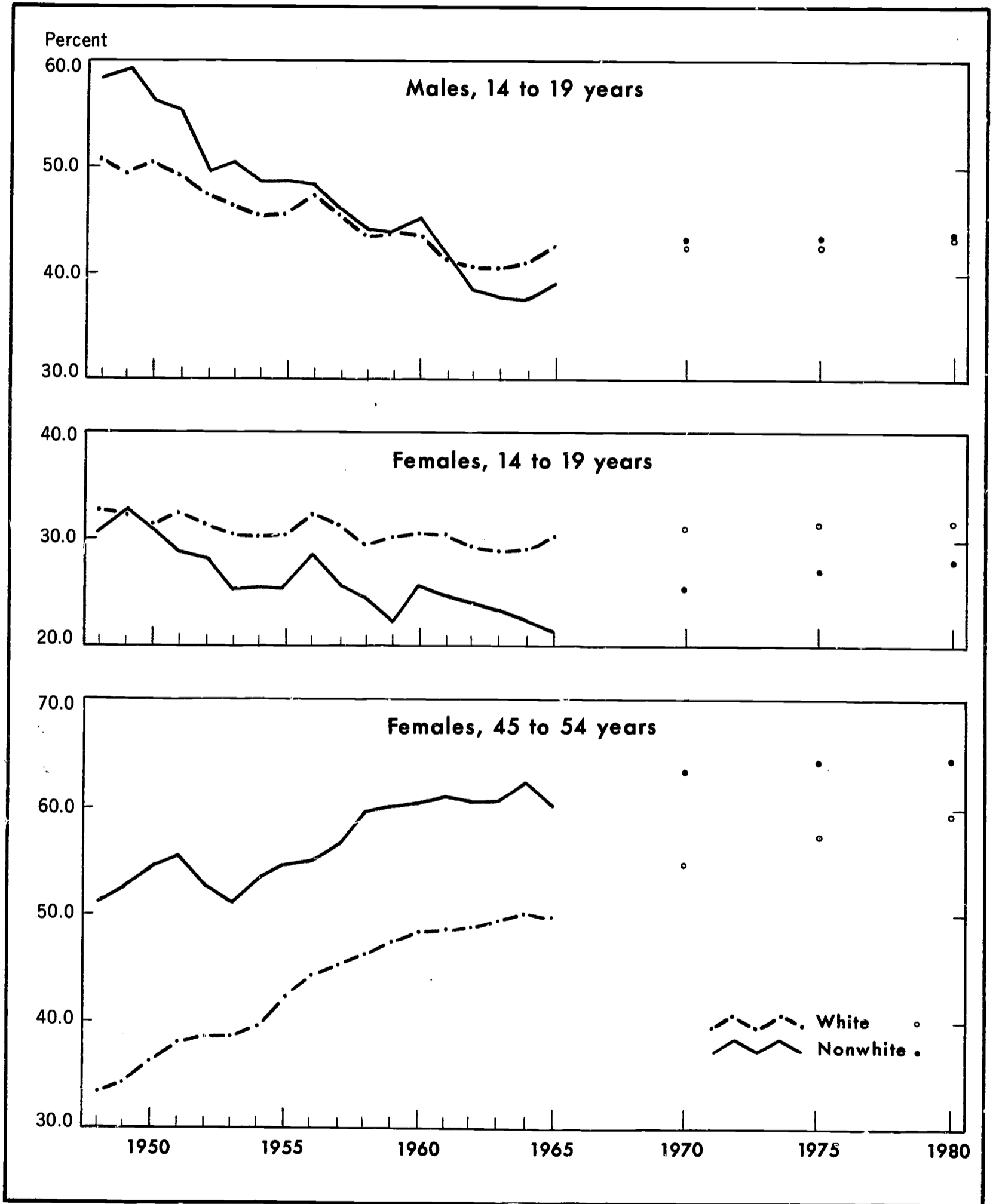


TABLE 4. APPROXIMATE STANDARD ERRORS OF ESTIMATES AND PERCENTAGES ASSOCIATED WITH ANNUAL AVERAGE LABOR FORCE PARTICIPATION RATES, BY AGE, SEX, AND COLOR 1948-65

[In percentage points]

Color and sex	Age groups						
	14 to 19 years	20 to 24 years	25 to 34 years	35 to 44 years	45 to 54 years	55 to 64 years	65 years and over
WHITE MALES							
Standard error of estimate ¹	1.2	1.2	0.3	0.3	0.5	1.3	1.3
Standard error of percentage ²5	.3	.1	.1	.1	.3	.4
NONWHITE MALES							
Standard error of estimate ¹	3.0	2.0	1.1	1.0	1.1	1.8	2.2
Standard error of percentage ²	1.2	.9	.4	.4	.6	1.1	1.4
WHITE FEMALES							
Standard error of estimate ¹	1.1	1.0	.8	.7	1.1	.9	.6
Standard error of percentage ²4	.5	.3	.3	.4	.4	.3
NONWHITE FEMALES							
Standard error of estimate ¹	2.0	2.3	1.5	1.3	1.8	1.9	1.2
Standard error of percentage ²	1.0	1.3	1.0	1.0	1.1	1.4	1.1

¹ See text for explanation.

² From *Employment and Earnings*, Technical Note on Labor Force Data, table D, adjusted to reflect annual average data.

jected at 47 percent in 1980. Among nonwhite women in this age group, the rate rose from 41 to 48 percent between 1960 and 1965, and is projected to rise only slightly to just below 50 percent by 1980.

Worker rates among all women 65 years old and over have displayed no clear-cut trend since the late 1950's. The rate for white women in this age group has fluctuated around 10 percent, 2 to 3 percentage points below the nonwhite rate. The projected rate for white women shows a slight increase (from 9.3 percent in 1965 to 9.9 percent by 1980) while the rate for nonwhite women indicates a gradual decline from 12.6 percent in 1965 to 10.6 percent by 1980. Both of these projections appear to be consistent with trends observed over the post-war period.

⁶ See footnote 1.

⁷ $N-3$ was used in most cases because the fitted curves employed in determining a trend line usually had the same general sort of curvature as a second-degree polynomial. In some cases, the fitted curve had a more complex kind of curvature, necessitating a further reduction in this denominator.

Reliability of the Projections

As stated above, certain judgments regarding the anticipated longrun impact of current economic programs and manpower policies were considered in making projections of labor force participation rates. These projections are also tied to those published in 1965, which were themselves developed on the basis of a judgmental model roughly consistent with an overall unemployment rate of 4 percent.⁶ For these reasons, it is impossible to provide a measure of the standard error of estimate that might be associated with the projected rates. However, some idea of the reliability of the rates projected for a particular age-sex-color group can be gained by considering the variability of the observed annual average labor force participation rates for that group over the postwar period, 1948-65. A standard error was estimated by fitting a judgmental trend line to the observed rates, and measuring the deviations of the actual values from that trend. The standard error of estimate was then calculated by the following formula:

$$s_e = \sqrt{\frac{\sum(Y - Y')^2}{N - 3}}$$

Where:

- s_e is the standard error of estimate;
- Y is the actual annual average labor force participation rate;
- Y' is the "expected" or trend value of the annual average rate;
- N is the number of observations.⁷

The standard errors of estimate of the labor force participation rates obtained by this procedure (in percentage points) are shown in table 4. Also shown are the estimated standard errors (sampling variability) of the annual average labor force rates which are derived from the monthly CPS sample.

It is apparent from these results that the reliability of the projected labor force participation rates varies considerably among the several groups. As might be expected, the rates of both the younger and the older nonwhite groups are the least reliable, while the greatest stability is found in the rates of white males in the 25 to 54 age groups.