

## Occupational mobility, January 2004

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When economic conditions are favorable, individuals may have more opportunities to change jobs to earn more money, do the kind of work they prefer, or reduce their commuting time. Conversely, when economic conditions are less favorable, fewer opportunities with such desirable characteristics may be available. Economic conditions or some other factor—completing school, for example—can prompt a change of occupation. If an individual is employed in one period (January 2005, for example) and changes occupations by the next period (January 2006), occupational mobility has occurred. The occupational mobility rate is the number of individuals employed in two time periods who change occupations divided by the number of individuals employed in both periods.

According to the Current Population Survey (CPS), around 137 million persons aged 16 or older were employed in January 2004 (data are not seasonally adjusted). About 123 million persons were employed in January of 2004 and of 2003, of which nearly 9 million changed occupations at the most detailed level. Thus, the overall occupational mobility rate was 7.25 percent. This report examines occupational mobility data for the January 2003 to January 2004 period for selected demographic and employment characteristics and compares historical data with current data.<sup>1</sup>

A concept related to occupational mobility is job mobility. Job mobility occurs when an individual stops working for one employer and begins work for another. Occupational mobility

can occur with or without job mobility. An example of occupational mobility *without* job mobility would be if a carpenter who works for a general building contractor changes occupations by being promoted into a management position for the same contractor. An example of occupational mobility *with* job mobility would be if the carpenter changed employers to work outside the construction field, such as working at the local fire department as a firefighter. Occupational mobility has not occurred if the carpenter leaves one contractor for another while continuing to work as a carpenter. Labor turnover, another Bureau of Labor Statistics measure, is different from both job and occupational mobility; turnover measures the separations of employees from establishments, but does not reveal whether the employee found work elsewhere.

### Data sources

This report examines occupational mobility data collected in the January 2004 supplement to the CPS and other earlier CPS supplements. Data on demographic characteristics and employment status of the civilian noninstitutional population are collected in the CPS each month from a sample of 60,000 households. Periodically, the CPS includes an occupational mobility supplement; respondents who are employed in the survey month and are employed in that month one year prior are asked if they did the same kind of work one year ago as they do presently. If the response is no, information about their previous work is obtained and coded to a three-digit number identifying one of about 500 detailed occupations. Occupational mobility measures the changes between current and previous three-digit occupations. The occupational mobility rate provides a snapshot of how many persons are in a different occupation than they were one year earlier as a percent of all persons employed both currently and in the same month one year earlier.<sup>2</sup>

In January 1966, the CPS supplement first asked respondents about performing the same kind of work a year ago to find changes at the detailed occupation level; data were collected from those aged 18 years and older only. In later supplements, data were collected for those aged 16 years and older. Also, occupation and industry classification systems, racial categories, and educational attainment level categories have changed over the years, making historical comparisons very difficult.

### Occupational mobility in January 2004

*Demographic characteristics.* As indicated below, occupational mobility rates for January 2004 show a consistent relationship between age and mobility for both men and women (in percent):

Age	Both genders		Men	Women
	Men	Women		
Aged 16 and older .....	7.2	6.8	7.7	
16–19 .....	27.1	26.2	28.0	
20–24 .....	19.9	19.7	20.0	
25–34 .....	9.1	9.1	9.0	
35–44 .....	5.9	5.1	6.8	
45–54 .....	3.7	3.1	4.4	
55–64 .....	2.7	2.8	2.7	
65 and older .....	1.6	1.1	2.3	
Aged 16–24 .....	21.5	21.2	21.9	
In school .....	20.6	20.9	20.3	
Not in school .....	22.1	21.3	23.1	

As age increases, occupational mobility rates decline, regardless of gender. More than 60 percent of those who changed their occupation between January 2003 and January 2004 were younger than age 35, while only about 36 percent of the total employed in January 2004 were under age 35. Generally, older persons have invested more time in completing their education or training and have built more experience in an occupation. As a result, they derive a smaller benefit from changing occupations. However, younger persons, on average, have less to lose from experimenting

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with different occupations. Generally, men had lower occupational mobility rates than women, but even so, the largest difference in the rates for each age group was less than 2 percentage points.

School enrollment can have a slight effect on the occupational mobility rate for those aged 16 to 24 years. Within this age group, those enrolled in school actually had a lower occupational mobility rate than those not in school. This could have occurred because those not in school recently completed their studies and qualified for occupations that were quite different from the ones they worked in during school.

Among men and women aged 16 and older, the occupational mobility rate is higher for those having some college but no degree or less educational attainment than for those with an associate degree or a higher degree. (See table 1.) Those with a master's degree or a higher level of education held the lowest occupational mobility rate for both genders. The group with some college but no degree as their highest level of educational attainment had the highest rate among educational groups for both men and women aged 16 and older.

The rates for those with a bachelor's degree or less education are impacted by the presence of large numbers of persons aged 16–24, a group with the highest occupational mobility rates. Rates are notably lower for persons

aged 25 and older with a bachelor's degree or less education. The range of occupational mobility rates among educational groups has become very minimal. For both genders aged 25 and older, the rates vary from 6.2 percent for those with some college but no degree to 4.7 percent for those with a master's degree or higher education; however, for both genders aged 16 and older, the rates vary from 8.8 percent for those with some college but no degree to 4.7 percent for those with a master's degree or higher education. While women in the some college but no degree group continue to have the highest occupational mobility rate among all educational groups after limiting the age to 25 and older, men in the associate degree academic program group hold a slightly higher rate than the remaining groups. Educational attainment plays a more limited role than age in determining the rate of occupational mobility.

A new set of race categories was introduced into the CPS in January 2003 that is not directly comparable to race categories used in the earlier surveys.<sup>3</sup> The new race categories allow individuals to belong to more than one race, while the old race categories required respondents to choose among a handful of nonoverlapping race categories. In January 2004, the Asian only category showed the lowest mobility rate—4.4 percent. Those who identified them-selves as being from

more than one race showed a significantly higher mobility rate than the remaining race categories. The following tabulation shows occupational mobility rates by race in January 2004:

Race	Rate
Total, all races .....	7.2
White only .....	7.4
Black only .....	6.6
Asian only .....	4.4
American Indian, Alaskan native, Hawaiian or Pacific Islander only .....	6.0
Two or more races .....	10.1

*Employment characteristics.* About 58 percent of those who changed their occupation between January 2003 and January 2004 also changed their industry; this means that most changes in occupation are accompanied by a change in industry.

Most wage and salary workers in private industry or in the government have higher occupational mobility rates than self-employed persons, whether incorporated or unincorporated. Self-employed persons who respond that their businesses are incorporated are included among wage and salary workers because, technically, they are paid employees of a corporation. Employees in the Federal Government demonstrate stability similar to the unincorporated self-employed. Those in private in-

**Table 1. Occupational mobility rates by educational attainment level and gender, January 2004**

Education	Aged 16 and older			Aged 25 and older		
	Both genders	Men	Women	Both genders	Men	Women
All education levels .....	7.2	6.8	7.7	5.4	5.1	5.9
Less than high school .....	8.3	7.7	9.3	4.9	4.6	5.5
High school or equivalent .....	7.6	7.7	7.6	5.5	5.5	5.6
Some college but no degree .....	8.8	8.1	9.6	6.2	5.4	7.2
Associate degree, occupational/ vocational .....	6.5	6.3	6.6	5.6	5.3	5.9
Associate degree, academic program .....	6.3	5.9	6.6	5.4	5.7	5.2
Bachelor's degree .....	6.4	5.7	7.2	5.2	4.8	5.6
Master's degree or higher education .....	4.7	4.2	5.4	4.7	4.2	5.3

**Table 2. Occupational mobility rates by major occupational group, January 2004**

Occupation	Percent
Total, all occupations .....	7.2
Management .....	6.5
Business and financial operations .....	6.3
Computer and mathematical science .....	4.0
Architecture and engineering .....	3.0
Life, physical, and social science .....	5.7
Community and social services .....	6.0
Legal .....	3.2
Education, training, and library .....	5.7
Arts, design, entertainment, sports, and media .....	7.0
Healthcare practitioner and technical .....	3.0
Healthcare support .....	7.5
Protective service .....	7.5
Food preparation and serving related .....	10.9
Buildings and grounds cleaning and maintenance .....	5.0
Personal care and service .....	8.1
Sales and related .....	10.6
Office and administrative support .....	8.9
Farming, fishing, and forestry .....	4.1
Construction and extraction .....	6.0
Installation, maintenance, and repair .....	4.8
Production .....	8.1
Transportation and material moving .....	8.9

dusty are the most likely to switch occupations. The following tabulation shows January 2004 occupational mobility rates by class of worker:

<i>Class of worker</i>	<i>Rate</i>
Total .....	7.2
Federal Government ....	3.9
State Government .....	6.3
Local Government .....	5.5
Private, for-profit .....	8.3
Private, nonprofit .....	7.8
Self-employed, incorporated .....	2.0
Self-employed, unincorporated .....	3.7

The highest occupational mobility rate by class of worker found in private, for-profit industry may be partly due to the high proportion of younger persons employed there. More than 41 percent of private, for-profit workers were younger than age 35, while only about 36 percent of the total employed in January 2004 were under age 35. Conversely, a low proportion of younger workers could partially explain lower occupational mobility rates. In January

2004, the incorporated self-employed had a mere 12 percent under age 35, the Federal Government had 18 percent under age 35, and the unincorporated self-employed had 19 percent under age 35.

The occupational mobility rates by major occupational group measure changes in detailed occupations, not changes between major groups. The rates reflect the proportion of persons entering the occupation from elsewhere, as opposed to leaving the occupation to enter a new one. The rates presented in table 2 are calculated as the number of individuals who belonged to a detailed occupation in January 2004 and were in a different occupation in January 2003 divided by the total number employed in the detailed occupation in January 2004 who were also employed in any occupation in January 2003.

Food preparation and serving-related occupations and sales and related occupations had the highest incidence of occupational mobility, reflecting the large number of young workers in these fields. As many as 64 percent of food preparation and serving-related workers were younger

than age 35 in January 2004, and about 2 out of 5 sales and related workers also were under age 35. In contrast, health-care practitioner and technical occupations, architecture and engineering occupations, and legal occupations had the lowest incidence of occupational mobility. These three major occupational groups had fewer than 3 out of 10 workers younger than age 35 in January 2004, less than the 36 percent of the total employed that were under age 35. As individuals invest in more training to qualify for an occupation, they are less likely to leave the occupation for another.

While the single largest contributor of occupational changers to each major occupational group was another detailed occupation within the same major group—shown in bold on table 3—this contribution never made up the majority of occupational changers. The highest contribution of occupational changers within the same major group was 40.0 percent for management, business, and financial occupations; the smallest percent contribution shown was 17.3 percent for installation, maintenance, and repair occupations. For all major groups, the majority of occupational changers transferred to another major group.

Installation, maintenance, and repair occupations had only about 294,000 persons originating in the group that later worked in a different detailed occupation, which is the smallest number among the groups shown in table 3. Also, this group received only 2.5 percent of all workers 16 years and older who had changed detailed occupations since January 2003—the smallest percent of all groups shown. With 1.7 million occupational changers originating in the group, service occupations had the highest number of persons who later changed detailed occupations. However, 16.8 percent of all occupational changers entered into the office and administrative support occupations group, making it the major

**Table 3. Occupational distribution of employed civilians aged 16 and older who changed occupations between January 2003 and January 2004**

[Numbers in thousands]

Aged 16 and older	Major occupational group, 2004 <sup>1</sup>									
	Total	Management, business, and financial	Professional and related	Service	Sales and related	Office and administrative support	Construction and extraction	Installation, maintenance, and repair	Production	Transportation and material moving
Share of total employment, January 2004 .....	100.0	14.5	20.7	15.6	11.9	13.9	5.9	3.7	7.1	6.2
<b>Major occupational group, 2003</b>	<b>Percent of total employment in different occupation</b>									
Total employed in a different occupation .....	8,914	13.6	13.9	16.2	16.5	16.8	4.8	2.5	8.1	7.3
Management, business, and financial .....	1,031	<b>40.0</b>	13.1	7.1	17.9	12.9	2.0	.4	3.9	2.4
Professional and related .....	1,076	15.6	<b>38.1</b>	10.9	15.0	12.9	1.5	.9	2.7	2.7
Service .....	1,691	7.8	13.2	<b>29.5</b>	16.7	16.1	2.2	1.1	4.7	8.5
Sales and related .....	1,327	12.3	8.4	18.4	<b>27.2</b>	19.2	2.3	1.6	5.0	5.5
Office and administrative support .....	1,465	13.3	13.0	13.2	15.6	<b>31.5</b>	3.6	1.1	4.8	3.7
Construction and extraction .....	360	6.2	4.3	18.8	8.7	3.4	<b>31.3</b>	5.1	13.9	5.9
Installation, maintenance, and repair .....	294	5.0	6.8	8.1	13.2	13.4	13.9	<b>17.3</b>	11.1	11.3
Production .....	568	6.8	6.4	7.8	9.9	10.1	5.1	5.9	<b>33.6</b>	13.9
Transportation and material moving .....	620	4.6	4.4	15.1	11.2	10.3	8.5	5.6	17.0	<b>22.1</b>
Do not remember <sup>1</sup> .....	339	5.1	13.2	19.3	15.8	15.8	8.3	1.8	10.8	9.9

<sup>1</sup> Due to the exclusion of the farming, fishing, and forestry occupation group and the military or Armed Forces occupation group, the sum of the major occupational groups shown and those who do not remember their previous occupation may not equal the total for all employed in a different occupation.

NOTE: Percents for each row may not add to 100 percent due to rounding and the exclusion of the farming, fishing, and forestry occupational group.

group that attracted the highest share of all occupational changers.

Even though 16.5 percent of occupational changers belonged to the sales and related major occupational group in January 2004, this group accounted for only 11.9 percent of total employment. The professional and related major occupational group accounted for 20.7 percent of total employment in January 2004, but only 13.9 percent of occupational changers belonged to this group. The employment share for each major occupational group was one factor affecting the distribution of occupational changers, but it was not the only determining factor.

The sample size was very small for farming, fishing, and forestry occupations and military or Armed Forces occupations. Because small samples

are often unreliable, data for these groups are not shown separately, but are included in the total.

### Historical data

Age and gender are two of the few individual characteristics not affected by changes in classification systems. While there is no clear trend over time, the occupational mobility rate for men and women dropped steadily over the last four CPS occupational mobility supplements and reached its lowest point between January 2003 and January 2004. With the exception of 1972–73, the rate for men has been lower than the rate for women. (See table 4.) Similar to the 1972–73 rates by gender, women—with a rate of 6.9 percent—exhibited less of a tendency to change occupations than men—with a rate of

9.9 percent—during 1965–66, when only those ages 18 and older were included.

One characteristic of the data that remains constant over time is the significantly larger occupational mobility rates for persons aged 16 to 24 years, regardless of gender. Changes in this group are to be expected, as these recent entrants to the labor market complete training programs and explore work options that precede their assimilation into more stable employment patterns. Overall, occupational mobility rates for 1977–78 are the highest of any year, reflecting the large number of young persons in the labor market, as the youngest baby boomers began working. Although the unemployment rate in 1977 of 7 percent is high relative to the most recent decade, employment grew by more than 4 million

**Table 4. Occupational mobility rates for employed civilians, by age and gender, selected years 1973–2004**

Age and gender	1972-73	1977-78	1980-81	1982-83	1986-87	1990-91	1995-96	1999-2000	2001-02	2003-04
Total, both genders, aged 16 and older .....	9.0	12.0	11.0	9.7	9.9	9.9	11.0	10.1	8.6	7.2
Men, aged 16 and older: .....	9.3	11.9	10.3	9.4	9.6	9.3	10.7	9.5	8.0	6.8
16-19 .....	30.3	35.9	28.7	25.6	29.4	32.5	35.0	32.6	29.7	26.2
20-24 .....	25.0	27.3	23.8	21.3	22.2	22.9	29.3	23.3	22.0	19.7
25-34 .....	12.4	15.5	12.4	11.5	11.4	11.6	14.8	12.8	10.8	9.1
35-44 .....	6.2	8.1	7.4	6.7	7.0	6.3	7.2	7.4	6.0	5.1
45-54 .....	3.5	4.5	4.4	4.8	4.7	4.5	4.9	4.9	3.8	3.1
55-64 .....	2.6	3.4	3.5	3.1	2.7	3.1	3.2	2.5	2.8	2.8
65 and older .....	1.7	2.0	1.6	1.9	1.2	2.0	1.9	2.1	1.9	1.1
Women, aged 16 and older: ..	8.4	12.2	12.0	10.2	10.4	10.7	11.3	10.9	9.3	7.7
16-19 .....	26.4	36.0	32.6	24.6	28.7	33.2	37.3	28.5	29.7	28.0
20-24 .....	18.9	22.9	22.8	20.1	21.0	25.0	25.2	29.4	25.1	20.0
25-34 .....	9.9	14.4	13.9	11.9	11.8	12.3	14.9	14.2	11.6	9.0
35-44 .....	6.3	9.3	8.9	7.8	8.5	8.1	8.8	9.0	6.8	6.8
45-54 .....	3.3	5.1	5.8	4.9	4.9	5.5	6.2	5.3	5.2	4.4
55-64 .....	2.4	3.6	2.7	3.8	3.2	3.4	3.5	3.7	3.4	2.7
65 and older .....	2.5	2.5	1.8	1.4	1.1	2.5	2.5	2.5	1.2	2.3
Standardized: <sup>1</sup>										
Total, both genders, aged 16 and older .....	8.0	10.3	9.5	8.5	8.7	9.1	10.5	9.8	8.4	7.2
Men, aged 16 and older .....	8.5	10.4	9.0	8.4	8.5	8.5	10.2	9.1	7.9	6.8
Women, aged 16 and older ..	7.3	10.3	10.0	8.7	9.0	9.7	10.8	10.6	9.0	7.7

NOTE: Occupational mobility rates for years before 1990–91 are from James P. Markey and William Parks II, "Occupational change: pursuing a different kind of work," *Monthly Labor Review*, September 1989, pp. 3–12. Occupational mobility rates for 1990–91 and onward were developed from

CPS job tenure and occupational mobility supplement data.

<sup>1</sup> Standardized to the age distribution of individuals working in both January 2003 and January 2004.

between 1977 and 1978, which is the largest employment change between years when the CPS included an occupational mobility supplement.<sup>4</sup> Such a large increase may have led to an abundance of job opportunities in fields that differed from those in which an individual worked in 1977.

Because the age distribution of the workforce changed in each year, a second occupational mobility rate by gender is provided that standardizes the age distribution to that found among individuals working in both January 2003 and January 2004. Because the workforce in January 2003–04 had a higher proportion of older age groups, the overall occupational mobility rate for all age groups was lowered by standardizing to 2004 across all previous years. (See table 4.) Even after being standardized, the rates do not show a consistent trend over time. The 2003–04 rate remains the lowest for men and for both genders combined; however, the standardized rate for women aged 16 and older in 1972–73 was slightly

lower than it was in 2003–04. Additionally, the 1977–78 rate remains the highest for men, while the standardized rate for women in both 1995–96 and 1999–2000 was above what it was in 1977–78. The 1995–96 standardized rate was slightly higher than the 1977–78 rate for both genders combined.

### Interpreting the data

Care must be exercised in interpreting occupational mobility data, especially when comparing data from different surveys. The 2004 rate is the lowest ever recorded and one temptation is to attribute poor economic conditions as the cause. The unemployment rate increased to 6.0 percent in 2004 from 4.7 percent in 2002, as more individuals lost jobs or began seeking work after being outside the labor market for a period of time. Some would interpret the low mobility to mean workers were being cautious, preferring the security of their current jobs and not changing

occupations, even though occupational mobility also declined when the unemployment rate dropped to 4.2 percent in 2000, from 5.6 percent in 1996. Others might be tempted to interpret the data as favorable, because less worker displacement over time would reduce occupational mobility. However, other factors are at work. Given that older workers exhibit lower occupational mobility, the total occupational mobility rates can be expected to decline as baby boomers approach retirement and the median age of the workforce continues to increase.

Occupational mobility data from the Current Population Survey supplements provide a unique, but limited, perspective on labor market dynamics. The BLS occupational outlook program combines the occupational mobility information with other CPS information on movements to estimate occupational replacement needs.<sup>5</sup> Occupational mobility data alone cannot be used as an indicator of labor market conditions. □

## NOTES

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<sup>1</sup> This report contains the first occupational mobility data published by the Bureau of Labor Statistics since a news release for the January 1991 CPS supplement. For a previous report on occupational mobility, see James P. Markey and William Parks II, "Occupational change: pursuing a different kind of work," *Monthly Labor Review*, September 1989, pp. 3–12. Earlier reports on occupational mobility appeared in the *Monthly Labor Review* in June 1967, February 1975, December 1979, September 1982, and October 1984.

<sup>2</sup> Occupational mobility data derived from retrospective questions may be subject to errors due to the possibility that some persons cannot accurately remember their occupation a year earlier. This can cause respondents to indicate they worked in a different occupation when they actually worked in the same occupation or vice versa. Often a respondent provides information for the other persons within the household, which also may result in inaccurate information about the previous

employment of a person who is not the respondent. Because estimates are based on a sample of the civilian noninstitutional population, they may differ from figures that could be obtained through a complete census. Sampling variability may be relatively large in cases in which the numbers are small. Small estimates and small differences between estimated percentages or rates should be used and interpreted with caution.

In addition to limitations of the data resulting from retrospective bias, there are several limitations which reflect how the data were obtained. Since the supplement to the CPS only asks about a person's occupation at two points in time—January 2003 and January 2004, any changes to the occupation between the two points in time are not included in the occupational mobility rate. Issues related to coding each respondent's occupation in the previous year proved to be an obstacle in identifying clearly all occupational changes. Individuals may have

responded that they did not know what their occupation was one year earlier, or they may have described the same duties as their current occupation after indicating that the kind of work they did in both years was different. Also, the incidence of occupational mobility changes with the level of detail used to classify occupations. If only changes between major occupational groups were considered, the degree of occupational mobility would be much less than if one considered all changes between detailed occupations.

<sup>3</sup> See Mary Bowler, Randy E. Ilg, Stephen Miller, Ed Robison, and Anne Polivka, "Revisions to the Current Population Survey Effective January 2003," *Employment and Earnings*, February 2003, pp. 4–23.

<sup>4</sup> See Table A–1, *Employment and Earnings*, January 2005, p. 13.

<sup>5</sup> See *Occupational Projections and Training Data: 2004–05 edition*, Bulletin 2572 (Bureau of Labor Statistics, March 2004).