

# Worker displacement in an expanding economy

*As the economy grew in the mid-1990s, job loss declined and the rate of reemployment rose; job losses that did occur were more widely dispersed across industries and occupations than in earlier years*

Steven Hipple

Following the 1990–91 recession, labor market conditions were unusually sluggish compared to earlier recoveries. However, as economic activity accelerated in 1993, and especially in 1994, the job market improved, with the result that both the level and risk of job displacement fell during the mid-1990s.

Between 1993 and 1994, 2.4 million workers permanently lost jobs they had held for at least 3 years because their plant or company closed down or moved, there was insufficient work for them to do, or their positions or shifts were abolished.<sup>1</sup> By comparison, 2.8 million long-tenured workers were displaced during 1991–92, a period of slower economic growth.<sup>2</sup> The displacement rate, which reflects the likelihood of job loss during specific periods, fell from 3.9 percent during 1991–92 to 3.2 percent during 1993–94.<sup>3</sup> (See table 1.)

This article examines the recent experience of job loss and reemployment, using data from the BLS surveys of displaced workers.<sup>4</sup> For the following analysis, 2 years of data from each of the displaced worker surveys were used to construct a time series that begins with the 1981–82 period (from the 1984 survey) and ends with the 1993–94 period (from the 1996 survey); particular emphasis is placed on results from the last two studies. (See appendix A for a description of the displaced worker surveys.) The analysis focuses on workers who lost jobs they had held for at least

3 years, under the assumption that these long-tenured workers have developed a more-than-marginal attachment to their jobs.

## Demographics

Compared with the early 1990s, the risk of job loss in 1993–94 was lower for nearly every major demographic group. While men continued to comprise a majority of the displaced (about three-fifths in 1993–94), their share has fallen since the early 1980s; this reflects a decline in the proportion of displacement occurring in durable goods industries, in which a large majority of employees are men. Furthermore, since the early 1980s, women have continued to increase their presence in the work force while continuing to be concentrated in service-producing industries, in which the risk of losing a job has increased.

With displacement rates of 3.5 percent, blacks and Hispanics had about an equal likelihood of being displaced as whites (3.2 percent). (See table 1.)

*Educational attainment.* In terms of overall labor market success, workers with higher levels of educational attainment fare considerably better than their counterparts with less education. For example, during 1993–94, workers aged 20 and older with less than a high school diploma were 4 times as likely as college graduates to be unemployed.<sup>5</sup>

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The following tabulation shows reemployment rates<sup>6</sup> and displacement rates for long-tenured displaced workers by educational attainment. More than 8 in 10 displaced workers with a college degree were reemployed in February 1996, compared with about 7 in 10 of their counterparts with less than a high school diploma.<sup>7</sup>

	1993-94	
	Reemployment rate	Displacement rate
Total, 20 years and older .....	78.5	3.2
Less than a high school diploma .....	70.8	2.5
High school graduates, no college .....	75.2	3.0
Some college, no degree .....	77.2	3.9
Associate degree .....	86.0	4.7
College graduates .....	83.2	2.9

Surprisingly, the displacement rate over the 1993-94 period was actually slightly *higher* for college graduates than for those with less than a high school diploma. This anomaly can be partially explained by the age profile and occupational concentration of each group. For example, workers with less than a high school diploma were more likely than college graduates to be older (aged 55 and older), and older workers in general have a slightly lower-than-average risk of displacement. Conversely, a large proportion of college graduates—8 in 10—were aged 25 to 54, compared to about half of those with less than a high school education. Workers in this age group have a slightly higher-than-average risk of losing their jobs.

Another factor that could explain the relatively low displacement rate among high school dropouts is their occupational concentration. Although a large share (more than one-half) of these workers hold blue-collar jobs, which have above-average displacement rates, nearly one-fourth work at service jobs, in which the risk of job loss is very low.<sup>8</sup> (See table 2.) A very large proportion of college graduates (9 in 10) are concentrated in white-collar occupations; the displacement rate for workers in this occupational category was the same as that for all workers during the 1993-94 period—3.2 percent.

This analysis describes differences between displacement rates among

less educated and more educated workers using basic cross-tabulations. However, the causes of variation in displacement rates between any two groups of workers (for example, men and women, whites and blacks) can be very complex. The groups may differ in terms of demographics, occupational and industry concentration, tenure with the employer, work schedules, and so forth.<sup>9</sup>

## Industry and occupation

*Industry.* Although the total number of displaced workers fell during the 1993-94 period, a broader range of industries was represented than in previous surveys. During the early 1980s, for example, more than three-fifths of all displaced workers were in goods-producing industries—mining, construction, and manufacturing. By the mid-1990s, this proportion had declined to less than two-fifths. In contrast, within the service-producing sector, the share of job loss attributable to the growing services industry doubled from 9 percent in 1981-82 to 18 percent in the 1993-94 period. The decrease in the proportion of job loss arising in goods-producing industries

**Table 1. Displacement rates<sup>1</sup> for long-tenured workers by age, sex, race, and Hispanic origin, 1981-94**

[Percent]							
Characteristic	1981-82	1983-84	1985-86	1987-88	1989-90	1991-92	1993-94
<b>TOTAL</b>							
Total, 20 years and older ....	3.9	3.1	3.1	2.4	3.1	3.9	3.2
20 to 24 years .....	4.0	2.0	1.8	2.0	2.2	2.0	2.3
25 to 54 years .....	4.0	3.3	3.3	2.5	3.1	3.9	3.4
25 to 34 years .....	5.0	3.9	3.5	2.5	3.1	3.9	3.4
35 to 44 years .....	3.8	3.1	3.3	2.7	3.2	4.0	3.4
45 to 54 years .....	3.0	2.6	3.0	2.2	3.1	3.9	3.4
55 years and older .....	3.6	3.1	2.9	2.2	3.1	4.4	3.0
55 to 64 years .....	3.8	3.1	3.0	2.3	3.3	4.5	3.0
65 years and older .....	3.2	2.9	2.3	1.9	2.4	3.8	3.1
Men, 20 years and older .	4.3	3.2	3.3	2.4	3.2	4.1	3.3
Women, 20 years and older .....	3.4	2.9	2.8	2.4	2.8	3.5	3.1
<b>White</b>							
Total, 20 years and older ....	3.8	3.1	3.1	2.4	3.0	3.8	3.2
Men .....	4.2	3.2	3.3	2.4	3.2	4.1	3.3
Women .....	3.3	2.9	2.8	2.4	2.8	3.4	3.1
<b>Black</b>							
Total, 20 years and older ....	4.8	3.9	3.4	2.0	3.5	3.8	3.5
Men .....	5.3	4.0	4.1	1.6	3.9	3.9	4.1
Women .....	4.3	3.8	2.6	2.4	3.2	3.7	2.9
<b>Hispanic origin</b>							
Total, 20 years and older ....	4.3	3.9	3.9	2.9	4.3	4.7	3.5
Men .....	4.3	3.9	4.1	2.6	4.1	5.2	3.9
Women .....	4.4	3.8	3.5	3.3	4.7	3.8	3.0

<sup>1</sup> See text footnote 3 for an explanation of the displacement rate calculation.

NOTE: Data beginning with those for the 1991-92 period are not strictly comparable with data for earlier years. See appendix A for details.

**Table 2. Displacement rates<sup>1</sup> for long-tenured workers by industry, class of worker, and occupation of lost job, 1981–94**

[Percent]

Characteristic	1981–82	1983–84	1985–86	1987–88	1989–90	1991–92	1993–94
Total, 20 years and older .....	3.9	3.1	3.1	2.4	3.1	3.9	3.2
<b>Industry and class of worker</b>							
Nonagricultural private wage and salary workers .....	5.3	4.2	4.3	3.2	4.1	5.1	4.2
Mining .....	13.6	9.2	17.8	6.1	10.0	7.4	7.1
Construction .....	7.6	5.5	7.0	4.2	5.9	8.4	4.2
Manufacturing .....	8.2	6.5	5.2	3.9	5.0	7.1	5.7
Durable goods .....	9.3	7.0	5.8	4.0	5.1	8.4	6.2
Nondurable goods .....	6.4	5.6	4.1	3.7	4.9	5.2	5.0
Transportation and public utilities .....	4.1	3.8	3.1	1.8	3.6	4.4	4.2
Wholesale and retail trade .....	3.7	3.1	4.3	3.6	3.9	4.7	4.4
Finance, insurance, and real estate .....	1.4	1.3	3.5	2.8	3.5	5.5	4.5
Services .....	2.3	2.1	2.3	1.7	2.1	2.9	2.7
Agricultural wage and salary workers .....	5.4	9.7	4.1	2.5	3.2	3.8	3.3
Government workers .....	1.2	.6	.4	.4	.4	1.1	1.2
Self-employed and unpaid family workers <sup>2</sup> .....	.2	.1	( <sup>3</sup> )	.3	.2	( <sup>3</sup> )	( <sup>3</sup> )
<b>Occupation</b>							
White-collar occupations <sup>4</sup> .....	2.6	2.1	2.6	2.1	2.7	3.7	3.2
Managerial and professional specialty .....	2.1	1.8	2.1	1.8	2.3	3.6	2.9
Executive, administrative and managerial .....	2.5	2.4	2.8	2.5	3.4	4.8	3.4
Professional specialty .....	1.7	1.2	1.4	1.1	1.3	2.4	2.3
Technical, sales, and administrative support .....	3.0	2.4	3.1	2.5	3.1	3.7	3.6
Technicians and related support .....	3.3	2.9	3.0	2.2	3.2	3.7	3.3
Sales occupations .....	3.7	2.8	3.2	2.7	2.9	3.6	3.4
Administrative support, including clerical .....	2.5	2.0	3.1	2.4	3.2	3.8	3.8
Service occupations .....	2.0	1.8	1.9	1.5	1.6	2.1	1.7
Protective services .....	1.3	1.9	.5	.6	1.2	.8	.6
Other service occupations .....	2.1	1.7	2.2	1.6	1.7	2.3	2.0
Blue-collar occupations <sup>4</sup> .....	7.3	5.7	4.7	3.3	4.5	5.3	4.2
Precision production, craft, and repair .....	6.2	4.5	3.9	2.7	4.2	5.1	3.3
Mechanics and repairers .....	4.8	3.8	2.1	2.1	3.4	3.7	3.3
Construction trades .....	5.3	4.0	4.1	2.4	4.2	5.5	2.2
Other precision production occupations .....	8.5	5.6	5.5	3.7	5.1	6.4	4.6
Operators, fabricators, and laborers .....	8.2	6.7	5.5	3.8	4.8	5.5	4.9
Machine operators, assemblers, and inspectors .....	9.6	8.1	5.9	4.5	6.2	6.7	5.4
Transportation and material moving occupations .....	5.7	3.7	4.8	3.1	3.6	4.1	4.1
Handlers, equipment cleaners, helpers, and laborers .....	8.0	7.6	5.2	3.0	3.0	4.9	5.2
Farming, forestry, and fishing .....	.9	2.1	1.6	.8	1.5	1.4	.8

<sup>1</sup> See text footnote 3 for an explanation of the displacement rate calculation.

<sup>2</sup> Data beginning with those for the 1991–92 period refer to unpaid family workers only.

<sup>3</sup> Less than 0.05 percent.

<sup>4</sup> See text footnote 8 for a definition of white- and blue-collar occupations.

NOTE: Data beginning with those for the 1991–92 period are not strictly comparable with data for earlier years. See appendix A for more details.

over the past decade is a result of both a reduction in the share of total employment found in these industries and a decline in the likelihood of displacement among these industries.

As the economy recovered from the effects of the 1990–91 recession, the risk of displacement decreased for every private industry sector. (See table 2.) While the displacement rate for workers in mining (7.1 percent) declined slightly during the mid-1990s, workers in this industry still had the highest risk of job loss. Workers in manufacturing also continued to be at greater-than-average risk, although their displacement rate fell from 7.1 percent in 1991–92 to 5.7 percent in 1993–94. Reflecting the strength of the housing sector, the displacement rate for construction workers (4.2 percent) fell sharply during the mid-1990s.

While they remain less likely than good-producing workers to lose their jobs, the risk of displacement for workers in service-producing industries has been rising gradually. For example, during the early 1980s, the displacement rate for the finance, insurance, and real estate industry was the lowest (1.4 percent) of all the industries in the service-producing sector; by the mid-1990s, the rate for this industry was the highest in the sector (4.5 percent).

In the most recent survey, displacement rates for wholesale and retail trade (4.4 percent) and for transportation and public utilities (4.2 percent) were close to those recorded in the 1991–92 period. Workers in services, which includes industries such as business services and professional services, were least likely to have lost their jobs. Their displacement rate (2.7 percent) in the February 1996 survey was not much different from that found in the previous survey.

*Occupation.* Since the early 1980s, the proportion of job loss made up of white-collar workers has risen. In the 1981–82 period, for example, white-collar workers accounted for less than

**Table 3. Long-tenured displaced workers<sup>1</sup> who lost jobs in 1993 or 1994 by age, sex, and reason for job loss**

[Numbers in thousands]

Age and sex	Number of displaced workers	Percent distribution by reason for job loss		
		Plant or company closed down or moved	Insufficient work	Position or shift abolished
Total, 20 years and older .....	2,445	46.1	24.1	29.8
20 to 24 years .....	73	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
25 to 54 years .....	2,003	44.5	25.0	30.5
25 to 34 years .....	597	45.2	33.2	21.6
35 to 44 years .....	797	43.0	21.1	36.0
45 to 54 years .....	609	45.6	22.3	32.0
55 years and older .....	369	50.1	19.0	30.9
55 to 64 years .....	277	47.7	17.7	34.7
65 years and older ...	91	57.1	23.1	19.8
Men, 20 years and older .....	1,417	44.2	25.4	30.5
Women, 20 years and older .....	1,028	48.7	22.4	28.9

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

<sup>2</sup> Data not shown where base is less than 75,000.

**Table 4. Long-tenured displaced workers<sup>1</sup> by age, sex, race, Hispanic origin, and employment status in February 1996**

[Numbers in thousands]

Age, sex, race, and Hispanic origin	Number of displaced workers	Percent distribution by employment status in February 1996		
		Employed	Unemployed	Not in the labor force
Total, 20 years and older .....	2,445	78.5	7.3	14.2
20 to 24 years .....	73	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
25 to 54 years .....	2,003	83.5	7.1	9.5
25 to 34 years .....	597	84.5	4.5	11.0
35 to 44 years .....	797	82.8	8.9	8.3
45 to 54 years .....	609	83.4	7.2	9.5
55 years and older .....	369	54.3	5.8	39.9
55 to 64 years .....	277	61.4	7.2	31.4
65 years and older .....	91	33.4	1.1	65.5
Men, 20 years and older ....	1,417	81.3	8.5	10.2
Women, 20 years and older	1,028	74.7	5.6	19.7
<b>White</b>				
Total, 20 years and older .....	2,094	78.9	6.7	14.4
Men .....	1,227	82.2	7.7	10.1
Women .....	868	74.2	5.3	20.5
<b>Black</b>				
Total, 20 years and older .....	273	74.2	11.8	14.0
Men .....	158	74.2	13.5	12.2
Women .....	116	74.1	9.4	16.5
<b>Hispanic origin</b>				
Total, 20 years and older .....	212	75.5	10.9	13.6
Men .....	144	82.8	7.2	10.0
Women .....	68	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

<sup>2</sup> Data not shown where base is less than 75,000.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented, and Hispanics are included in both the white and black population groups.

two-fifths of the total job loss; by the 1993–94 period, their share had increased to three-fifths. This rise reflects the increase in the proportion of employment composed of white-collar workers, and can, in part, be explained by the link between industries and occupations. Specifically, the share of total employment found in service-producing industries has increased from 64 percent in the early 1980s to 70 percent in the mid-1990s. Because white-collar workers make up a large proportion (two-thirds) of employment in these industries, their likelihood of experiencing job displacement has risen since the early 1980s.

Compared to the 1991–92 period, the risk of job loss was lower for both blue- and white-collar workers during 1993–94. (See table 2.) The displacement rate for blue-collar workers (4.2 percent) continued to be higher than that for white-collar workers (3.2 percent). Since the early 1980s, however, the gap between the blue- and white-collar displacement rates has narrowed, reflecting the fact that a wider range of occupations are being subjected to job loss.

### Reason for job loss

Nearly half of the 2.4 million displaced workers reported that they had lost their jobs because their plant or company had closed down or moved. (See table 3.) Roughly one-fourth cited "slack work" as the reason for their job loss, and the remainder—3 in 10—reported that their individual position or entire shift had been abolished, up from about one-fourth in the February 1994 survey. Over the past decade, job loss due to plant closings or moves has held fairly constant, while job loss due to slack work has moved counter to the business cycle. The proportion reporting that their position or shift was abolished has doubled since the late 1980s.<sup>10</sup>

### Displacement's aftermath

*Employment status.* The reemployment rate—the proportion of displaced

**Table 5. Long-tenured displaced workers<sup>1</sup> by sex, marital status, and employment status in February 1996**

[Numbers in thousands]

Sex and marital status	Number of displaced workers	Percent distribution by employment status in February 1996		
		Employed	Unemployed	Not in the labor force
<b>Men</b>				
Total, 20 years and older .	1,417	81.3	8.5	10.2
Never married .....	211	74.1	14.0	11.9
Married, spouse present .....	985	83.0	6.9	10.1
Widowed, divorced, or separated .....	221	80.6	10.2	9.3
<b>Women</b>				
Total, 20 years and older .	1,028	74.7	5.6	19.7
Never married .....	165	87.9	6.6	5.5
Married, spouse present .....	605	69.6	5.5	24.9
Widowed, divorced, or separated .....	258	78.3	5.0	16.7

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

**Table 6. Long-tenured displaced workers<sup>1</sup> who found new jobs by weeks without work, age, sex, and employment status in February 1996**

[Numbers in thousands]

Age, sex, and employment status in February 1996	Total who found jobs	Weeks without work before finding a job					Median weeks without work
		Less than 5 weeks	5 to 14 weeks	15 to 26 weeks	27 to 52 weeks	52 weeks or more	
<b>Total</b>							
Total, 20 years, and older ...	2,018	854	390	333	311	130	8.3
25 to 54 years .....	1,750	764	344	276	260	106	8.0
25 to 34 years .....	539	237	116	86	68	32	7.7
35 to 44 years .....	693	313	126	111	97	46	7.9
45 to 54 years .....	518	214	102	79	95	28	9.6
55 years and older .....	219	71	38	43	43	24	15.5
Employed .....	1,850	808	358	309	260	115	8.0
Unemployed .....	86	16	23	15	25	7	19.7
Not in the labor force .....	83	30	10	9	26	8	17.3
<b>Men</b>							
Men, 20 years and older .....	1,195	530	238	177	174	76	7.9
Employed .....	1,104	506	222	166	137	73	7.6
Unemployed .....	61	13	13	8	23	4	(?)
Not in the labor force .....	31	10	3	4	14	-	(?)
<b>Women</b>							
Women, 20 years and older .....	825	325	153	156	137	54	11.5
Employed .....	747	302	136	143	123	43	9.8
Unemployed .....	24	3	9	7	2	3	(?)
Not in the labor force .....	53	20	7	6	12	8	(?)

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

<sup>2</sup> Data not shown where base is less than 75,000.

NOTE: Dash equals zero.

workers who held new jobs when surveyed—was 79 percent in February 1996, up from 75 percent in the February 1994 survey. (See table 4.) The proportion of job losers who were unemployed was 7 percent in 1996, down from 11 percent in the previous survey. The increase in the reemployment rate and the decline in unemployment reflected overall improvements in economic conditions during the mid-1990s.

Compared with results from the previous survey, job losers in nearly every age group were more likely to be reemployed in February 1996. Displaced workers aged 25 to 34 were most likely to have found new employment, with more than 8 in 10 having found a new job when surveyed. Displaced workers aged 55 and older were least likely to be reemployed; slightly more than half had found new jobs.

Following displacement, men were more likely than women to have found a new job in February 1996, and, among those reemployed, men were more likely than women to be working full time. Among the displaced, women were less likely than men to *participate* in the labor force—defined as working or actively looking for work; 8 in 10 women were in the labor force, compared with 9 in 10 men. For each age group, the labor force participation rate is lower for women than for men who were displaced from a job. Women who were married with a spouse present were much more likely to be out of the labor force than were single women or those who were widowed, divorced, or separated. (See table 5.) Thus, balancing labor market activity with childrearing, care of elders, and other home responsibilities—roles traditionally assumed by women—may have played a part in women’s decisions about whether to search for new jobs following job loss. The ability to depend on other family members for financial support also appears to be an important factor.

**Table 7. Long-tenured displaced workers<sup>1</sup> by receipt or exhaustion of unemployment insurance benefits and employment status in February 1996**

[Numbers in thousands]

Characteristic	Displaced workers	
	Number	Percent
Total, 20 years and older .....	2,445	100.0
Received benefits .....	1,302	53.3
Exhausted benefits .....	687	28.1
Did not receive benefits .....	1,132	46.3
Employed .....	1,920	100.0
Received benefits .....	1,002	52.2
Exhausted benefits .....	468	24.4
Did not receive benefits .....	909	47.3
Unemployed .....	177	100.0
Received benefits .....	117	66.1
Exhausted benefits .....	79	44.6
Did not receive benefits .....	61	34.5
Not in the labor force .....	348	100.0
Received benefits .....	183	52.6
Exhausted benefits .....	140	40.2
Did not receive benefits .....	162	46.6

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

NOTE: Data on receipt of unemployment insurance benefits will not sum to totals or to 100 percent because a small number of workers did not report whether they received benefits.

Another factor for some workers might have been their previous level of commitment to the labor force. Women were more likely than men to have been displaced from part-time jobs; 15 percent of women lost part-time jobs, compared with 4 percent of their male counterparts. Of those displaced from part-time jobs, women were 3 times more likely than men to be out of the labor force when surveyed.

As was the case in nearly each of the prior surveys, blacks and Hispanics were less likely than whites to be reemployed in February 1996. Among blacks and Hispanics, roughly three-fourths had found new jobs when surveyed, compared with nearly 8 in 10 whites. (See table 4.)

*Weeks without work.* In February 1996, the 2 million displaced workers who had found work at some point after displacement were asked how many weeks had passed before they began a new job.<sup>11</sup> The median number of weeks without work for the group was 8.3. (See table 6.) Displaced workers aged 55 years and older had the longest spell without work—15.5 weeks. In comparison, workers in the 25-to-54-year age group spent much less time without work (8 weeks). Women who lost their jobs were without work longer (11.5 weeks) than their male counterparts (7.9 weeks). (As indicated earlier, women also were more likely than men to stop participat-

ing in the labor force following job loss.)

Workers who were reemployed when surveyed in February 1996 spent fewer weeks (8.0) between displacement and their first postdisplacement job than did those who were unemployed (19.7) or out of the labor force (17.3) in February 1996.

*Receipt of unemployment insurance.* For many displaced workers, loss of income was mitigated for a time by receipt of unemployment insurance benefits; more than half of displaced workers received unemployment insurance after losing their jobs. (See table 7.) The proportion who had received benefits (two-thirds) was highest among those who were unemployed at the time of the survey.

More than 1 in 4 displaced workers who had received unemployment insurance had exhausted their benefits prior to the time of the February 1996 survey. This proportion was highest (45 percent) for those who were unemployed and lowest (24 percent) for those who were employed when the survey was taken.

*Loss of health insurance.* Seven of every ten workers displaced in the mid-1990s had been included in a group health plan on their lost jobs. (See table 8.) For displaced workers, employment status at the time of the survey greatly influenced whether they still had coverage from any source. Typically, workers who had been reemployed were covered by some form of insurance, either through their new jobs or through the plan of a spouse or other family member. Only about 1 in 10 of the reemployed was not covered when surveyed in February 1996. By comparison, displaced workers who were unemployed had a much greater likelihood of not having health insurance coverage; more than half of those who had been covered on their lost job were not covered when surveyed. Overall, women and men were about equally likely to have health insurance coverage after displacement.

As in prior surveys, black and Hispanic displaced workers were less likely than whites to have health insurance when surveyed. One reason for minorities' lower coverage rates is that they were less likely than whites to be reemployed in February 1996. Moreover, blacks and Hispanics were less likely to have been covered on their pre-displacement jobs; two-thirds of black workers and only half of Hispanic workers had been covered, compared with more than 7 in 10 white workers.

## The new jobs

Of the 2.4 million workers displaced in 1993–94, about 9 in 10 had been employed in full-time wage and salary jobs. When surveyed in February 1996, 65 percent of these displaced workers were again working in full-time wage and sal-

**Table 8. Long-tenured displaced workers<sup>1</sup> by incidence of group health insurance coverage on lost and current job, by sex, race, and Hispanic origin**

[Numbers in thousands]

Characteristic	Total	Covered by a group health insurance plan on lost job			Not covered on lost job
		Total	Percent covered by any group health insurance plan in February 1996		
			Yes	No	
Total, 20 years and older .....	2,445	1,748	81.6	17.6	681
Employed .....	1,920	1,391	86.5	12.9	515
Unemployed .....	177	124	45.2	54.8	54
Not in the labor force .....	348	233	71.7	25.8	113
Men, 20 years and older .....	1,417	1,080	82.4	17.1	325
Employed .....	1,152	884	86.8	12.6	256
Unemployed .....	120	84	52.4	47.6	36
Not in the labor force .....	145	112	70.5	29.5	33
Women, 20 years and older .....	1,028	668	80.1	18.6	356
Employed .....	768	507	86.0	13.6	259
Unemployed .....	57	40	( <sup>2</sup> )	( <sup>2</sup> )	17
Not in the labor force .....	203	121	72.7	22.3	80
<b>White</b>					
Total, 20 years and older .....	2,094	1,505	82.5	17.1	574
Men .....	1,227	961	83.4	16.5	255
Women .....	868	544	81.1	18.0	319
<b>Black</b>					
Total, 20 years and older .....	273	181	71.8	26.0	92
Men .....	158	95	70.5	25.3	63
Women .....	116	86	73.3	26.7	29
<b>Hispanic origin</b>					
Total, 20 years and older .....	212	107	43.9	57.0	96
Men .....	144	72	( <sup>2</sup> )	( <sup>2</sup> )	63
Women .....	68	35	( <sup>2</sup> )	( <sup>2</sup> )	33

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

<sup>2</sup> Data not shown where base is less than 75,000.

NOTE: Health insurance coverage excludes medicare or medicaid. Detail will not sum to totals or to 100 percent because a small number of respondents did not know about their coverage on their past or current job, or both. Moreover, detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented, and Hispanics are included in both the white and black population groups.

insurance, and real estate industries had found new jobs in the services industry when surveyed in February 1996.

*Earnings.* Although workers who lost full-time wage and salary jobs in 1993 and 1994 were more likely to be reemployed in such jobs than those in the previous survey period, earnings patterns in the new jobs were similar between the two surveys. More than half of those who had lost full-time wage and salary jobs and were again employed in such jobs earned less than they had previously. Slightly more than one-third had suffered earnings losses of 20 percent or more.<sup>12</sup> (See table 9.)

Median weekly earnings on jobs lost during the 1993–94 period were \$538. At the time of the February 1996 survey, the median had declined by 14 percent, to \$463. (These data are restricted to median weekly earnings on full-time wage and salary jobs with respect to both the lost and new jobs.) Earnings losses recorded in the most recent survey were similar in magnitude to those observed in the previous survey period.

The decline in earnings was greatest, 17 percent, for persons aged 35 to 44. By gender, women's predisplacement earnings were lower than men's, and earnings losses after displacement were greater for women (16 percent) than for men (13 percent). In terms of race, earnings losses were greatest for

any jobs, while 7 percent were holding part-time jobs and 9 percent were self-employed or working as unpaid family workers. The remainder were either unemployed or out of the labor force.

*Switching industries.* Many reemployed workers were in industries other than those in which they had worked previously. For example, of the 559,000 displaced manufacturing workers reemployed in February 1996, only half were reemployed in manufacturing. By comparison, nearly three-fourths of the 361,000 displaced from the expanding (and diverse) services industry were reemployed in the same industry. In fact, roughly 1 in 4 workers displaced from the manufacturing, transportation and public utilities, retail trade, and finance,

blacks (24 percent); they were much smaller for both whites and Hispanics.

Of the workers who had found new full-time jobs when surveyed in February 1996, those who had lost manufacturing jobs experienced the greatest decline in their median weekly earnings. Earnings fell 19 percent from \$552 per week on the old job to \$445 per week on the new job. (See table 10.) Weekly earnings for workers displaced from jobs in other industries showed no statistically significant change between the lost and new job. In terms of the range of earnings losses, durable goods manufacturing and transportation and public utilities had the largest proportions of workers suffering earnings losses of 20 percent or more; about 4 in 10 of the workers in these industries experienced a drop in earnings of this magnitude.

**Table 9. Median weekly earnings of long-tenured displaced full-time wage and salary workers<sup>1</sup> on their lost jobs and on jobs held in February 1996 by age, sex, race, and Hispanic origin**

[Numbers in thousands]

Age, sex, race, and Hispanic origin	Displaced full-time wage and salary workers	Part time	Reemployed in full-time wage and salary jobs in February 1996					
			Total <sup>2</sup>	Total who reported earnings	Earnings relative to those of lost job			
					20 percent or below	Below, but within 20 percent	Equal to or above, but within 20 percent	20 percent or more above
Total, 20 years and older .....	2,213	146	1,431	1,278	33.9	19.6	24.6	22.0
20 to 24 years .....	52	5	20	19	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
25 to 54 years .....	1,851	118	1,292	1,149	32.2	19.8	24.5	23.4
25 to 34 years .....	565	28	426	378	22.2	19.3	21.7	36.8
35 to 44 years .....	718	40	509	465	35.9	21.3	25.2	17.6
45 to 54 years .....	568	50	358	306	38.6	18.6	27.1	15.7
55 to 64 years .....	250	19	113	103	51.5	16.5	28.2	3.9
65 years and older .....	60	3	6	6	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
Men, 20 years and older .....	1,353	69	899	798	33.5	17.9	24.4	24.2
Women, 20 years and older ...	860	77	532	479	34.7	22.3	24.6	18.4
<b>White</b>								
Total, 20 years and older .....	1,889	135	1,202	1,079	32.8	20.3	24.2	22.7
Men .....	1,184	67	779	692	31.9	19.2	24.0	24.9
Women .....	705	68	423	387	34.4	22.0	24.5	19.1
<b>Black</b>								
Total, 20 years and older .....	257	8	175	145	48.3	13.8	17.2	20.7
Men .....	142	2	96	82	51.2	6.1	17.1	25.6
Women .....	115	6	78	63	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Hispanic origin</b>								
Total, 20 years and older .....	175	5	114	103	27.2	28.2	22.3	22.3
Men .....	123	5	91	85	23.5	29.4	27.1	20.0
Women .....	52	—	23	18	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )
<b>Reemployed in full-time wage and salary jobs in February 1996</b>								
<b>Median weekly earnings on:</b>				<b>Self-employed and unpaid family workers</b>	<b>Unemployed</b>	<b>Not in the labor force</b>		
<b>Lost job</b>	<b>Job held in February 1996</b>	<b>Percent change</b>						
Total, 20 years and older .....	\$538	\$463	-13.9	189	159	288		
20 to 24 years .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	3	15	9		
25 to 54 years .....	531	469	-11.7	152	123	165		
25 to 34 years .....	428	447	4.4	31	20	60		
35 to 44 years .....	576	477	-17.2	52	62	54		
45 to 54 years .....	587	489	-16.7	69	41	51		
55 to 64 years .....	670	422	-37.0	22	20	75		
65 years and older .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	11	1	39		
Men, 20 years and older .....	605	525	-13.2	141	109	134		
Women, 20 years and older ...	462	390	-15.6	48	49	153		
<b>White</b>								
Total, 20 years and older .....	555	495	-10.8	172	127	253		
Men .....	625	550	-12.0	131	88	119		
Women .....	472	407	-13.8	41	38	134		
<b>Black</b>								
Total, 20 years and older .....	456	349	-23.5	15	32	27		
Men .....	489	356	-27.2	9	21	13		
Women .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	7	11	14		
<b>Hispanic origin</b>								
Total, 20 years and older .....	384	368	-4.2	12	14	29		
Men .....	373	371	-5	9	3	14		
Women .....	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	3	11	14		

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

<sup>2</sup> Includes 153,000 who did not report earnings on their lost job.

<sup>3</sup> Data not shown where base is less than 75,000.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented, and Hispanics are included in both the white and black population groups. Dash equals zero.



**Table 10. Median weekly earnings of long-tenured displaced full-time wage and salary workers<sup>1</sup> on their lost jobs and on jobs held in February 1996 by industry and class of worker of lost job**

[Numbers in thousands]

Industry and class of worker of lost job	Displaced full-time wage and salary workers	Part time	Reemployed in full-time wage and salary jobs in February 1996						
			Total <sup>2</sup>	Total who reported earnings	Earnings relative to those of lost job				
					20 percent or below	Below, but within 20 percent	Equal to or above, but within 20 percent	20 percent or more above	
Total, 20 years and older .....	2,213	146	1,431	1,278	33.9	19.6	24.6	22.0	
Nonagricultural private wage and salary workers .....	2,013	132	1,291	1,164	34.7	20.3	22.9	22.2	
Mining .....	34	—	13	9	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	
Construction .....	106	2	75	71	36.6	14.1	29.6	19.7	
Manufacturing .....	743	43	481	432	38.2	18.8	21.3	21.8	
Durable goods .....	473	27	309	273	41.8	13.2	23.4	21.6	
Nondurable goods .....	270	16	172	159	32.1	28.3	17.6	22.0	
Transportation and public utilities .....	164	10	124	114	42.1	20.2	21.1	16.7	
Transportation .....	99	9	72	68	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	
Communications and other public utilities .....	65	1	51	47	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	
Wholesale and retail trade .....	408	33	262	224	30.4	21.4	16.5	31.7	
Wholesale trade .....	140	5	98	93	22.6	21.5	18.3	37.6	
Retail trade .....	268	28	164	129	36.4	20.9	14.7	27.9	
Finance, insurance, and real estate .....	194	9	112	96	19.8	27.1	28.1	25.0	
Services .....	357	35	225	219	32.9	21.5	29.7	16.0	
Professional services .....	182	28	116	111	36.9	23.4	28.8	10.8	
Other services .....	168	7	105	103	29.1	20.4	31.1	19.4	
Agricultural wage and salary workers .....	27	6	13	13	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	
Government workers .....	156	8	113	98	26.5	14.3	39.8	19.4	
			<b>Reemployed in full-time wage and salary jobs in February 1996</b>						
			<b>Median weekly earnings on:</b>			<b>Self-employed and unpaid family workers</b>	<b>Unemployed</b>	<b>Not in the labor force</b>	
			<b>Lost job</b>	<b>Job held in February 1996</b>	<b>Percent change</b>				
Total, 20 years and older .....	\$538		\$463		-13.9	189	159	288	
Nonagricultural private wage and salary workers .....	539		465		-13.7	177	150	263	
Mining .....	( <sup>3</sup> )		( <sup>3</sup> )		( <sup>3</sup> )	3	12	6	
Construction .....	550		515		-6.4	8	12	8	
Manufacturing .....	552		445		-19.4	41	62	116	
Durable goods .....	614		494		-19.5	27	43	67	
Nondurable goods .....	472		384		-18.6	15	20	48	
Transportation and public utilities .....	627		559		-10.8	1	9	21	
Transportation .....	( <sup>3</sup> )		( <sup>3</sup> )		( <sup>3</sup> )	1	3	14	
Communications and other public utilities .....	( <sup>3</sup> )		( <sup>3</sup> )		( <sup>3</sup> )	—	6	7	
Wholesale and retail trade .....	394		407		3.3	43	17	54	
Wholesale trade .....	462		503		8.9	21	5	10	
Retail trade .....	360		357		-.8	22	12	43	
Finance, insurance, and real estate .....	527		485		-8.0	34	4	36	
Services .....	621		525		-15.5	44	33	19	
Professional services .....	673		562		-16.5	13	17	8	
Other services .....	575		481		-16.3	31	13	12	
Agricultural wage and salary workers .....	( <sup>3</sup> )		( <sup>3</sup> )		( <sup>3</sup> )	—	4	4	
Government workers .....	554		430		-22.4	12	2	21	

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

<sup>2</sup> Includes 153,000 who did not report earnings on their lost job.

<sup>3</sup> Data not shown where base is less than 75,000.

NOTE: Dash equals zero.

**Table 11. Long-tenured displaced workers,<sup>1</sup> displacement rates, and reemployment rates by census region and division, 1991–92 and 1993–94**

[Numbers in thousands]

Census designation	1991–92			1993–94		
	Displaced workers	Reemployment rate <sup>2</sup>	Displacement rate <sup>3</sup>	Displaced workers	Reemployment rate <sup>2</sup>	Displacement rate <sup>3</sup>
Total, 20 years and older ....	2,816	75.0	3.9	2,445	78.5	3.2
Northeast .....	694	69.3	4.4	541	75.0	3.4
New England .....	209	71.8	4.9	164	78.0	3.8
Middle Atlantic .....	485	68.2	4.2	377	73.7	3.2
Midwest .....	630	80.3	3.4	596	81.5	3.2
East North Central .....	454	79.5	3.6	418	79.7	3.2
West North Central .....	176	82.4	3.2	178	86.0	3.1
South .....	807	78.4	3.3	734	80.1	2.9
South Atlantic .....	458	77.7	3.5	378	79.1	2.8
East South Central .....	127	75.6	3.0	141	85.1	3.2
West South Central .....	222	81.5	3.1	215	78.6	2.8
West .....	686	72.0	4.7	575	76.3	3.7
Mountain .....	147	80.3	4.1	133	75.2	3.4
Pacific .....	539	69.8	4.8	442	76.7	3.9

<sup>1</sup> Data refer to persons who had 3 or more years of tenure on a job they had lost or left between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their

positions or shifts were abolished.

<sup>2</sup> See text footnote 6 for an explanation of the reemployment rate calculation.

<sup>3</sup> See text footnote 3 for an explanation of the displacement rate calculation.

*Regions.* As the labor market improved during the mid-1990s, the incidence of worker displacement declined in every region of the United States.<sup>13</sup> As was the case in the previous survey, the risk of job loss was greatest in the Northeast and West and lowest in the Midwest and South. For example, displacement rates for the New England and Pacific regions were 3.8 and 3.9 percent, respectively; by comparison, the rate was 2.8 percent in both the South Atlantic and West South Central regions, and 3.1 percent in the West North Central region. (See table 11.)

Workers in the South and Midwest also were more likely to be reemployed than were those in the Northeast and West. For example, reemployment rates in the West North Central and East South Central regions were 86.0 and 85.1 percent, respectively; by comparison, rates were 73.7 percent in the Middle Atlantic region and 75.2 percent in the Mountain region.

### Short-tenured workers

Since the inception of the Displaced Worker Surveys in 1984, BLS analysis of data on displaced workers has focused primarily on workers who had 3 or more years of tenure with their employer (long-tenured). Some researchers have argued that limiting analysis to only long-tenured displaced workers is too restrictive and, in response, have formulated alternative

measures of job displacement that include workers with fewer than 3 years of tenure (short-tenured).<sup>14</sup> However, the rationale for restricting analysis to only the long-tenured is to ensure that these workers had a significant attachment to their previous employer, and thus had acquired a considerable amount of job-specific skills. Excluding short-tenured job losers lessens the likelihood of including displacement that was the result of a mismatch between the employee and employer rather than the consequence of labor market conditions.

Indeed, short-tenured displaced workers differ from their counterparts with long tenure in terms of demographic characteristics, industry and occupational concentration, and risk of displacement. In the February 1996 survey, the number of short-tenured displaced workers was 2.7 million. (See table 12.) These workers were about 5 times as likely to be young—aged 20 to 24—than were their counterparts with long-tenure. Displaced workers with short tenure were nearly twice as likely as the long-tenured to have lost part-time jobs, and were more likely to be less educated; the proportion who had not graduated from high school (14 percent) was higher than that for the long-tenured (8 percent).

In terms of occupations, short-tenured displaced workers were less likely than those with longer tenure to have worked in managerial and professional specialty occupations, and were twice as likely to have held service jobs. By industry, short-tenured job losers were more likely to

**Table 12. Percent distribution of displaced workers and displacement rates for workers who lost jobs in 1993 or 1994 by tenure on the lost job and selected characteristics**

Characteristic	3 years of tenure or more		Less than 3 years of tenure	
	Total <sup>1</sup>	Displacement rate <sup>2</sup>	Total <sup>1</sup>	Displacement rate <sup>2</sup>
<b>Total</b>				
Total, 20 years and older (in thousands) ....	2,445	3.2	2,699	6.7
Percent .....	100.0	3.2	100.0	6.7
20 to 24 years .....	3.0	2.3	15.5	4.3
25 to 54 years .....	81.9	3.4	78.1	7.4
25 to 34 years .....	24.4	3.4	36.3	6.6
35 to 44 years .....	32.6	3.4	27.5	7.8
45 to 54 years .....	24.9	3.4	14.3	8.3
55 years and older .....	15.1	3.0	6.4	6.9
55 to 64 years .....	11.3	3.0	4.5	6.5
65 years and older .....	3.7	3.1	1.9	8.2
Men, 20 years and older .....	58.0	3.3	55.3	7.3
Women, 20 years and older .....	42.0	3.1	44.7	6.2
White, 20 years and older .....	85.6	3.2	83.2	6.6
Black, 20 years and older .....	11.2	3.5	12.9	8.2
Hispanic origin, 20 years and older .....	8.7	3.5	10.2	6.9
<b>Full- and part-time status</b>				
Full-time workers .....	89.2	3.3	80.5	7.1
Part-time workers .....	8.4	2.2	15.4	4.7
<b>Educational attainment</b>				
Less than a high school diploma .....	8.1	2.5	13.5	7.8
High school graduates, no college .....	32.7	3.0	33.4	6.9
Some college, no degree .....	22.6	3.9	23.1	6.6
Associate degree .....	12.0	4.7	9.7	8.3
College graduates, total .....	24.5	2.9	20.3	5.7
<b>Occupation</b>				
Managerial and professional specialty .....	27.3	2.9	17.9	5.1
Technical, sales, and administrative support ..	32.7	3.6	31.6	6.6
Service occupations .....	5.7	1.7	11.8	4.8
Precision production, craft, and repair .....	12.6	3.3	15.0	10.2
Operators, fabricators, and laborers .....	20.2	4.9	21.3	8.9
Farming, forestry, and fishing .....	.8	.8	1.1	4.3
<b>Industry</b>				
Nonagricultural private wage and salary workers .....	90.2	4.2	92.6	7.5
Mining .....	1.4	7.1	.9	13.6
Construction .....	4.9	4.2	11.4	12.5
Manufacturing .....	30.8	5.7	19.7	8.7
Durable goods .....	19.2	6.2	12.0	8.9
Nondurable goods .....	11.6	5.0	7.7	8.4
Transportation, communications and other public utilities .....	7.5	4.2	6.0	7.5
Wholesale and retail trade .....	19.5	4.4	25.0	5.4
Finance, insurance, and real estate .....	8.5	4.5	5.6	5.7
Services .....	17.5	2.7	23.8	5.0
Agricultural wage and salary workers .....	1.3	3.3	1.0	4.8
Government workers .....	7.2	1.2	4.0	2.6

<sup>1</sup> Data refer to persons who had lost or left a job between January 1993 and December 1994 because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

<sup>2</sup> See text footnotes 3 and 15 for explanations of the displacement rate calculation.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to

totals because data for the "other races" group are not presented, and Hispanics are included in both the white and black population groups. In addition, data for workers who were displaced from full- and part-time jobs will not sum to totals because data were not collected for a small number of workers, while others worked at jobs in which their hours varied. Similarly, occupational detail will not sum to totals because a small number of workers did not report occupation of lost job.

have worked in the construction, wholesale and retail trade, and services industries.

Displaced workers with short tenure had a much higher risk of displacement than did those with long tenure. The displacement rate for those with short tenure (6.7 percent) was more than twice that for long-tenured workers (3.2 percent).<sup>15</sup> This relationship held for nearly every demographic group and for many industry and occupational categories.

THE ECONOMIC EXPANSION AND IMPROVEMENT in the job market in the mid-1990s led to a decline in the number of displaced workers. Between 1993 and 1994, 2.4 million long-tenured workers were displaced from their jobs. These workers ac-

counted for 3.2 percent of all workers who had been with the same employer for 3 years or more. By comparison, 3.9 percent of all long-tenured workers had lost their jobs during 1991–92, a period of much poorer labor market conditions. Although workers in the mid-1990s were more successful at finding new jobs than those reporting displacement in the prior survey, those who found full-time jobs were no more likely to have found jobs with earnings comparable to those on their lost jobs. While workers in goods-producing industries continued to be overrepresented among the displaced, job losses recorded in the February 1996 survey were more widely dispersed across industries and occupations than those experienced in previous surveys. □

## Footnotes

<sup>1</sup> In addition to workers who said they had lost jobs, the count of displacement also includes workers who said they had left jobs in anticipation of losing them.

<sup>2</sup> The National Bureau of Economic Research, Inc., generally viewed as the arbiter of business cycle dates, designated March 1991 as the trough of the recession that began in July 1990. However, although the recession officially ended in early 1991, labor market conditions continued to be unusually sluggish well into 1992.

<sup>3</sup> Displacement rates are calculated by dividing the number of displaced workers in a specified worker group by a tenure-adjusted, 2-year average estimate of employment for the same worker group. Employment estimates for each year were adjusted, using job-tenure data from the January 1983, 1987, 1991, and February 1996 CPS supplements, to include only those workers with 3 years of tenure or more. A 2-year average was then computed using those adjusted employment estimates.

<sup>4</sup> These surveys were initiated in 1984 to address concerns about the extent to which structural changes in the economy had resulted in the elimination of many long-held jobs in the early 1980s. The 1984 survey was conducted under the aegis of the Employment and Training Administration of the U.S. Department of Labor. The series of questions on displacement has since become a biennial supplement to the Current Population Survey (CPS).

<sup>5</sup> During 1993–94, among workers aged 20 and older, the 2-year average unemployment rate for those with less than a high school diploma was 11.5 percent, while that for college graduates was 2.9 percent.

<sup>6</sup> Reemployment rates are calculated by dividing the number of displaced workers in a specified worker group who were reemployed at the time of the survey by the total number displaced in the same worker group.

<sup>7</sup> In Paul Swaim and Michael Podgursky, “Do more-educated workers fare better following job displacement?” *Monthly Labor Review*, August 1989, pp. 43–46, the authors found that workers with more education spend considerably less time finding a new job and are more likely to become reemployed in a full-time job. In addition, workers with higher levels of education are more likely to find jobs that pay wages similar to those of their lost jobs.

<sup>8</sup> For purposes of this analysis, blue-collar occupations are defined as the sum of the “precision production, craft, and repair” and “operators, fabricators, and laborers” categories; the white-collar occupations comprise the “managerial and professional specialty” and “technical, sales, and administrative support” categories.

<sup>9</sup> Even so, results from a recent study, which controlled for such differences between groups, suggest that the risk of job displacement declines markedly with more education. See Henry S. Farber, “The Changing Face of Job Loss in the United States, 1981–95.” *Brookings Papers on Economic*

*Activity: Microeconomics* (The Brookings Institution), forthcoming.

<sup>10</sup> In “The Changing Face of Job Loss,” Farber found that much of the increase in displacement due to “position or shift abolished” has been concentrated among more educated workers.

<sup>11</sup> Because of an error in the February 1994 survey, data on weeks without work were not collected.

<sup>12</sup> It should be noted that decreases are somewhat understated (and increases overstated), because the earnings data are not adjusted for inflation.

<sup>13</sup> The four census regions of the United States are Northeast, South, Midwest, and West. Within the Northeast, the New England division includes Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont; and the Middle Atlantic division includes New Jersey, New York, and Pennsylvania. Within the South, the South Atlantic division includes Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia; the East South Central division includes Alabama, Kentucky, Mississippi, and Tennessee; and the West South Central division includes Arkansas, Louisiana, Oklahoma, and Texas. Within the Midwest, the East North Central division includes Illinois, Indiana, Michigan, Ohio, and Wisconsin; the West North Central division includes Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. Within the West, the Mountain division includes Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming; the Pacific division includes Alaska, California, Hawaii, Oregon, and Washington.

<sup>14</sup> In “Job Displacement and Family Structure,” Working Paper (Boston University, Center for Work and Family, 1997) Paul Attewell uses a range of three alternative definitions of job displacement in his analysis of the relationship among marital status, parental status, and job loss. The least restrictive definition includes all persons who answered “yes” to the first question of the survey, “...did you lose a job or leave one because: your plant or company closed or moved, your position or shift was abolished, insufficient work, or another similar reason?” The most restrictive definition is the Bureau of Labor Statistics (BLS) definition of long-tenured displaced workers used throughout this article.

<sup>15</sup> See footnote 3 for an explanation of the displacement rate calculation for long-tenured displaced workers. Displacement rates for short-tenured displaced workers are calculated by dividing the number of displaced workers (with fewer than 3 years of job tenure) in a specified worker group by a tenure-adjusted, 2-year average estimate of employment for the same worker group. Employment estimates for 1993 and 1994 were adjusted, using job-tenure data from the February 1996 CPS supplement, to include only those workers with fewer than 3 years of tenure. A 2-year average was then computed using those adjusted employment estimates.

## Appendix A: Scope and method of the study

The data presented in this article were collected through a supplement to the February 1996 Current Population Survey (CPS), a monthly survey of about 50,000 households that provides basic data on employment and unemployment for the Nation. The purpose of this supplement was to obtain information on the number and characteristics of persons who had been displaced (as defined below) from their jobs over the prior 3 calendar years.

The first question asked of survey respondents was, "During the last 3 calendar years, that is, January 1993 through December 1995, did (you/name) lose or leave a job because a plant or company closed or moved, (your/his/her) position or shift was abolished, insufficient work, or another similar reason?" If the answer to that question was "yes," the respondent was asked to identify which reason, among the following, best described the reason for the job loss:

- Plant or company closed down or moved
- Plant or company operating but lost job because of:
  - Insufficient work
  - Position or shift abolished
  - Seasonal job completed
- Self-operated business failed
- Some other reason

Respondents who provided one of the first three reasons—plant or company closed or moved, insufficient work, or position or shift abolished—were then asked questions about the lost job, including how many years it had been held; the year the job was lost; the earnings, industry, and occupation of the lost job; and whether health insurance had been provided. Other questions were asked to determine what occurred before and after the job loss, such as: Was the respondent notified of the upcoming dismissal? How long did he/she go without work? Did he/she receive unemployment benefits? And, if so, were the benefits used up? Did the person move to another location after the job loss to take or look for another job? Information also was collected about current health insurance coverage (other than Medicare and Medicaid) and current earnings for those employed in February 1996.

The definition of displaced workers used in this article—as in earlier studies based on displaced worker supplements—is persons aged 20 years and older who lost or left a job because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished. Most of the data presented here refer to workers who lost or left jobs they had worked at for 3 or more years. There are several important differences between the February 1994 and February 1996 surveys and surveys conducted every other January since 1984 in the counting of displaced workers that render the data not strictly comparable:

1) In January 1994, there were two major changes made in the CPS—the implementation of a redesigned survey questionnaire and collection methodology and the introduction of new population estimates from the 1990 census, adjusted for the estimated undercount of the population. For more information on these changes, see "Revisions in the Current Population Survey Effective January 1994" in the February 1994 issue of *Employment and Earnings*.

2) The reference period used when asking questions about displacement was shortened from "the prior 5 years" in earlier surveys to "the prior 3 calendar years" in the February 1994 and February

1996 surveys. This was done because the reliability of the data decreases as the length of the reference period increases. Data on job losses that occurred in the fourth and fifth years of the reference period were probably less accurate than information on displacements that occurred in years closer to the survey date. For example, in the January 1992 survey, the numbers of displacements in the fourth and fifth years—that is, 1987 and 1988—were markedly lower than when those 2 years were the second and third years of the reference period in the January 1990 survey, a clear indication of recall bias in the later years.

3) This article also excludes displacements that occurred in the year closest to the survey date. This was done to avoid the possibility of including some persons who, having lost their jobs relatively recently when they were surveyed, were counted as displaced when, in reality, their job losses were temporary rather than permanent.

4) Displaced workers who cited one of the three displacement reasons for job loss and then responded later in the questionnaire that their "class of worker" on their lost job was self-employed were excluded from the count of displaced workers in the 1994 and 1996 surveys, whereas they had been included in prior ones.

5) In the February 1994 and 1996 surveys, respondents who reported that they had lost their jobs in the year closest to the survey date—1993 in the February 1994 survey and 1995 in the February 1996 survey—and expected to be recalled within the next 6 months (and thus did not meet the requirements of having been displaced) were left out of the count of displaced workers; in earlier surveys, respondents were not asked directly about their expectation of recall.

6) The 1994 and 1996 displaced worker surveys were conducted in February, whereas the five previous surveys were held in January. In 1994, the survey was postponed 1 month to help ease the transition to the "new" survey and collection methodology that occurred in January 1994. Also, the reference periods in the 1994 and 1996 surveys were the calendar years 1991, 1992, and 1993; and 1993, 1994, and 1995, respectively. In the prior surveys, those losing jobs in the first 2 or 3 weeks of January were subject to being counted as displaced.

7) Displaced worker surveys conducted prior to the February 1994 survey also are not directly comparable because the earlier surveys were not adjusted for supplement nonresponse. A proportion of the people who complete the basic questionnaire on labor force status do not provide usable responses to the supplementary questions. Respondents may choose to answer none of the supplement questions, or they may not provide answers to key questions within the supplement. In the February 1996 survey, nonresponse was much higher relative to past displaced worker supplements. Reweighting is one of the methods historically used to adjust for such supplement nonresponse. It accounts for missing information by increasing the weights assigned to the individuals from whom information was obtained. In addition to the February 1996 survey, supplement weights also were calculated for the February 1994 survey so that comparisons of the data from the two surveys are not clouded by the differences in nonresponse.

During and after the February 1996 administration of the Displaced Worker Survey, quality assessment research was conducted as part of the Bureau's ongoing effort to improve the quality of its surveys. For more information on this research, see James L. Esposito and Sylvia Fisher, "A Summary of Quality-Assessment Research Conducted on the 1996 Displaced-Worker/Job-Tenure/Oc-

cupational-Mobility Supplement," BLS Working Paper, forthcoming.

## Appendix B: Statistical error

In any sample survey such as the Current Population Survey, there are two types of errors possible—nonsampling and sampling. Nonsampling errors can be attributed to many factors, including the inability to obtain information about all cases in the sample; definitional difficulties; differences in the interpretation of questions; respondents' inability or unwillingness to provide correct information or to recall information; errors made in data collection, such as in coding or recoding the data; errors in processing the data; errors made in estimating values for missing data; and failure to represent all units within the sample (undercount).

Sampling error is the variation that occurs by chance because a sample, rather than the entire population, is surveyed. This type of error, or variability, is primarily measured by the standard error. The sample estimate and its standard error can be used to construct confidence intervals, or ranges, that would include the average result of all possible samples, with a known probability. When the standard error is multiplied by 2 and then added to and subtracted from the sample estimate, the resulting confidence interval should contain about 95 percent of all possible estimates. If the standard error is multiplied by 1.6 and then added to and subtracted from the estimate, the confidence interval contains 90 percent of all possible estimates. At one standard error, 68 percent of all possible estimates would fall within the confidence interval.

Table B shows the median weekly earnings on jobs lost in the 1993–94 period, the earnings on the job held in February 1996, and the standard errors associated with both earnings estimates. The standard error of an estimated median depends upon the shape of the distribution (particularly in the vicinity of the median value) as well as the size of its base. Because the base included in both of these earnings estimates is the same, the differences in the standard errors shown here between the lost and new job are determined solely by the distribution of earnings.

**Table B.** Median weekly earnings and standard errors of the median earnings on the jobs lost between January 1993 and December 1994 and the jobs held in February 1996 for long-tenured displaced full-time wage and salary workers,<sup>1</sup> by age, sex, race, and Hispanic origin, and by industry and class of worker

[Numbers in thousands]

Characteristic	Reemployed in February 1996 in full-time wage and salary jobs			
	Median weekly earnings on:		Standard error of median on:	
	Lost job	Job held in February 1996	Lost job	Job held in February 1996
Total, 20 years and older .....	\$538	\$463	\$14.40	\$14.53
<b>Age, sex, race, and Hispanic origin</b>				
20 to 24 years .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
25 to 54 years .....	531	469	15.21	14.76
25 to 34 years .....	428	447	22.95	18.52
35 to 44 years .....	576	477	38.31	21.49
45 to 54 years .....	587	489	34.41	25.97
55 to 64 years .....	670	422	184.10	40.60
65 years and older .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Men, 20 years and older .....	605	525	25.78	16.92
Women, 20 years and older .....	462	390	13.63	15.65
White, 20 years and older ...	555	495	28.33	13.62
Men .....	625	550	30.86	43.13
Women .....	472	407	14.80	20.38
Black, 20 years and older ...	456	349	35.01	10.49
Men .....	489	356	35.69	10.39
Women .....	413	340	35.35	37.72
Hispanic origin, 20 years and older .....	384	368	38.43	51.14
Men .....	373	371	34.33	38.73
Women .....	430	353	71.74	46.46
<b>Industry and class of worker</b>				
Nonagricultural private wage and salary workers ..	539	465	15.38	13.84
Mining .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Construction .....	550	515	86.95	37.73
Manufacturing .....	552	445	30.21	29.03
Durable goods .....	614	494	88.80	27.69
Nondurable goods .....	472	384	30.61	22.51
Transportation and public utilities .....	627	559	60.88	49.60
Wholesale and retail trade .....	394	407	18.28	20.34
Wholesale trade .....	462	503	35.78	18.60
Retail trade .....	360	357	19.35	32.14
Finance, insurance, and real estate .....	527	485	74.46	86.20
Services .....	621	525	41.46	31.09
Professional services ..	673	562	167.24	28.72
Other service industries	575	481	55.99	26.67
Agricultural wage and salary workers .....	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Government workers .....	554	430	67.16	235.13

<sup>1</sup> Data refer to displaced workers who had lost full-time wage and salary jobs they had held for 3 or more years and were reemployed in full-time wage and salary jobs. Displaced workers are persons who lost or left jobs because their plant or company closed or moved, there was insufficient work for them to do, or their positions or shifts were abolished.

<sup>2</sup> Data not shown where base is less than 75,000.