

# Dynamics of Economic Well-Being: Spells of Unemployment 2001–2003

Issued March 2006

*Household Economic Studies*

P70-105

## Current Population Reports

By  
Alfred O. Gottschalck

This report presents data from the 2001 panel of the Survey of Income and Program Participation (SIPP) on how long people remained unemployed during each of the times (spells) they experienced unemployment. The data cover the period of January 2001 through December 2003. The table in the appendix displays the detailed statistical data analyzed in this report.

The labor market of the United States is dynamic and flexible, changing as people enter and exit it or change jobs within it. As the overall structure of the U.S. economy continues to shift from a manufacturing base to a service-oriented base, so does the demand for particular types of labor.<sup>1</sup> Data on spells of unemployment provide an insight into how easily the market allows people to

### SIPP—A Longitudinal Survey

The SIPP is a longitudinal panel survey that interviews a representative sample of U.S. households every 4 months. The population represented (the population universe) is the civilian noninstitutionalized population of the United States. The median spell duration estimates in this report relate to the civilian noninstitutionalized population of the United States 15 years and older at the end of the 2001 SIPP panel in December 2003.

The core content of the SIPP identifies demographic characteristics, labor force participation, government program participation, and various income sources of members of sampled households. The longitudinal estimates presented here are based on people who were interviewed in all waves of the 2001–2003 reference period, or for whom imputed information exists. Each wave of the SIPP panel consists of four rotations interviewed in turn in consecutive months. Efforts were made during the life of the panel to ensure that the sample remained representative of the noninstitutionalized population of the United States. If the people included in the estimates have different experiences of employment and unemployment than the people who did not respond initially, left the sample, or missed two or more consecutive waves, these longitudinal estimates may be biased.

<sup>1</sup> For a more thorough discussion of U.S. economic structural change and its relationship to changing labor demands, see Kevin Murphy and Finis Welch, "Industrial Change and the Rising Importance of Skill," pages 101–132 in *Uneven Tides: Rising Inequality in America*, Sheldon H. Danziger and Peter Gottschalk, eds., 1993; George E. Johnson, "Changes in Earnings Inequality: The Role of Demand Shifts," pages 41–54 in *Journal of Economic Perspectives*, Spring 1997; and Daron Acemoglu, "Technical Change, Inequality, and the Labor Market," pages 7–72 in *Journal of Economic Literature*, March 2002.

make these transitions and respond to shifts in labor demand.

### Unemployment Spells by Sex

The median duration of a spell of unemployment for individuals was 2.4 months during the period from January 2001

U S C E N S U S B U R E A U

Helping You Make Informed Decisions

U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU

through December 2003.<sup>2</sup> The median spell of unemployment for women (2.2 months) was shorter than that for men (2.6 months), which may reflect a segmentation between men and women in the types of jobs they were seeking, the intensity of their job searches, the conditions under which they would accept jobs (reservation wage,<sup>3</sup> for example), and other factors (Figure 1).

### Unemployment Spells by Race and Hispanic Origin

Non-Hispanic White workers experienced the shortest spells of unemployment, while Black workers and Asian and Pacific Islander workers had the longest (Figure 1).<sup>4</sup> Black workers had a median spell length that was 43 percent longer than that of non-Hispanic White workers; Asian and Pacific Islander workers had a median spell length that was 38 percent longer. Male and female Black workers had unemployment spell durations that were longer than their non-Hispanic White counterparts. Male Black workers had a median duration of 3.1 months and female Black workers a median of

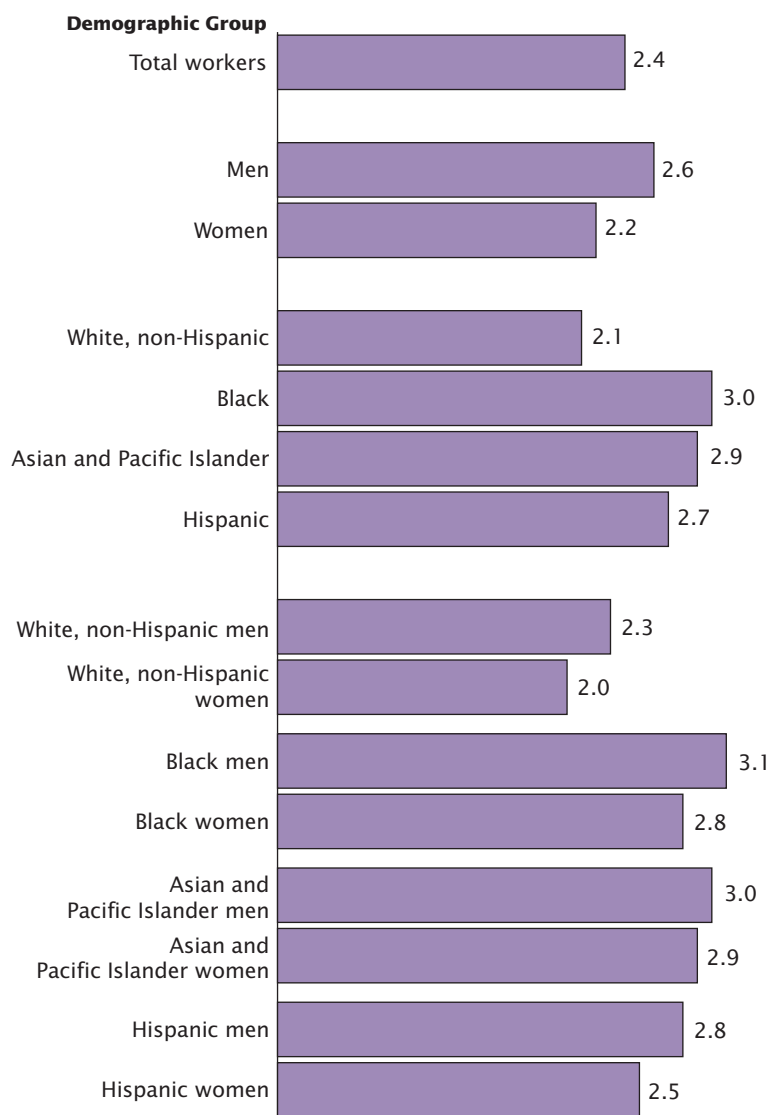
<sup>2</sup> The estimates in this report are based on responses from a sample of the population and may differ from the actual values because of sampling variation and other factors. As a result, apparent differences between the estimates for two or more groups may not be statistically significant. All comparative statements have undergone statistical testing and are significant at the 90-percent confidence level unless otherwise noted. All spells are included in the statistical analysis, so individuals may be represented more than once.

<sup>3</sup> The lowest wage an individual is willing to accept in order to enter employment.

<sup>4</sup> Because Hispanics may be any race, data in this report for Hispanics overlap slightly with data for the Black population and the Asian and Pacific Islander population. For this report, the number of Hispanic Black workers comprised 1 percent of total workers and the number of Hispanic Asian and Pacific Islander workers comprised less than one-half of 1 percent of total workers. Data for American Indians and Alaska Natives are not shown in this report because of their small sample sizes.

Figure 1.  
**Median Duration of Spells of Unemployment by Sex, Race, and Hispanic Origin: 2001–2003**

(In months)



Note: Includes all unemployment spells for people in the labor force; people of Hispanic origin may be any race.

Source: U.S. Census Bureau, Survey of Income and Program Participation, 2001 panel.

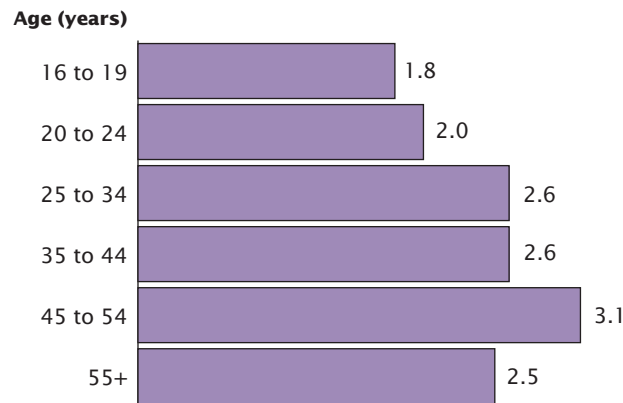
2.8 months, while male and female non-Hispanic White workers had median durations of 2.3 and 2.0 months, respectively. Female Hispanic workers had an unemployment spell duration (2.5 months) that was longer than that of female non-Hispanic White workers (2.0 months).

### Unemployment Spells by Age

Spell length and age were positively related, with the median unemployment spell duration increasing with age (Figure 2). The shortest median spell length was 1.8 months for 16-to-19-year-olds; the longest was 3.1 months for

Figure 2.  
**Median Duration of Spells of Unemployment  
 by Age: 2001–2003**

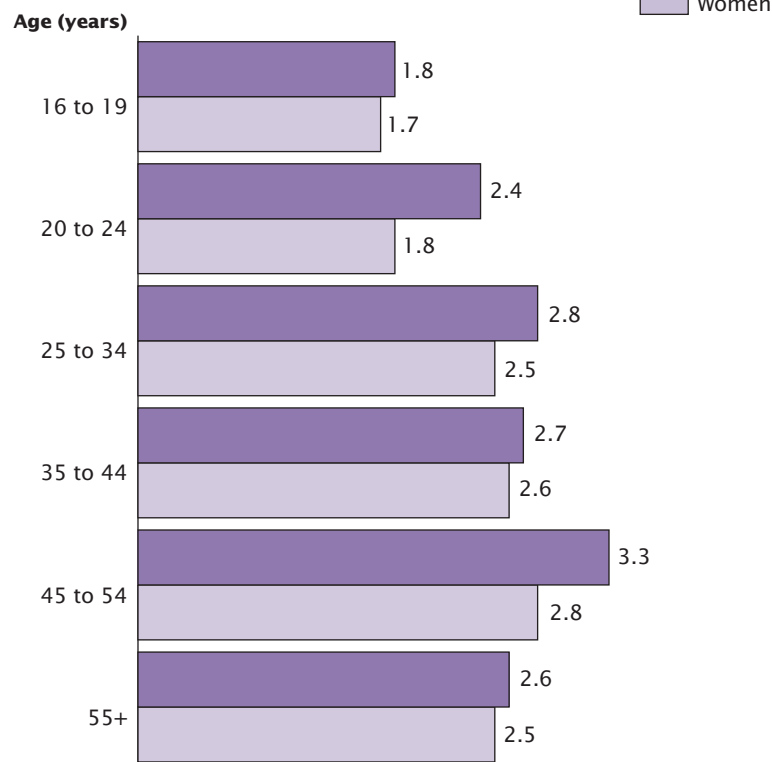
(In months)



Note: Includes all unemployment spells for people in the labor force.  
 Source: U.S. Census Bureau, Survey of Income and Program Participation, 2001 panel.

Figure 3.  
**Median Duration of Spells of Unemployment  
 by Age and Sex: 2001–2003**

(In months)



Note: Includes all unemployment spells for people in the labor force.  
 Source: U.S. Census Bureau, Survey of Income and Program Participation, 2001 panel.

people aged 45–54. Male 20-to-24-year-olds (2.4 months) had longer spell lengths than their female counterparts (1.8 months), while for the other age groups, the male and female spell durations were not statistically different from each other (Figure 3). Of the male age cohorts, 16-to-19-year-olds had the shortest spell lengths (1.8 months). Among the female age cohorts, 16-to-19-year-olds had the shortest spell lengths (1.7 months), compared with 25-to-34-year-olds (2.5 months), 35-to-44-year-olds (2.6 months), 45-to-54-year-olds (2.8 months), and those aged 55 and older (2.5 months). The shorter spell durations for younger workers relative to older workers may be partly a result of younger workers possessing more current job skills that the modern service-oriented labor market demands and being less constrained by family responsibilities, thereby allowing them to transition between jobs more easily and quickly. Also, younger workers tend to be less well-paid than older workers, and since more jobs are available in the lower wage ranges, younger workers may be able to transition between lower-paying jobs more quickly.

**Unemployment Spells  
 by Education**

Educational attainment was inversely related to spell length. The greater the educational attainment, the shorter the spell of unemployment (Figure 4). Individuals with less than a high school education had a median spell length that was 35 percent longer than that of people with at least some college education. The longer spell duration for workers who did not complete high school relative to more highly educated workers may partly reflect the diminished employment opportunities for less-skilled

workers over the time period examined in this report.<sup>5</sup>

### Source of the Data

The population represented (the population universe) in the 2001 SIPP is the civilian noninstitutionalized population of the United States. The SIPP is a longitudinal survey conducted at 4-month intervals. The data in this report refer to the period from January 2001 through December 2003. The institutionalized population, which is excluded from the population universe, is composed primarily of the population in correctional institutions and nursing homes (91 percent of the 4.1 million institutionalized population in Census 2000).

### Accuracy of the Estimates

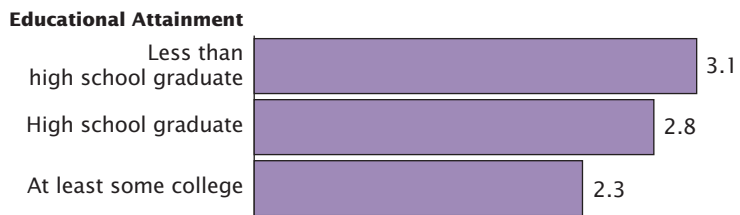
Statistics from surveys are subject to sampling and nonsampling error. All comparisons presented in this report have taken sampling error into account and are significant at the 90-percent confidence level unless otherwise noted. This means the 90-percent confidence interval for the difference between the estimates being compared does not include zero. Nonsampling errors in surveys may be attributed to a variety of sources, such as how the survey is designed, how respondents interpret questions, how able and willing respondents are to provide correct answers, and how accurately the answers are coded and classified. The U.S. Census Bureau employs quality control procedures throughout the production

<sup>5</sup> See Sheldon H. Danziger and Peter Gottschalk, *America Unequal*, 1995, for a discussion of the diminished employment opportunities for less-skilled workers relative to more highly skilled workers in the United States.

Figure 4.

### Median Duration of Spells of Unemployment by Educational Attainment for People 21 and Older: 2001–2003

(In months)



Note: Includes all unemployment spells for people in the labor force.

Source: U.S. Census Bureau, Survey of Income and Program Participation, 2001 panel.

### Description of Concepts

**Spell of unemployment:** An uninterrupted period of months in which an individual was unemployed. For this analysis, individuals were unemployed in a given month only if they had no job all month and spent at least 1 week on layoff or looking for work. This definition of unemployment differs slightly from the definition used for the Current Population Survey (CPS). The SIPP considers some people who were absent without pay from a job because of layoff to be “with a job”; these people are excluded from the definition of unemployment used here, but not necessarily from the CPS definition.

**Layoff:** An individual was on “layoff” if the individual (1) was released from a job because of slack work, material shortages, inventory taking, plant remodeling, installation of machinery, or other similar reasons; and (2) anticipated being recalled to the job.

**Looking for work:** An individual “looked for work” in a given month if the individual (1) was without a job during at least 1 week during the month; and (2) tried to get work or establish a business or profession in that week.

**Median spell duration:** The value of spell length that divides the distribution of spells by length into two equal parts: one half being longer and the other half shorter than the median.

#### Civilian noninstitutionalized population 15 years and older:

The population 15 years and older that does not reside in institutions, such as correctional institutions and nursing homes.

**Labor force:** An individual was considered to be in the labor force if the individual (1) was employed in a given month; or (2) was unemployed in a given month and actively looking for work or on layoff.

---

process, including the overall design of surveys, the wording of questions, the review of the work of interviewers and coders, and the statistical review of reports to minimize these errors.

The SIPP weighting procedure uses ratio estimation, whereby sample estimates are adjusted to independent estimates of the national population by age, race, sex, and Hispanic origin. This weighting partially corrects for bias due to undercoverage, but biases may still be present when people who are missed by the survey differ from those interviewed in ways other than age, race, sex, and Hispanic origin. How this weighting procedure affects other variables in the survey is not precisely known. All of these considerations affect

comparisons across different surveys or data sources.<sup>6</sup>

For further information on the source of the data and accuracy of the estimates, including standard errors and confidence intervals, go to <[www.sipp.census.gov/sipp/sourceac/S&A2\\_SIPP2001\\_w1tow9\\_20050214.pdf](http://www.sipp.census.gov/sipp/sourceac/S&A2_SIPP2001_w1tow9_20050214.pdf)> or contact Dennis Sissel, Demographic Statistical Methods Division, at <[charles.d.sissel@census.gov](mailto:charles.d.sissel@census.gov)>.

### Contacts

Labor Force Statistics—  
Statistical Information Staff  
301-763-3242  
[hhes-info@census.gov](mailto:hhes-info@census.gov)

---

<sup>6</sup> For a more detailed discussion of SIPP sampling and weighting, see <[www.sipp.census.gov/sipp/sam\\_and\\_wt.html](http://www.sipp.census.gov/sipp/sam_and_wt.html)>.

This report—  
Thomas J. Palumbo  
Branch Chief  
Labor Force and Transfer Program  
Statistics Branch  
301-763-3230

### User Comments

The Census Bureau welcomes the comments and advice of users of its data and reports. If you have any suggestions or comments, please send an e-mail inquiry to <[hhes-info@census.gov](mailto:hhes-info@census.gov)>.

### Suggested Citation

Gottschalck, Alfred O. *Dynamics of Economic Well-Being: Spells of Unemployment, 2001–2003*. Current Population Reports, P70-105. U.S. Census Bureau, Washington, DC. 2006.

Appendix.

**Unemployment Spells by Sex, Age, Educational Attainment, Race, and Hispanic Origin: 2001–2003**

Characteristic	Total number of spells (thousands)	Median length of spells (months)	Standard error
<b>Total</b> .....	<b>49,417</b>	<b>2.4</b>	<b>0.08</b>
<b>Sex</b>			
Men .....	24,819	2.6	0.11
Women .....	24,598	2.2	0.10
<b>Age</b>			
16 to 19 years .....	10,714	1.8	0.10
Men .....	5,720	1.8	0.15
Women .....	4,993	1.7	0.13
20 to 24 years .....	9,307	2.0	0.17
Men .....	4,863	2.4	0.25
Women .....	4,444	1.8	0.14
25 to 34 years .....	10,483	2.6	0.15
Men .....	4,895	2.8	0.24
Women .....	5,589	2.5	0.20
35 to 44 years .....	9,244	2.6	0.16
Men .....	4,349	2.7	0.22
Women .....	4,895	2.6	0.22
45 to 54 years .....	6,585	3.1	0.15
Men .....	3,459	3.3	0.21
Women .....	3,126	2.8	0.33
55 years and over .....	3,084	2.5	0.27
Men .....	1,533	2.6	0.38
Women .....	1,551	2.5	0.38
<b>Educational Attainment (people 21 years and older)</b>			
Less than high school graduate .....	7,021	3.1	0.12
High school graduate .....	11,645	2.8	0.16
At least some college .....	17,790	2.3	0.12
<b>Race/Ethnicity</b>			
White .....	36,879	2.2	0.08
Men .....	18,655	2.4	0.13
Women .....	18,224	2.0	0.11
Not of Hispanic origin .....	30,338	2.1	0.09
Men .....	15,448	2.3	0.14
Women .....	14,889	2.0	0.08
Black .....	9,311	3.0	0.19
Men .....	4,456	3.1	0.15
Women .....	4,855	2.8	0.25
Asian and Pacific Islander .....	2,078	2.9	0.44
Men .....	1,083	3.0	0.62
Women .....	995	2.9	0.62
Hispanic origin (any race) .....	7,355	2.7	0.20
Men .....	3,636	2.8	0.29
Women .....	3,719	2.5	0.28
<b>Year Spell Started</b>			
2001 .....	16,399	1.9	0.06
2002 .....	18,434	2.4	0.09
2003 .....	14,583	3.0	0.10

Source: U.S. Census Bureau, 2001 SIPP panel, January 2001–December 2003.

U.S. Department of Commerce  
Economics and Statistics Administration  
U.S. CENSUS BUREAU  
Washington, DC 20233

**OFFICIAL BUSINESS**

Penalty for Private Use \$300

FIRST-CLASS MAIL  
POSTAGE & FEES PAID  
U.S. Census Bureau  
Permit No. G-58