

# A time to work: recent trends in shift work and flexible schedules

*Numerous U.S. workers have work schedules different from the standard 9 a.m.-to-5 p.m., Monday-through-Friday, work shift; the demands of the industry are the chief determinant of the use of shift work and flexible schedules*

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**T**he traditional work schedule for an American employee has long been 9 a.m. to 5 p.m., Monday through Friday. However, an examination of data from the Work Schedules and Work at Home survey, a special supplement to the Current Population Survey (CPS) conducted in May 2004, reveals that substantial proportions of workers' schedules do not fit this paradigm. For instance, nearly one-third of wage and salary workers have flexible schedules on their primary jobs, meaning that they can vary their beginning and ending hours; about one-fifth work a shift other than a regular daytime shift on their primary job; and a slightly smaller proportion works on Saturday, Sunday, or both. The use of alternate shifts and flexible work schedules is often determined by the demands of the industry, rather than by workers' preferences. However, schedule considerations and flexibility are influential factors in the career-planning and labor market decisions of many workers.

The Work Schedules and Work at Home survey obtained information on individuals' work schedules or shifts and on whether they did any job-related work

at home. The data presented in this article pertain to work schedules and alternate shifts. Because of the high prevalence of both shift work and flexitime among part-time workers, the article analyzes total employment, including that of both full- and part-time workers in most cases. (Where appropriate, data are analyzed separately for part-time workers; for further information about the survey, see the appendix.)

## Flexible work schedules

In May 2004, 36.4 million wage and salary workers, or about 30 percent of all such workers, were able to vary their work hours to some degree. This percentage was somewhat lower than that (30.7 percent) in May 2001, but about the same as in May 1997. Such flexibility provides workers with increased control over their time, enhancing their ability to balance competing demands at work and at home. In a competitive labor market, companies can choose to offer their workers the freedom afforded by flexible schedules in order to improve both morale and loyalty to the company.<sup>1</sup> The proportion of

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workers able to vary their work hours rose from 1985 to 1997, but has remained fairly steady thereafter. The following tabulation shows the percentage of wage and salary workers with flexible schedules, by sex and the presence of their own children, for selected years over the past two decades:

	1985	1991	1997	2001	2004
Total, 16 years and older.....	13.6	16.0	29.9	30.7	29.6
Men.....	13.9	15.9	30.0	30.8	29.3
With own children under 18 years .....	13.1	15.6	30.7	31.8	29.8
Women.....	13.2	16.0	29.7	30.6	29.9
With own children under 18 years.....	13.3	16.3	30.8	30.7	30.2

Since 1985, the proportions of employed men and women able to vary their work hours have been about equal.<sup>2</sup> The same is true of both mothers and fathers who work. Within each of these groups, the proportion of workers able to vary the times they started and ended work more than doubled between 1985 and 1997, after which it has remained at about that level.

The nature of the industry is one of the main determinants of the prevalence of flexible schedules. For example, in 2004, fewer workers (24.8 percent) had flexible schedules in the manufacturing industry, in which set work schedules are frequently necessary, than in financial activities or in professional and business services, in which nearly 40 percent of workers were able to vary their schedules.<sup>3</sup> (See table 1.)

Despite the fact that flexible schedules have remained relatively steady overall, several industries exhibited recent declines in the proportion of workers on such schedules. Among such industries were retail trade; finance and insurance; educational services; arts, entertainment, and recreation; and accommodation. (See table 2.) This movement away from flexible schedules occurred despite employment growth in those industries.

Due to the nature of the work required for each particular job, the prevalence of flexible schedules varies by occupation. For example, elementary and high school teachers are less likely to be able to vary their work hours than others, because they have to be available when their students are in class. Hence, it is not surprising to see that only 16.6 percent of workers in education, training, and library occupations can vary their schedule. Management occupations, in which 46.7 percent of the workers could vary their work hours, is an example from the opposite end of the spectrum. (See table 1.) Work schedules required

in management occupations usually are not as rigid as those required in teaching occupations, so employers can allow management workers to vary their schedules.

Within some broad occupational categories, men were more likely than women to have access to flexible schedules. In professional and related occupations, for example, 41.8 percent of men were able to vary their schedule, compared with 26.2 percent of women. Much of this difference arises because many more women in that occupational group were employed in the education and health care fields, where flexible work schedules were less prevalent. (See table 1.) Within service occupations, however, 27.8 percent of women could vary their work hours, compared with 22.9 percent of men. In that occupational group, a large proportion of women worked in food preparation and serving related occupations and in personal care and service occupations. In both of these occupations, many workers were able to follow a flexible schedule. By contrast, men made up the majority of workers in building and grounds cleaning and maintenance occupations, as well as in protective support occupations, both of which had low proportions of workers with flexible schedules.

The proportion of white and Asian workers in occupations in which they can vary their schedules continued to exceed that of other groups. In May 2004, about 30 percent of employed whites and Asians could vary their work hours. The proportion was closer to 21 percent among black workers and those of Hispanic ethnicity. The following tabulation shows the percentage of wage and salary workers with flexible schedules, by race and Hispanic or Latino ethnicity (data on Asians were not tabulated prior to 2001):

	1985	1991	1997	2001	2004
White.....	14.0	16.4	31.0	31.8	30.9
Black or African-American.....	9.9	12.8	21.7	22.8	21.2
Asian.....	—	—	—	32.2	29.0
Hispanic or Latino ethnicity.....	10.4	12.0	20.9	20.7	20.7

Many older workers have flexible schedules. Among workers 65 years and older in May 2004, about 37.2 percent of wage and salary workers were able to vary their work schedules on their main job. (See table 3.) Among younger workers, the rate ranged between 28 percent and 31 percent. The percentage of employed women who were able to vary their schedules exceeded that of men from ages 16 through 44; above age 45, a greater proportion of employed men in all age groups could vary their

**Table 1. Flexible schedules of wage and salary workers, by occupation and industry, May 2004**

[Numbers in thousands]

Occupation and industry	All workers			Men			Women		
	Total	With flexible schedules		Total	With flexible schedules		Total	With flexible schedules	
		Number	Percent		Number	Percent		Number	Percent
<b>Occupation</b>									
Management, professional, and related.....	41,906	15,799	37.7	19,302	8,570	44.4	22,604	7,229	32.0
Management, business, and financial operations.....	15,605	7,195	46.1	8,309	3,978	47.9	7,297	3,217	44.1
Management.....	10,654	4,981	46.7	6,200	3,004	48.5	4,454	1,976	44.4
Business and financial operations.....	4,951	2,214	44.7	2,108	973	46.2	2,843	1,241	43.7
Professional and related.....	26,300	8,604	32.7	10,993	4,592	41.8	15,307	4,012	26.2
Computer and mathematical.....	2,799	1,480	52.9	2,078	1,124	54.1	721	356	49.5
Architecture and engineering.....	2,571	1,144	44.5	2,216	967	43.6	355	177	49.8
Life, physical, and social science.....	1,160	577	49.7	702	324	46.2	458	253	55.2
Community and social services...	2,162	1,042	48.2	862	480	55.6	1,301	563	43.3
Legal.....	1,251	568	45.4	577	338	58.6	674	230	34.1
Education, training, and library....	8,354	1,387	16.6	2,182	530	24.3	6,172	857	13.9
Arts, design, entertainment, sports, and media.....	1,988	833	41.9	1,117	485	43.4	871	348	40.0
Health care practitioner and technical.....	6,015	1,573	26.1	1,259	345	27.4	4,756	1,228	25.8
Service.....	20,787	5,335	25.7	9,036	2,069	22.9	11,751	3,266	27.8
Health care support.....	2,778	603	21.7	279	57	20.6	2,499	545	21.8
Protective service.....	2,527	505	20.0	2,001	380	19.0	526	125	23.8
Food preparation and serving related.....	7,447	2,114	28.4	3,304	947	28.7	4,144	1,166	28.1
Building and grounds cleaning and maintenance.....	4,620	988	21.4	2,674	480	17.9	1,946	508	26.1
Personal care and service.....	3,415	1,125	33.0	779	204	26.2	2,636	921	34.9
Sales and office.....	31,946	10,439	32.7	11,440	3,856	33.7	20,506	6,583	32.1
Sales and related.....	13,304	5,131	38.6	6,769	2,761	40.8	6,535	2,370	36.3
Office and administrative support....	18,642	5,308	28.5	4,671	1,095	23.4	13,971	4,212	30.1
Natural resources, construction, and maintenance.....	11,551	2,219	19.2	11,024	2,092	19.0	527	128	24.2
Farming, fishing, and forestry.....	875	224	25.6	673	165	24.6	202	59	29.1
Construction and extraction.....	6,179	1,101	17.8	6,077	1,065	17.5	102	37	35.8
Installation, maintenance, and repair.....	4,497	894	19.9	4,275	861	20.2	223	32	14.4
Production, transportation, and material moving.....	16,977	2,657	15.7	13,047	2,126	16.3	3,929	531	13.5
Production.....	8,880	1,226	13.8	6,235	883	14.2	2,645	343	13.0
Transportation and material moving..	8,097	1,432	17.7	6,812	1,243	18.3	1,285	188	14.6
<b>Industry</b>									
Agriculture and related.....	1,096	334	30.5	827	238	28.8	269	96	35.5
Nonagricultural.....	122,071	36,115	29.6	63,022	18,475	29.3	59,049	17,641	29.9

See footnote at end of table.

**Table 1. Continued—Flexible schedules of wage and salary workers, by occupation and industry, May 2004**

[Numbers in thousands]

Occupation and industry	All workers			Men			Women		
	Total	With flexible schedules		Total	With flexible schedules		Total	With flexible schedules	
		Number	Percent		Number	Percent		Number	Percent
Mining.....	464	113	24.4	429	93	21.8	35	19	54.9
Construction.....	7,636	1,683	22.0	6,848	1,361	19.9	789	321	40.8
Manufacturing.....	15,957	3,961	24.8	11,081	2,768	25.0	4,876	1,193	24.5
Durable goods manufacturing.....	9,729	2,562	26.3	7,166	1,898	26.5	2,563	664	25.9
Nondurable goods manufacturing.....	6,228	1,399	22.5	3,915	870	22.2	2,313	529	22.9
Wholesale and retail trade.....	18,546	5,850	31.5	10,349	3,111	30.1	8,197	2,739	33.4
Wholesale trade.....	4,071	1,377	33.8	2,821	968	34.3	1,250	409	32.7
Retail trade.....	14,475	4,473	30.9	7,529	2,143	28.5	6,946	2,331	33.6
Transportation and utilities.....	6,296	1,517	24.1	4,789	1,151	24.0	1,507	365	24.2
Transportation and warehousing..	5,176	1,272	24.6	3,921	975	24.9	1,255	297	23.6
Utilities.....	1,121	245	21.9	869	176	20.3	252	69	27.2
Information <sup>1</sup> .....	3,267	1,185	36.3	1,921	709	36.9	1,346	476	35.4
Publishing, except Internet.....	810	342	42.2	462	205	44.4	349	137	39.2
Motion picture and sound recording.....	324	115	35.5	223	83	37.5	102	32	31.3
Broadcasting, except Internet.....	578	143	24.7	349	90	25.8	228	53	23.2
Telecommunications.....	1,217	437	35.9	738	256	34.8	479	181	37.7
Financial activities.....	8,561	3,387	39.6	3,536	1,555	44.0	5,025	1,832	36.4
Finance and insurance.....	6,206	2,398	38.6	2,300	1,066	46.3	3,906	1,333	34.1
Real estate and rental and leasing.....	2,355	988	42.0	1,236	490	39.6	1,119	499	44.6
Professional and business services.....	10,916	4,284	39.2	6,059	2,374	39.2	4,857	1,909	39.3
Professional and technical services.....	6,478	3,152	48.7	3,415	1,759	51.5	3,064	1,393	45.5
Management, administrative, and waste services.....	4,438	1,132	25.5	2,645	616	23.3	1,793	516	28.8
Education and health services.....	27,686	6,606	23.9	6,698	1,771	26.4	20,988	4,836	23.0
Educational services.....	12,295	2,311	18.8	3,701	889	24.0	8,594	1,422	16.5
Health care and social assistance..	15,391	4,295	27.9	2,997	882	29.4	12,394	3,414	27.5
Leisure and hospitality.....	11,159	3,395	30.4	5,461	1,629	29.8	5,697	1,766	31.0
Arts, entertainment, and recreation.....	2,218	654	29.5	1,203	333	27.7	1,015	321	31.6
Accommodation and food services.....	8,940	2,741	30.7	4,258	1,296	30.4	4,682	1,445	30.9
Accommodation.....	1,451	346	23.8	633	171	27.0	818	175	21.3
Food services and drinking places.....	7,490	2,395	32.0	3,625	1,125	31.0	3,864	1,271	32.9
Other services.....	5,663	2,418	42.7	2,601	1,023	39.3	3,062	1,395	45.5
Other services, except private households.....	4,926	2,093	42.5	2,567	1,011	39.4	2,360	1,082	45.9
Other services, private households.....	736	325	44.1	35	13	36.4	702	313	44.5
Public administration.....	5,918	1,717	29.0	3,248	929	28.6	2,670	788	29.5

<sup>1</sup> Includes other industries not shown separately.

SOURCE: Current Population Survey, supplement, May 2004.

**Table 2. Flexible schedules of wage and salary workers, by industry, May 2001–04**

[Percent distribution]

Industry	Workers with flexible work schedules		Change, May 2001–May 2004
	2001	2004	
Agriculture and related.....	30.7	30.5	-.2
Nonagricultural.....	30.7	29.6	-1.1
Mining.....	22.9	24.4	1.5
Construction.....	23.2	22.0	-1.2
Manufacturing.....	24.1	24.8	.7
Durable goods manufacturing.....	25.3	26.3	1.0
Nondurable goods manufacturing.....	22.2	22.5	.3
Wholesale and retail trade.....	34.2	31.5	-2.7
Wholesale trade.....	35.3	33.8	-1.5
Retail trade.....	33.9	30.9	-3.0
Transportation and utilities.....	25.2	24.1	-1.1
Transportation and warehousing.....	24.5	24.6	.1
Utilities.....	28.2	21.9	-6.3
Information <sup>1</sup> .....	36.7	36.3	-.4
Publishing, except Internet.....	36.7	42.2	5.5
Motion picture and sound recording industries.....	41.0	35.5	-5.5
Broadcasting, except Internet.....	31.2	24.7	-6.5
Telecommunications.....	37.4	35.9	-1.5
Financial activities.....	42.5	39.6	-2.9
Finance and insurance.....	42.1	38.6	-3.5
Real estate and rental and leasing.....	43.6	42.0	-1.6
Professional and business services.....	41.4	39.2	-2.2
Professional and technical services.....	50.5	48.7	-1.8
Management, administrative, and waste services.....	28.1	25.5	-2.6
Education and health services.....	24.3	23.9	-.4
Educational services.....	20.5	18.8	-1.7
Health care and social assistance.....	27.5	27.9	.4
Leisure and hospitality.....	32.0	30.4	-1.6
Arts, entertainment, and recreation.....	37.7	29.5	-8.2
Accommodation and food services.....	30.5	30.7	.2
Accommodation.....	28.8	23.8	-5.0
Food services and drinking places.....	30.8	32.0	1.2
Other services.....	41.5	42.7	1.2
Other services, except private households.....	41.6	42.5	.9
Other services, private households.....	41.1	44.2	3.1
Public administration.....	32.5	29.0	-3.5

<sup>1</sup> Includes other industries not shown separately.

SOURCE: Current Population Survey, supplement, May 2004.

work schedules.

Persons with less than a high school diploma were the least likely (17.5 percent) to work in occupations in which they were able to vary their work schedules, while college

graduates were most likely (39.1 percent). Among workers with less than a college degree, women were more likely than men to have a flexible work schedule. In contrast, among workers with college degrees, men were more likely

**Table 3. Flexible schedules of wage and salary workers, by selected characteristics, May 2004**

[Numbers in thousands]

Characteristic	Total wage and salary workers			Men			Women		
	Total	With flexible schedules		Total	With flexible schedules		Total	With flexible schedules	
		Number	Percent		Number	Percent		Number	Percent
<b>Age</b>									
Total, 16 years and older.....	123,167	36,449	29.6	63,849	18,713	29.3	59,318	17,736	29.9
16 to 24 years.....	18,702	5,457	29.2	9,567	2,567	26.8	9,135	2,890	31.6
16 to 19 years.....	5,579	1,748	31.3	2,720	816	30.0	2,859	931	32.6
20 to 24 years.....	13,122	3,709	28.3	6,847	1,751	25.6	6,276	1,959	31.2
20 years and older.....	117,588	34,701	29.5	61,129	17,896	29.3	56,459	16,805	29.8
25 to 54 years.....	86,940	25,599	29.4	45,569	13,291	29.2	41,371	12,309	29.8
25 to 34 years.....	28,310	8,420	29.7	15,416	4,452	28.9	12,894	3,969	30.8
35 to 44 years.....	30,599	9,307	30.4	16,123	4,841	30.0	14,476	4,466	30.9
45 to 54 years.....	28,031	7,872	28.1	14,031	3,998	28.5	14,001	3,874	27.7
55 years and older.....	17,525	5,393	30.8	8,713	2,855	32.8	8,812	2,538	28.8
55 to 64 years.....	14,096	4,117	29.2	7,050	2,160	30.6	7,045	1,957	27.8
65 years and older.....	3,430	1,276	37.2	1,663	695	41.8	1,767	581	32.9
<b>Race and Hispanic origin</b>									
White.....	100,112	30,916	30.9	52,293	16,012	30.6	47,819	14,904	31.2
Black or African-American.....	14,881	3,159	21.2	7,280	1,410	19.4	7,602	1,749	23.0
Asian.....	4,975	1,444	29.0	2,614	861	32.9	2,360	583	24.7
Hispanic or Latino.....	16,725	3,464	20.7	9,430	1,704	18.1	7,295	1,760	24.1
<b>Presence and age of children</b>									
Without own children under 18 years...	78,625	23,097	29.4	41,330	12,007	29.1	37,295	11,090	29.7
With own children under 18 years....	44,542	13,352	30.0	22,519	6,706	29.8	22,023	6,646	30.2
With own children under 6 years...	19,117	5,961	31.2	10,646	3,224	30.3	8,531	2,737	32.1
With own children 6 to 17 years....	25,366	7,391	29.1	11,874	3,482	29.3	13,492	3,909	29.0
<b>Educational Attainment</b>									
Less than a high school diploma.....	10,207	1,785	17.5	6,211	940	15.1	3,997	845	21.1
High school graduate, no college....	31,396	7,175	22.9	16,560	3,398	20.5	14,836	3,777	25.5
Less than a bachelor's degree.....	28,940	8,770	30.3	13,792	4,079	29.6	15,148	4,691	31.0
College graduate.....	33,922	13,262	39.1	17,719	7,729	43.6	16,203	5,533	34.1

NOTE: Data relate to the sole or principal jobs of full-time wage and salary workers and exclude all self-employed persons, regardless of whether or not their businesses were incorporated. Data reflect revised population controls used in the Current Population Survey ef-

fective with the January 2003 estimates.

SOURCE: Current Population Survey, supplement, May 2004.

than women to be able to vary their work schedules.

The option to work a flexible schedule was more common among part-time workers (38.6 percent) than among those who normally worked full time (27.5 percent). (See table 4.) As a result, part-time workers constituted a disproportionate share of workers with flexible schedules: while about 19 percent of all wage and salary workers usu-

ally worked part time, nearly one-quarter of all workers with flexible schedules worked part time.

### Shift work

In May 2004, more than 80 percent of wage and salary workers usually worked a daytime schedule, one between

**Table 4. Prevalence of a flexible schedule on wage and salary workers' primary job, by sex and usual full- or part-time status on primary job, May 2004**

[Numbers in thousands]

Work status	Total wage and salary workers	With flexible schedule		Without flexible schedule	Not reporting flexible schedule
		Number	Percent of total		
Total.....	123,167	36,449	29.6	85,218	1,500
Usual full time.....	99,778	27,411	27.5	71,113	1,255
Men.....	56,412	15,853	28.1	39,839	721
Women.....	43,366	11,558	26.7	31,274	534
Usual part time.....	23,102	8,919	38.6	13,939	244
Men.....	7,262	2,785	38.3	4,383	95
Women.....	15,840	6,134	38.7	9,557	149

SOURCE: Current Population Survey, supplement, May 2004.

the hours of 6 a.m. and 6 p.m. However, more than 21 million wage and salary workers, or 17.7 percent, usually worked alternate shifts that fell at least partially outside the daytime shift range. The most common alternate shift, the evening shift, with usual hours between 2 p.m. and midnight, accounted for 6.8 percent of all wage and salary workers. Other alternate shifts included employer-arranged irregular schedules (3.8 percent), which allow employers to vary the time of the shift to meet the needs of the business; night shifts (3.1 percent), with hours between 9 p.m. and 8 a.m.; and rotating shifts (2.7 percent) with hours that change periodically. (See table 5.)

People who work alternate shifts do so to accommodate school attendance, to provide childcare, or for other reasons. Others choose to work alternate shifts because the employer offers higher earnings in the form of a shift premium.<sup>4</sup> More than half of full-time workers who worked an alternate shift in May 2004 reported doing so because it was in the “nature of the job.”<sup>5</sup> (See table 6.) Others, however, may have selected alternate shift work for “personal preference,” to have “better arrangements for family or childcare,” or because they “could not get any other job.” The reasons given by part-time workers for working an alternate shift differed somewhat from those cited by full-time workers. Primary among the reasons reported by part-time workers was “allows time for school” (40.2 percent). Other reasons commonly cited included “nature of the job” (33.5 percent), “better arrangements for family or childcare” (9.0 percent), and “could not get any other job” (6.1 percent). Both full- and part-time workers infrequently cited better pay as a reason for usually working an alternate shift (6.8 percent and 1.5 percent, respectively).

Employers normally make use of alternate shifts when they are required for efficiency or when the type of work being done can accommodate or requires work

performed outside of the 6 a.m.-to-6 p.m. range.<sup>6</sup> For this reason, certain industries make extensive use of alternate shifts while others do so sparingly. For example, establishments such as restaurants and bars are known to do much of their business after 6 p.m. Thus, it is no surprise that, within the leisure and hospitality industry, 52.7 percent of workers in food services and drinking places usually work alternate schedules. (See table 7 on page 12.) Other industry groups with large portions of employees who work alternate shifts include arts, entertainment, and recreation (33.0 percent), mining (31.5 percent), and transportation and warehousing (31.5 percent). Industries in which few employees work alternate shifts include construction (2.8 percent), finance and insurance (3.8 percent), professional and technical services (3.8 percent), and educational services (5.0 percent).

As with industries, the incidence of alternate shifts within different occupational groups is related to the type of work performed in those occupations. Workers in service occupations are those most likely to be alternate shift workers. Many service occupations, such as protective service and food preparation and serving occupations, are in businesses or industries that operate around the clock. Half of the workers in these occupational groups usually work an alternate shift. In contrast, the management, professional, and related occupations group includes jobs that, despite their high level of flexibility, are typically performed within the confines of normal business hours. For instance, only 1.8 percent of workers in legal occupations and 3.6 percent of those in business and financial operations occupations work alternate schedules as a usual part of their jobs. (See table 7.)

Between May 2001 and May 2004, the proportion of persons working alternate shifts changed little. Men continued to be more likely than women to usually work an alternate shift (19.1 percent and 16.1 percent, respective-

**Table 5. Shift usually worked on primary job by wage and salary workers, by selected characteristics, May 2004**

[Percent distribution]

Characteristic	Total wage and salary workers (thousands)	Alternate-shift workers (percent of total wage and salary workers)								
		All alternate-shift workers	Full time (percent of total full-time workers)	Part time (percent of total part-time workers)	Evening shift	Night shift	Rotating shift	Split shift	Employer-arranged irregular schedules	Other shifts
<b>Age and sex</b>										
Total, 16 years and older.....	123,167	17.7	14.8	29.6	6.8	3.1	2.7	0.6	3.8	0.7
16 to 24 years.....	18,702	35.2	23.9	49.3	18.0	3.3	4.7	.8	7.5	.7
16 to 19 years.....	5,579	51.9	34.5	57.9	30.9	2.5	6.4	.8	10.5	.8
20 to 24 years.....	13,122	28.1	22.3	40.6	12.6	3.6	4.0	.8	6.3	.7
20 years and older.....	117,588	16.0	14.6	23.5	5.6	3.1	2.5	.5	3.5	.7
25 years and older.....	104,465	14.5	13.8	18.7	4.8	3.1	2.3	.5	3.2	.7
25 to 54 years.....	86,940	14.9	14.0	20.7	4.9	3.2	2.4	.5	3.1	.7
25 to 34 years.....	28,310	16.6	15.2	25.7	6.0	3.4	2.6	.5	3.3	.7
35 to 44 years.....	30,599	14.8	14.1	19.3	4.8	3.2	2.4	.5	3.3	.7
45 to 54 years.....	28,031	13.3	12.8	16.5	3.9	3.1	2.3	.5	2.8	.6
55 years and older.....	17,525	12.8	12.2	14.2	4.1	2.4	1.7	.6	3.4	.7
55 to 64 years.....	14,096	13.0	12.5	15.1	4.0	2.6	1.9	.5	3.3	.6
65 years and older.....	3,430	12.2	10.3	13.3	4.6	1.4	.8	.8	3.8	.8
Men.....	63,849	19.1	16.7	37.5	6.9	3.5	3.0	.6	4.2	.9
Women.....	59,318	16.1	12.4	26.0	6.6	2.6	2.3	.5	3.5	.5
<b>Race and ethnicity</b>										
White.....	100,112	16.7	13.7	28.7	6.2	2.9	2.5	.5	3.9	.7
Black or African-American	14,881	23.2	20.8	36.4	9.8	4.4	4.1	.4	3.6	.7
Asian.....	4,975	17.9	15.7	28.7	7.5	3.8	1.8	1.0	3.0	.8
Hispanic or Latino.....	16,725	18.1	16.0	29.5	7.6	3.5	2.5	.6	2.9	.8
<b>Educational attainment</b>										
Less than a high school diploma.....	10,207	18.6	17.8	22.5	7.8	4.1	2.2	1.0	2.9	.6
High school graduate, no college.....	31,396	17.1	16.8	19.0	6.0	3.5	2.8	.6	3.5	.7
Less than a bachelor's degree.....	28,940	16.7	15.9	20.7	5.2	4.0	2.8	.5	3.3	.8

SOURCE: Current Population Survey, supplement, May 2004.

ly; see table 5), and black workers were more likely than workers in any of the other racial or ethnic groups surveyed to work an alternate shift, in 2004 (23.2 percent). Among those other groups, 16.7 percent of whites, 17.9 percent of Asians, and 18.1 percent of Hispanics worked alternate shifts.

Part-time workers were twice as likely to work alter-

nate shifts as those who usually work full time. (See table 5.) Although it is the nature of the industry, not the education of the worker, that determines whether a given job requires alternate shift work, workers with higher educational attainment are more likely to find work in industries in which shift work is less common. The reason is that alternate shifts are much more common in industries, such



**Table 6. Shift usually worked on principal job by wage and salary workers, by reason for working shift, May 2004**

[Numbers in thousands]

Reason for working shift	Shift workers			Shift worked					
	Total	Usual full time	Usual part time	Evening shift	Night shift	Rotating shift	Split shift	Employer-arranged irregular schedule	Other shifts
Total shift workers.....	21,762	14,805	6,844	8,353	3,811	3,296	679	4,719	850
Better arrangements for family or childcare.....	1,827	1,211	613	888	626	74	44	162	34
Better pay.....	1,125	1,007	104	397	365	166	32	119	45
Allows time for school.....	3,236	477	2,753	2,110	204	332	40	516	34
Could not get any other job.....	1,624	1,200	416	892	307	202	25	168	30
Local transportation or pollution control program.....	26	26	—	6	2	5	—	11	2
Nature of the job.....	10,445	8,089	2,294	2,586	1,247	2,242	470	3,346	553
Personal preference.....	2,122	1,700	409	976	732	110	40	191	74
Some other reason.....	1,029	802	220	388	251	124	25	177	65
Not reporting reasons.....	328	292	34	110	77	42	2	28	13

NOTE: Data relate to the sole or principal jobs of wage and salary workers and exclude all self-employed persons, regardless of whether or not their businesses were incorporated. Dash represents zero.

SOURCE: Current Population Survey, supplement, May 2004.

as manufacturing, in which relatively large proportions of workers do not have college degrees. In fact, even part-time workers with a college degree were less likely to work an alternate shift than full-time workers with lower levels of educational attainment.

### Days usually worked

For most workers, the standard workweek is limited to weekdays. However, some workers have schedules that usually include work on the weekends. Table 8 (on page 13) shows that, although the majority of employed wage and salary workers (66.3 percent) usually worked only on weekdays in 2004, 15.8 percent of workers usually worked during at least 1 weekend day. Men were more likely than women to work on a weekend day, while women were more likely to have schedules in which the days worked varied. Working fathers were about as likely to work on a weekend day as were employed men without children, but were less likely to report that their workdays varied. Working mothers were less likely to work a weekend day or weekly schedules that varied than were employed women without children.

Among the racial and ethnic groups surveyed, Hispanic or Latino workers were the most likely to work during the weekend, while white workers were the least likely. Black workers were the most likely to have a schedule in which the days worked varied. More than two-thirds of full-time workers, but less than half of part-time workers, usually worked weekdays only. Nearly one-third of part-time workers worked weekly schedules with varying days, more than twice the rate among full-time workers.

THE TIMING OF WORK IS CONTINUALLY EVOLVING. Despite a recent decline in the percentage of people who say that they can vary their hours of work, the proportion of workers with this option is more than double that of 20 years ago. Over the same period, the proportion of workers with alternate shifts has remained fairly steady. Flexible schedules and shift work can provide benefits to both workers and employers. Because of these potential benefits, regular examinations of various aspects associated with the flexibility of work schedules help to provide a more complete understanding of employment patterns in industries and occupations and among demographic groups. □

**Table 7. Shift usually worked by wage and salary workers, by occupation and industry, May 2004**

[Numbers in thousands]

Occupation and industry	Total wage and salary workers	Alternate-shift workers	Percent of wage and salary workers
<b>Occupation</b>			
Management, professional, and related.....	41,906	3,650	8.7
Management, business, and financial operations.....	15,605	883	5.7
Management.....	10,654	702	6.6
Business and financial operations.....	4,951	180	3.6
Professional and related.....	26,300	2,768	10.5
Computer and mathematical.....	2,799	121	4.3
Architecture and engineering.....	2,571	102	4.0
Life, physical, and social science.....	1,160	92	7.9
Community and social services.....	2,162	298	13.8
Legal.....	1,251	23	1.8
Education, training, and library.....	8,354	338	4.0
Arts, design, entertainment, sports, and media.....	1,988	348	17.5
Health care practitioner and technical.....	6,015	1,446	24.0
Service.....	20,787	7,511	36.1
Health care support.....	2,778	774	27.9
Protective service.....	2,527	1,273	50.4
Food preparation and serving related.....	7,447	3,680	49.4
Building and grounds cleaning and maintenance.....	4,620	840	18.2
Personal care and service.....	3,415	944	27.6
Sales and office.....	31,946	5,239	16.4
Sales and related.....	13,304	3,094	23.3
Office and administrative support.....	18,642	2,145	11.5
Natural resources, construction, and maintenance.....	11,551	879	7.6
Farming, fishing, and forestry.....	875	90	10.3
Construction and extraction.....	6,179	267	4.3
Installation, maintenance, and repair.....	4,497	522	11.6
Production, transportation, and material moving.....	16,977	4,483	26.4
Production.....	8,880	2,133	24.0
Transportation and material moving.....	8,097	2,351	29.0
<b>Industry</b>			
Agriculture and related.....	1,096	104	9.5
Nonagricultural.....	122,071	21,658	17.7
Mining.....	464	146	31.5
Construction.....	7,636	214	2.8
Manufacturing.....	15,957	2,829	17.7
Durable goods manufacturing.....	9,729	1,377	14.2
Nondurable goods manufacturing.....	6,228	1,452	23.3
See footnote at end of table.			

**Table 7. Continued—Shift usually worked by wage and salary workers, by occupation and industry, May 2004**

[Numbers in thousands]

Occupation and industry	Total wage and salary workers	Alternate-shift workers	Percent of wage and salary workers
Wholesale and retail trade.....	18,546	4,074	22.0
Wholesale trade.....	4,071	340	8.4
Retail trade.....	14,475	3,734	25.8
Transportation and utilities.....	6,296	1,748	27.8
Transportation and warehousing.....	5,176	1,629	31.5
Utilities.....	1,121	119	10.6
Information <sup>1</sup> .....	3,267	491	15.0
Publishing, except Internet.....	810	108	13.3
Motion picture and sound recording industries.....	324	125	38.6
Broadcasting, except Internet.....	578	87	15.1
Telecommunications.....	1,217	124	10.2
Financial activities.....	8,561	598	7.0
Finance and insurance.....	6,206	236	3.8
Real estate and rental and leasing.....	2,355	362	15.4
Professional and business services.....	10,916	1,028	9.4
Professional and technical services.....	6,478	248	3.8
Management, administrative, and waste services.....	4,438	780	17.6
Education and health services.....	27,686	3,542	12.8
Educational services.....	12,295	617	5.0
Health care and social assistance.....	15,391	2,926	19.0
Leisure and hospitality.....	11,159	5,107	45.8
Arts, entertainment, and recreation.....	2,218	732	33.0
Accommodation and food services.....	8,940	4,376	48.9
Accommodation.....	1,451	431	29.7
Food services and drinking places.....	7,490	3,945	52.7
Other services.....	5,663	739	13.0
Other services, except private households.....	4,926	622	12.6
Other services, private households.....	736	117	15.9
Public administration.....	5,918	1,143	19.3

<sup>1</sup> Includes other industries not shown separately.

SOURCE: Current Population Survey, supplement, May 2004.

**Table 8. Days usually worked by wage and salary workers, by selected characteristics, May 2004**

[Percent distribution]

Characteristic	Total (thousands)	Usually work weekdays only	Usually work on both Saturday and Sunday <sup>1</sup>	Usually work on Saturday <sup>1</sup>	Usually work on Sunday <sup>1</sup>	Days vary
Total, 16 years and older.....	123,167	66.3	5.4	8.1	2.3	16.8
White.....	100,112	67.3	5.1	8.2	2.2	16.3
Black or African-American.....	14,881	61.6	5.7	7.6	2.5	20.3
Asian.....	4,975	64.8	6.9	8.1	2.9	15.6
Hispanic or Latino ethnicity.....	16,725	63.9	6.8	9.9	2.3	15.4

See footnote at end of table.

**Table 8. Continued—Days usually worked by wage and salary workers, by selected characteristics, May 2004**

[Percent distribution]

Characteristic	Total	Usually work weekdays only	Usually work on both Saturday and Sunday <sup>1</sup>	Usually work on Saturday <sup>1</sup>	Usually work on Sunday <sup>1</sup>	Days vary
Men.....	63,849	65.3	5.7	9.8	2.5	15.5
Without own children under 18.....	41,330	62.6	6.2	9.7	2.6	17.6
With own children under 18.....	22,519	70.2	4.8	10.1	2.4	11.7
Women.....	59,318	67.4	5.0	6.3	2.0	18.1
Without own children under 18.....	37,295	65.2	5.6	6.5	2.0	19.5
With own children under 18.....	22,023	71.0	4.0	6.0	2.1	15.8
Usual full time.....	99,778	71.4	4.7	7.9	2.1	13.0
Usual part time.....	23,102	44.7	8.1	9.3	3.1	32.9

<sup>1</sup> These groups include workers who worked only on one or both weekend days, as well as workers who reported working on the weekend in addition to working during the week.

## Notes

<sup>1</sup> Max Messmer, "Building employee job satisfaction," *Employment Relations Today*, summer 2005, pp. 53–59; retrieved July 25, 2007, from ABI/INFORM Research database, Document ID 872589231.

<sup>2</sup> Data on flexible work schedules were first collected in May 1980, but those data are not comparable to the data in this article, due to a difference in coverage. The 1980 survey included self-employed workers (most of whom, by definition, can vary their work hours) and excluded farmworkers. Starting in 1985, the survey did not ask the incorporated self-employed the question about flexible work schedules, but did ask it of farmworkers. Starting in 1997, the unincorporated self-employed also were excluded.

<sup>3</sup> A breakdown, by industry, of workers on flexible schedules is limited to the 2001 and 2004 supplementary CPS data, due to the 2003 conversion from the 1987 Standard Industrial Classification (SIC) basis to the 2002 North American Industry Classification System (NAICS). The conversion to NAICS involved

major definitional changes to many of the SIC-based series, and after the conversion, SIC-based series no longer were produced or published. Historical time series from 2000 forward were reconstructed as part of the NAICS conversion process.

<sup>4</sup> Joseph Lanfranchi, Henry Ohlsson, and Ali Skalli, "Compensating Wage Differentials and Shift Work Preferences: Evidence from France," *Economics Letters*, February 2002, pp. 393–98; on the Internet at [www.handels.gu.se/epc/data/html/html/PDF/gunwpe0055.pdf](http://www.handels.gu.se/epc/data/html/html/PDF/gunwpe0055.pdf) (visited July 25, 2007).

<sup>5</sup> Those who worked an alternate shift were asked to choose their main reason for working such a shift from a list. (See appendix.)

<sup>6</sup> Joram Mayshar and Yoram Halevy, "Shiftwork," *Journal of Labor Economics: Vol. 15, No. 1, Part 2: Essays in Honor of Yoram Ben-Porath*, January 1997, pp. s198–s222; on the Internet at [www.jstor.org/view/0734306x/di009557/00p00252/0](http://www.jstor.org/view/0734306x/di009557/00p00252/0).

## APPENDIX: Data collection

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The data presented in this article and other information on work schedules and shifts were obtained from a supplement to the May 2004 Current Population Survey (CPS), a monthly sample survey of about 60,000 households conducted by the U.S. Census Bureau for the Bureau of Labor Statistics (BLS), principally to gather information on employment and unemployment. Respondents to the May 2004 supplement answered questions about work schedules or shifts and whether they did any job-related work at home. Since 1973, surveys concerning shift work have been conducted periodically by the Census Bureau for the BLS. Periodic surveys concerning flexible work schedules have been conducted since 1980.

Following are some sample questions from the May 2004 CPS work schedule supplement:

Do you have flexible work hours that allow you to vary or make changes in the time you begin and end work?

1. Yes
2. No

On your main job in your business do you USUALLY work a daytime schedule or some other schedule?

- A daytime schedule
- Some other schedule

Which of the following best describes the hours you USUALLY work at this main job in your business?

1. An EVENING shift: anytime between 2 p.m. and midnight

2. A NIGHT shift: anytime between 9 p.m. to 8 a.m.
3. A ROTATING shift: one that changes periodically from days to evenings or night
4. A SPLIT shift: one consisting of two distinct periods each day
5. An irregular schedule
6. Some other shift

What is the MAIN reason why you work this type of shift?

1. Better arrangements for family or childcare
2. Better pay
3. Allows time for school
4. Could not get any other job
5. Local transportation or pollution control program
6. Nature of the job
7. Personal preference
8. Some other reason

Which days of the week do you USUALLY work?

1. Sunday
2. Monday
3. Tuesday
4. Wednesday
5. Thursday
6. Friday
7. Saturday
8. Monday through Friday
9. It varies.