

Shift work and flexitime: how prevalent are they?

New data reveal that shift work and flexitime are not widespread; only 1 of 10 full-time wage and salary workers is on an evening or night shift, and only 1 of 8 has a flexible schedule

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Although the needs of society require a diversity of work schedules, most Americans have traditional morning to late-afternoon hours. The great majority of full-time wage and salary earners begin work between 7 and 9 in the morning. The proportion who work in the evening or at night, or who are on flexible schedules, is rather small. In contrast, almost half of all part-time employees work schedules other than regular day shifts, and nearly one-fifth have some type of flexible scheduling. The incidence of shift work and flexitime varies by sex, race, age, and other characteristics, but differences are more apparent by occupation and industry.

These patterns are revealed in newly available data from the Current Population Survey (CPS), which asked questions on beginning and ending hours of work, shift work, and the availability of flexitime, to name a few. The information relates to people who were at work during the week of May 12-18, 1985, and was collected in a special supplement to the May 1985 CPS.¹

Workday, from start to finish

Nearly 8 of 10 full-time wage and salary workers began their workdays between 7 and 9 a.m. during the survey reference week, with 8 a.m., by far, the most reported time. (See table 1.) With so many workers starting at these hours, it is not surprising that the most frequent quitting times were between 4 and 6 p.m., with 5 p.m. leading. Thus, tradi-

tional daytime shifts predominate, with 8-to-5, 7-to-4, 8-to-4, and 9-to-5 schedules being the most popular. Of the top 10 work schedules (of a possible 576) only one—the tenth ranked 3-to-11 p.m. shift—included a substantial number of hours outside the normal daylight span. (The times actually reported are rounded to the nearest hour when they are entered on the CPS questionnaire. For example, 8 a.m. refers to any reported time between 7:30 and 8:29. See appendix for further details.)

For part-time workers, 7 to 9 a.m. were the most frequently reported starting times, accounting for 45 percent of the total. The most popular quitting times were in the 3-to-5 p.m. span. As was the case for full-time workers, part-timers most often reported an 8 a.m. to 5 p.m. work day—but these hours accounted for only 4 percent of the part-time schedules. Part-time jobs—in terms of starting time, quitting time, and the overall schedule—were far less concentrated within the top 10 rankings. Whereas the top 10 schedules were reported by 71 percent of all full-time workers, they fit the pattern for only 29 percent of part-time workers.

Shift work

There are two ways to determine a worker's shift. One is based on the time the person begins and ends the workday;² the other is based on responses to a question regarding which shift persons considered themselves to usually work. The former method permits a precise definition (for example, a day shift is one in which half or more hours worked are between 8:00 a.m. and 4:00 p.m.), and thus a shift work definition can be tailored to the user's particular needs.

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Table 1. Most prevalent beginning and ending hours of work and overall schedules of wage and salary workers, by usual full- and part-time status, May 1985

[Numbers in thousands]

Rank	Beginning time			Ending time			Overall daily schedule		
	Time	Number of workers	Percent of all workers	Time	Number of workers	Percent of all workers	Schedule	Number of workers	Percent of all workers
Full-time workers									
1	8 a.m.	29,116	39.7	5 p.m.	25,807	35.2	8 a.m. to 5 p.m.	16,025	21.8
2	7 a.m.	17,532	23.9	4 p.m.	16,750	22.8	7 a.m. to 4 p.m.	7,947	10.8
3	9 a.m.	11,004	15.0	6 p.m.	8,440	11.5	8 a.m. to 4 p.m.	7,256	9.9
4	6 a.m.	3,864	5.3	3 p.m.	6,645	9.1	9 a.m. to 5 p.m.	6,172	8.4
5	3 p.m.	2,043	2.8	7 p.m.	2,896	3.9	7 a.m. to 3 p.m.	4,087	5.6
6	10 a.m.	1,597	2.2	12 midnight	1,927	2.6	8 a.m. to 6 p.m.	2,902	4.0
7	4 p.m.	1,526	2.1	11 p.m.	1,816	2.5	9 a.m. to 6 p.m.	2,726	3.7
8	11 p.m.	1,110	1.5	8 p.m.	1,355	1.8	7 a.m. to 5 p.m.	2,585	3.5
9	5 a.m.	814	1.1	2 p.m.	1,256	1.7	7 a.m. to 6 p.m.	1,477	2.0
10	12 midnight	634	.9	7 a.m.	1,142	1.6	3 p.m. to 11 p.m.	1,238	1.7
Part-time workers									
1	9 a.m.	3,179	18.2	5 p.m.	2,481	14.2	8 a.m. to 5 p.m.	703	4.0
2	8 a.m.	3,111	17.8	4 p.m.	2,192	12.5	9 a.m. to 5 p.m.	651	3.7
3	7 a.m.	1,605	9.2	3 p.m.	1,962	11.2	9 a.m. to 3 p.m.	602	3.4
4	10 a.m.	1,517	8.7	2 p.m.	1,480	8.5	8 a.m. to 4 p.m.	550	3.1
5	4 p.m.	1,328	7.6	6 a.m.	1,311	7.5	7 a.m. to 4 p.m.	494	2.8
6	5 p.m.	1,318	7.5	9 p.m.	1,238	7.1	5 p.m. to 9 p.m.	449	2.6
7	3 p.m.	993	5.7	10 p.m.	1,106	6.3	9 a.m. to 4 p.m.	421	2.4
8	11 a.m.	782	4.5	1 p.m.	979	5.6	8 a.m. to 3 p.m.	409	2.3
9	12 noon	637	3.6	12 noon	967	5.5	8 a.m. to 12 noon	405	2.3
10	1 p.m.	605	3.5	8 p.m.	767	4.4	8 a.m. to 2 p.m. ¹	398	2.3

¹ There were also 398,000 workers on a 9 a.m. to 2 p.m. schedule.

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who

were at work during the reference week. Times refer to beginning and ending hours most days of the week and are rounded to the nearest whole hour.

However, this makes no allowance for split or rotating shifts. The latter method allows the respondents to say what they consider is the shift usually worked. This concept permits the incorporation of split and rotating shifts as well as reduces the reporting of deviations from the usual work schedule which may have occurred in a given week. It is the self-identified notion of shift which is the focus of the analysis in this article.³

Generally speaking, shift work is a great advantage to employers who need to match production with demand, accommodate the nature of certain production processes, and reduce the cost of capital per employee. However, except for those who cannot work at a regular daytime job (for instance, students) and those who prefer evening or night hours, shift work often does not benefit workers or their families. In fact, the effects of shift work—particularly night and rotating shifts—can be quite disruptive, with such consequences as sleeping, digestive, and nervous disorders and interference with family relationships.⁴

Of the 73.4 million full-time wage and salary workers who were at work during the survey reference week, 61.7 million, or 84 percent, described their usual work period as a “regular daytime schedule.” Of the remaining 11.6 million—called “shift workers”⁵—most worked an evening shift (4.6 million), followed by rotating (3.1 million), night (2.0 million), and split shifts (about 540,000). A substantial number (1.4 million) worked some other schedule; presumably, this would include daytime workers who felt their schedules were not “regular,” and may include some on flexitime who vary their beginning and ending times.

Men were more likely than women to be shift workers.

This was the case also in each age group, except for teenagers. (See table 2.) More than one-quarter of the teens who worked full time were not on a regular daytime schedule. Among adult men, the incidence of shift work decreased with age, reaching 15 percent for the 45 and over age groups. For adult women, the incidence fell with age to 11 percent for 35- to 44-year-olds, and then rose slightly in the upper ages, reaching 13 percent for those 65 and older. The evening shift accounted for one-third to one-half of all shift workers, except men age 65 and over.

Blacks were more likely than whites or Hispanics to be shift workers. Hispanic men were as likely as white men, but considerably less likely than black men, to work other than a regular daytime schedule. Hispanic women, however, were less likely than both white and black women to be shift workers. Married (spouse present) persons had much smaller proportions working shifts than either singles or those of other marital status. Given that single workers are usually younger than married workers, the higher incidence is probably the result of age differences. Younger workers have less seniority on the job—hence, less choice in shift selection. In addition, youths tend to be in the types of jobs that are more likely to require shift work. Another consideration is that married workers may be less willing to work other than day schedules.

Among occupational and industry groups, shift work is associated with skill and product demands which cannot be satisfied by daytime schedules alone. These include businesses whose customers wish to shop until 9 or 10 at night, or even around the clock; the need for police and fire protection and health care 24 hours a day; and the overnight

delivery of goods. On the supply side, some production processes requires continuous operation, as it would be too costly to shut down each evening and restart each morning. In other cases, high capital costs necessitate around-the-clock utilization.

The incidence of shift work was 10 percent or less among full-time workers in managerial and professional jobs; administrative support, including clerical jobs; and farming, forestry, and fishing occupations. However, within some of these occupations, there were groups with an incidence of shift work of 20 percent or higher—for example, health diagnosing, assessment, and treating occupations among professional workers, and mail and message distributing workers within the administrative support category. (See table 3.) Protective service workers (61 percent) were most likely to work shifts (in fact, 22 percent worked rotating shifts), followed by workers in food (43 percent) and health services (36 percent). Other occupational groups traditionally associated with shift work—the operators, fabricators, and laborers group, and salesworkers in retail trade and personal services—had about one-quarter on shift work.

For most occupations, the evening shift was the most frequent departure from a regular day schedule. The exceptions were health professionals, retail and personal salesworkers, protective service workers, and motor vehicle operators, who reported rotating shifts more frequently than evening shifts. Night shifts were the least common, accounting for about 3 percent of all full-time workers. But, the incidence of night shifts was well above average for some in the groups noted for the likelihood of rotating shifts.

Shift work was more prevalent in the private sector (16.5 percent) than the public sector (12.8 percent). Among goods-producing industries in the private sector, shift work was highest in mining and lowest in construction. (See table 3.) In manufacturing, it was most frequent in areas requiring continuous production (because startup and shutdown costs are high), such as primary metals, automobiles, paper products, chemicals, and rubber and plastics. In the service-producing sector, shift work was most often reported in transportation, retail trade (particularly in eating and drinking places), personal services, entertainment and recreation, and hospitals—all activities for which product demand goes

Table 2. Shift usually worked by full-time wage and salary workers, by selected characteristics, May 1985

[Percent distribution]

Characteristic	Total employed (in thousands)	Regular daytime schedule	Shift workers					
			Total	Evening shift	Night shift	Rotating shift	Split shift	Other shift
Total, 16 years and over	73,395	84.1	15.9	6.3	2.7	4.3	0.7	1.9
Age								
Men, 16 years and over	43,779	82.2	17.8	6.8	3.0	4.9	.8	2.3
16 to 19	1,139	72.6	27.4	11.8	4.7	7.0	1.6	2.3
20 to 24	5,567	80.0	20.0	8.5	3.5	5.0	.9	2.1
25 to 34	14,281	80.0	20.0	7.8	3.3	5.6	.8	2.5
35 to 44	10,630	83.6	16.4	5.7	2.7	5.0	.7	2.3
45 to 54	7,094	85.4	14.6	5.3	2.7	3.9	.5	2.2
55 to 64	4,594	85.5	14.5	5.6	2.1	3.8	1.0	2.0
65 and over	474	85.4	14.6	2.8	2.5	4.0	1.0	4.5
Women, 16 years and over	29,616	87.0	13.0	5.5	2.3	3.3	.6	1.2
16 to 19	777	71.1	28.9	12.8	4.0	9.4	.6	2.1
20 to 24	4,346	84.0	16.0	6.7	2.0	5.1	.9	1.3
25 to 34	9,510	87.5	12.5	5.3	2.2	3.3	.6	1.0
35 to 44	7,080	88.9	11.1	4.8	2.3	2.2	.4	1.3
45 to 54	4,753	88.4	11.6	4.6	2.2	2.8	.8	1.2
55 to 64	2,838	87.3	12.7	5.3	2.6	3.2	.6	1.0
65 and over	311	85.8	14.2	7.3	3.8	-	.8	2.3
Race and Hispanic origin								
White	63,523	84.7	15.3	5.8	2.6	4.3	.7	1.9
Men	38,588	82.7	17.3	6.3	2.9	5.0	.8	2.3
Women	24,935	87.7	12.3	5.0	2.1	3.3	.6	1.2
Black	7,847	80.1	19.9	9.8	3.5	4.3	.7	1.7
Men	4,054	77.4	22.6	10.6	3.7	5.3	.7	2.3
Women	3,793	83.0	17.0	8.9	3.2	3.2	.7	1.1
Hispanic origin	4,911	84.6	15.4	7.1	2.5	3.3	1.0	1.6
Men	3,184	82.3	17.7	7.7	2.8	4.0	1.2	1.9
Women	1,727	88.8	11.2	5.8	1.9	2.0	.6	.9
Marital status								
Men:								
Single, never married	9,703	78.9	21.1	9.3	3.6	5.0	1.1	2.2
Married, spouse present	29,666	83.5	16.5	5.7	2.7	5.1	.6	2.3
Widowed, divorced, or separated	4,410	80.4	19.6	8.5	3.6	4.0	1.1	2.3
Women:								
Single, never married	7,109	83.6	16.4	6.8	2.3	5.2	.6	1.3
Married, spouse present	15,679	89.9	10.1	4.3	1.9	2.3	.6	1.0
Widowed, divorced, or separated	6,828	83.7	16.3	7.0	3.3	3.6	.8	1.5

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the reference week. Dash indicates fewer than 0.05 percent.

Table 3. Shift usually worked by full-time wage and salary workers, by occupation and industry, May 1985

[Percent distribution]

Occupation or industry	Total employed (in thousands)	Regular daytime schedule	Shift workers					
			Total	Evening shift	Night shift	Rotating shift	Split shift	Other shift
Total, 16 years and over	73,395	84.1	15.9	6.3	2.7	4.3	0.7	1.9
Occupation								
Managerial and professional specialty	18,944	91.4	8.6	2.0	1.2	2.7	.6	2.1
Executive, administrative, and managerial	9,079	92.6	7.4	1.8	.8	2.6	.5	1.8
Professional specialty	9,866	90.3	9.7	2.3	1.5	2.8	.8	2.3
Health diagnosing occupations	212	77.6	22.4	1.7	-	13.6	-	7.2
Health assessment and treating occupations	1,257	68.7	31.3	8.3	8.3	12.1	.1	2.6
Technical, sales, and administrative support	21,961	88.3	11.7	4.2	2.1	3.5	.5	1.3
Technicians and related support	2,548	84.5	15.5	6.5	3.3	4.6	.1	1.0
Health technologists and technicians	761	70.1	29.9	12.5	9.0	7.6	.2	.6
Sales occupations	6,730	82.8	17.2	4.1	2.2	6.9	1.1	2.9
Supervisors	1,957	84.0	16.0	2.8	2.1	7.4	1.3	2.4
Salesworkers, retail and personal services	2,400	72.3	27.7	8.3	3.6	11.5	1.1	3.2
Administrative support, including clerical	12,684	92.0	8.0	3.7	1.7	1.6	.3	.6
Computer equipment operators	673	81.2	18.8	11.0	2.7	4.1	-	1.0
Mail and message distributing	613	76.2	23.8	12.7	9.1	.4	.6	1.1
Service occupations	7,268	61.6	38.4	16.9	6.1	8.7	2.4	4.3
Private household	275	83.0	17.0	7.3	1.9	-	1.0	6.8
Protective service	1,286	39.2	60.8	19.8	7.2	23.8	.7	9.4
Service, except private household and protective	5,707	65.6	34.4	16.7	6.1	5.7	2.8	3.0
Food service	2,194	56.9	43.1	21.2	5.3	8.2	5.0	3.4
Health service	1,076	63.9	36.1	14.8	10.3	6.8	.6	3.6
Cleaning and building service	1,719	74.4	25.6	16.1	5.4	1.7	1.3	1.1
Personal service	718	73.9	26.1	7.5	3.7	6.2	3.0	5.7
Precision production, craft, and repair	10,477	87.0	13.0	6.3	2.2	3.7	.1	.7
Mechanics and repairers	3,582	87.3	12.7	6.0	2.3	3.6	.1	.8
Construction trades	3,282	94.1	5.9	3.4	1.0	1.2	.1	.3
Other precision production, craft, and repair	3,614	80.3	19.7	9.3	3.2	6.1	.2	.9
Operators, fabricators, and laborers	13,326	76.3	23.7	10.5	4.6	6.2	.5	1.9
Machine operators, assemblers, and inspectors	6,748	76.3	23.7	13.2	3.7	6.2	.1	.5
Transportation and material moving occupations	3,448	73.8	26.2	5.8	6.0	7.4	1.5	5.5
Motor vehicle operators	2,392	74.5	25.5	4.3	6.9	5.9	1.9	6.5
Handlers, equipment cleaners, helpers, and laborers	3,130	78.9	21.1	9.9	5.2	4.9	.2	.9
Farming, forestry, and fishing	1,418	89.9	10.1	1.5	1.4	.7	3.5	3.0
Industry								
Private sector	60,127	83.5	16.5	6.6	2.9	4.4	.8	1.9
Goods-producing industries	24,626	85.0	15.0	7.4	2.6	3.9	.3	.8
Agriculture	1,154	89.4	10.6	.9	2.2	.2	4.3	3.0
Mining	885	78.1	21.9	6.0	1.6	12.1	-	2.2
Construction	4,279	97.5	2.5	1.3	.4	.4	-	.4
Manufacturing	18,309	82.1	17.9	9.3	3.2	4.5	.1	.7
Durable goods	11,277	84.0	16.0	10.0	2.5	2.8	.1	.5
Non-durable goods	7,033	79.1	20.9	8.2	4.4	7.2	.2	1.0
Service-producing industries	35,501	82.4	17.6	6.1	3.0	4.8	1.1	2.6
Transportation and public utilities	4,958	79.4	20.6	6.1	3.5	6.4	1.2	3.5
Wholesale trade	3,222	91.9	8.1	2.9	2.1	.9	.4	1.7
Retail trade	9,111	73.7	26.3	9.1	3.7	8.6	1.9	3.0
Eating and drinking places	2,242	52.4	47.6	21.0	5.3	12.5	4.5	4.2
Finance, insurance, and real estate	5,003	93.9	6.1	1.9	1.0	1.1	.5	1.6
Services ¹	13,207	82.9	17.1	6.4	3.3	3.9	1.0	2.6
Private households	345	80.8	19.2	7.3	1.5	.7	.8	9.0
Business and repair	3,242	87.4	12.6	5.8	2.4	3.1	.1	1.0
Personal, except private household	1,379	74.0	26.0	10.1	3.8	6.6	2.1	3.4
Entertainment and recreation	529	66.6	33.4	13.8	2.2	7.3	4.1	6.1
Professional services	7,682	83.8	16.2	5.4	3.7	3.6	.9	2.5
Hospitals	2,303	73.0	27.0	10.5	6.6	8.5	.2	1.3
Public sector	13,268	87.2	12.8	4.6	2.0	3.7	.6	1.9
Federal Government	2,901	86.2	13.8	6.1	3.4	2.8	.2	1.2
State government	3,320	88.2	11.8	4.3	2.3	3.0	.5	1.7
Local government	7,047	87.1	12.9	4.2	1.3	4.5	.7	2.2

¹ Includes forestry and fisheries, not shown separately.

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the reference week. Dash indicates fewer than 0.05 percent.

beyond traditional daytime hours.

The incidence of shifts was much higher for those who did not usually work 5 days a week. Almost two-thirds of those working full-time on a 3-day-a-week schedule and just over a third of those on 4-day schedules considered themselves shift workers. Half of the 3-day workers reported

working "other shifts." This should be expected, because each day's work would average at least 12 hours and would not be considered by many as a regular daytime shift, even if most of the hours fell during daytime hours. About 29 percent of those working a 6-day week and 38 percent of 7-day workers considered themselves shift workers.

Of those who reported a reason for not working a regular daytime schedule, 28 percent cited voluntary reasons, including better arrangements for child care or care of other family members, better pay, or time for school. Of the 72 percent giving "involuntary" reasons, 9 of 10 cited the schedule as a requirement of the job; most of the remainder reported they worked shifts because they could not find any other job.

Part-timers were about three times as likely as full-time workers to work other than a regular daytime schedule. Employers often hire part-time help to cover periods of peak demand, which may be as short as 3 or 4 hours on weekdays and may require nonconventional working hours. This is the case, particularly in retail sales and in entertainment and recreation. Many seeking part-time work, especially students, are able to work only evenings or weekends. Nearly half of all part-time workers and four-fifths of the 16- to 19-year-olds were shift workers. About one-quarter of the part-timers worked in the evening. (See table 4.) Employees in sales, service (particularly protective service), transportation and material moving, and in handler, equipment cleaner, helper, and laborer jobs were most likely to work other than a regular daytime schedule. Seven of ten part-time workers in protective service jobs were on shifts.

Flexible schedules

Under flexitime, employees can vary the times their workdays begin and end. The arrangements vary among establishments, and even among units within an establishment, depending on such factors as production, customer, and other coverage requirements; public laws and collective bargaining agreements; and the attitudes of individual managers and supervisors.

The amount of flexibility made possible by flexitime arrangements varies—ranging from as little as 30 minutes to 3 hours or more. Some plans permit variation in the number of hours worked per day, and in some cases, even the total number of hours worked each week, or pay period, and provide for the accumulation of "credit hours." Nearly all plans have a "core-time" requirement: all employees must work during the core time every day, or in some cases, on specified days of the week. A flexitime plan may be a formal document with detailed definitions, rules, and procedures, or it may be so informal that it is not explicitly identified as a flexible work schedule.⁶

Some potential advantages of a flexitime program are decreased tardiness, added hours of service to the public, smoothing rush-hour traffic peaks, larger blocks of employee leisure time, facilitating child care, and better

Table 4. Shift usually worked by part-time wage and salary workers, by selected characteristics, May 1985

[Percent distribution]

Characteristic	Total employed (in thousands)	Regular daytime schedule	Shift workers					
			Total	Evening shift	Night shift	Rotating shift	Split shift	Other shift
Age								
Total, 16 years and over	17,497	52.5	47.5	25.1	5.0	7.1	2.3	8.0
Men, 16 years and over	5,670	43.5	56.5	30.3	5.4	7.3	2.5	11.0
16 to 19	2,008	21.0	79.0	53.6	4.4	7.7	1.6	11.8
20 to 24	1,228	41.2	58.8	31.8	7.5	8.6	1.4	9.5
25 and over	2,434	63.2	36.8	10.4	5.2	6.3	3.8	11.1
Women, 16 years and over	11,826	56.8	43.2	22.6	4.8	7.0	2.3	6.6
16 to 19	2,006	20.9	79.1	52.1	4.3	12.5	1.2	9.0
20 to 24	1,798	46.0	54.0	27.2	6.5	11.4	1.5	7.3
25 and over	8,022	68.2	31.8	14.1	4.6	4.6	2.7	5.8
Occupation								
Managerial and professional specialty	2,321	65.1	34.9	14.4	4.3	5.0	2.2	9.1
Executive, administrative, and managerial	516	71.8	28.2	10.4	3.6	3.6	1.8	8.9
Professional specialty	1,805	63.2	36.8	15.5	4.5	5.4	2.3	9.1
Technical, sales, and administrative support	6,460	54.1	45.9	24.4	4.7	8.6	.9	7.2
Technicians and related support	389	50.8	49.2	23.0	7.0	12.8	1.2	5.1
Sales occupations	2,902	40.8	59.2	31.8	4.8	14.0	.9	7.7
Administrative support, including clerical	3,169	66.7	33.3	17.8	4.3	3.1	.9	7.1
Service occupations	5,339	44.1	55.9	33.5	6.0	7.0	2.1	7.2
Private household	648	64.2	35.8	15.4	2.3	2.9	1.4	13.9
Protective service	235	29.1	70.9	27.6	12.5	8.8	12.0	10.1
Service, except private household and protective	4,457	42.0	58.0	36.4	6.2	7.5	1.7	6.1
Precision production, craft, and repair	653	75.7	24.3	9.5	3.3	2.6	.8	8.1
Mechanics and repairers	158	63.0	37.0	24.6	3.9	1.3	—	7.1
Construction trades	303	85.5	14.5	4.2	.7	1.1	—	8.5
Other precision production, craft, and repair	192	70.7	29.3	5.5	6.9	6.2	2.6	8.2
Operators, fabricators, and laborers	2,148	47.8	52.2	23.6	5.2	7.4	7.1	8.9
Machine operators, assemblers, and inspectors	555	68.8	31.2	16.6	3.5	4.5	—	6.7
Transportation and material moving occupations	550	39.9	60.1	11.5	6.3	6.0	26.5	9.7
Handlers, equipment cleaners, helpers, and laborers	1,043	40.7	59.3	33.7	5.5	9.7	.8	9.6
Farming, forestry, and fishing	577	51.9	48.2	21.0	3.5	3.5	4.8	15.4

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the reference week. Dash indicates fewer than 0.05 percent.

Table 5. Full-time wage and salary workers on flexible work schedules, by selected characteristics, May 1985

[Numbers in thousands]

Characteristic	Total		Men		Women	
	With flexible schedules	Percent of all workers	With flexible schedules	Percent of all workers	With flexible schedules	Percent of all workers
Age						
Total, 16 years and over	9,061	12.3	5,760	13.2	3,300	11.1
16 to 19	178	9.3	115	10.1	63	8.1
20 to 24	1,070	10.8	625	11.2	445	10.2
25 to 34	3,127	13.1	1,916	13.4	1,211	12.7
35 to 44	2,468	13.9	1,597	15.0	872	12.3
45 to 54	1,372	11.6	932	13.1	440	9.3
55 to 64	737	9.9	495	10.8	242	8.5
65 and over	108	13.8	80	16.9	28	9.2
Race and Hispanic origin						
White	8,105	12.8	5,270	13.7	2,835	11.4
Black	707	9.0	332	8.2	375	9.9
Hispanic origin	425	8.6	286	9.0	139	8.0
Occupation						
Managerial and professional specialty	3,448	18.2	2,340	21.5	1,109	13.8
Executive, administrative, and managerial	1,785	19.7	1,183	20.6	601	18.0
Professional specialty	1,664	16.9	1,156	22.4	507	10.8
Technical, sales, and administrative support	3,215	14.6	1,540	18.5	1,675	12.3
Technicians and related support	480	18.8	327	22.6	153	13.9
Sales occupations	1,340	19.9	940	23.1	400	15.1
Administrative support, including clerical	1,395	11.0	273	9.7	1,122	11.4
Service occupations	619	8.5	302	8.5	317	8.5
Private household	30	11.1	1	(1)	30	11.0
Protective service	109	8.5	101	8.7	8	6.6
Service, except private household and protective	479	8.4	200	8.4	279	8.4
Precision production, craft, and repair	717	6.8	658	6.8	59	7.3
Mechanics and repairers	255	7.1	246	7.1	9	7.0
Construction trades	232	7.1	229	7.1	3	(1)
Other precision production, craft, and repair	230	6.4	183	6.1	47	7.3
Operators, fabricators, and laborers	847	6.4	728	7.2	120	3.7
Machine operators, assemblers, and inspectors	273	4.0	187	4.5	85	3.3
Transportation and material moving occupations	397	11.5	389	11.8	8	5.6
Handlers, equipment cleaners, helpers, and laborers	178	5.7	151	5.7	26	5.4
Farming, forestry, and fishing	214	15.1	192	15.4	22	12.6

1 Data not shown where base is less than 75,000.

NOTE: Data refer to wage and salary workers, excluding the incorporated self-employed, who were at work during the reference week.

scheduling of the work force to coincide with variations in the workload. Potential problem areas include the added need for managers and supervisors to schedule and plan the work flow and ensure the coverage of critical functions, the possible lack of supervision at some hours, added timekeeping needs, and nonlabor costs associated with more hours of operation (for example, heating and cooling).⁷

About 9.1 million full-time wage and salary workers (excluding the incorporated self-employed) who worked during the survey reference week in May 1985 were reported as having a work schedule which permitted them to vary their beginning and ending hours of work. (See table 5.) This was 12.3 percent of the covered workers. The incidence of flexible scheduling was lowest for teenagers (9.3 percent) and highest for the 35 to 44 and 65 and over age groups. Men were more likely than women to have flexibility in their work day, as were whites, compared with their black or Hispanic counterparts.

Among occupational groups, the ability to vary work hours ranged from 4 percent for machine operators, assemblers, and inspectors to 20 percent for those in sales occupations. For some more detailed classifications, the incidence

was more than 30 percent, such as mathematical and computer scientists; natural scientists; technicians, except health, engineering, and science; and sales representatives (commodities except retail). The incidence was higher for men than for women for each occupational, age, and race or Hispanic category.

The likelihood of flexible scheduling was slightly higher in the private sector (12.6 percent) than in the public sector (11.3 percent). However, it was 20 percent in the Federal Government, where many agencies have formal flexitime programs. Within the private sector, those in service-producing industries (at 14.5 percent) had higher proportions with the freedom to vary work times than those in goods-producing industries (9.8 percent). Among industry groups, the incidence ranged from under 5 percent in furniture and fixtures, textiles, and apparel, to 15 percent or more in agriculture, printing and publishing, wholesale trade, finance, insurance, and real estate, business and repair services, personal services, entertainment and recreation, and the "other" professional services category, which includes legal services, membership organizations, and engineering, architectural, and surveying services.

Employees on regular daytime schedules were more likely to have the ability to vary their starting and ending hours (12.7 percent) than those on evening shifts (6.6 percent), night shifts (8.2 percent), or rotating shifts (10.8 percent). Nearly one-quarter of those on split shifts had either flexitime or some other scheduling arrangement permitting flexibility.

Part-time workers were more likely than their full-time counterparts to have flexibility in the scheduling of their work, with 3.3 million (18.6 percent) being able to do so. As with full-time workers, the proportion of men reporting flexibility was higher than that of women (19.8 versus 18.0 percent.)

—FOOTNOTES—

¹ Statistics on wage and salary workers usually include self-employed workers whose businesses are incorporated because from a legal standpoint they are the paid employees of a corporation. However, they are excluded from the analysis here, as the primary interest in the scheduling of work lies in a universe of workers limited to those who work for someone else. To have a consistent universe throughout the article, data are limited to those who actually worked during the survey reference week, because some of the data were collected only for this group.

² Information on beginning and ending hours should not be used to indicate the number of hours worked per day—a statistic available through another question in the May 1985 survey. As previously mentioned, the times are rounded. For example, a 9:00 to 5:30 schedule would appear as 9:00 to 6:00. Because most workers usually arrive at work a few minutes before the required start time, someone who has a 7:30 to 4:00 work requirement, but actually arrives at 7:25 most days (and “punches in”

accordingly), would be tallied as 7:00 to 4:00 if that earlier time was reported as the starting time. Both factors may combine to partially explain the large number of those with such 10-hour spans as 8-to-6 and 7-to-5 schedules. Accordingly, an 8-hour work requirement of 8:30 to 5:30 (less an hour for lunch) may appear as 8 to 6. In addition, proxy respondents may not know precise starting and ending times and may report the times an employee departs from and returns home. The span also includes any time not worked, such as lunch and other breaks and the time between the work periods of split shifts—which vary in length among workers.

³ See *Workers on Late Shifts*, Summary 81-13 (Bureau of Labor Statistics, 1981); and Janice N. Hedges and Edward Sekscenski, “Workers on late shifts in a changing economy,” *Monthly Labor Review*, September 1979, pp. 14-22, for previously published data on shift work. Data published in this article are not comparable to those previously published on the subject.

⁴ See Hedges and Sekscenski, “Workers on late shifts”; and Peter Finn, “The effects of shift work on the lives of employees,” *Monthly Labor Review*, October 1981, pp. 31-35.

⁵ Although a regular daytime schedule is, strictly speaking, a “shift,” the term shift work is used here to describe only those schedules other than a “regular daytime schedule.”

⁶ Some of the variations of flexitime used among the plans covering Federal Government employees are flexitour, gliding time, variable day, variable week, and maxiflex. See *The Federal Employees Flexible and Compressed Work Schedules Act of 1978: An Overview of the Experimental Program for Federal Agencies* (Washington, U.S. Office of Personnel Management, 1979).

⁷ See John D. Owen, *Working Hours* (Lexington, MA, Lexington Books, 1979), which has a thorough discussion of alternative work schedules, including the practicality of flexitime in different work situations. For testimony which cites both the merits and limitations of flexitime, see *Flexible and Compressed Work Schedules and Federal Employees Flexible and Compressed Work Schedules Act*, hearings before the Subcommittee on Human Resources of the Committee on Post Office and Civil Service, U.S. House of Representatives (Washington, Government Printing Office, 1982 and 1985, respectively).

APPENDIX: Notes on the data

Unless otherwise indicated, information in this article covers wage and salary workers, excluding the incorporated self-employed, who reported having worked during the week of May 12-18, 1985. Coverage includes both the private and public sectors and workers both in and out of agricultural industries. The data were collected for the Bureau of Labor Statistics by the Bureau of the Census as part of the May 1985 Current Population Survey (CPS). The CPS employs a scientifically selected sample of about 59,500 households in all 50 States and the District of Columbia.

Information on beginning and ending hours of work were obtained from responses to the following questions:

34. LAST WEEK at what time of day did . . . begin work on this job most days?

35. LAST WEEK at what time of day did . . . end work on this job most days?

Answers were coded in 1-hour increments, centered on the hour. For example, answers ranging between 4:30 and 5:29 p.m. were coded as 5:00 p.m.

Information for most of the data on shift work was obtained from the following:

36. Which of the following best describes the hours . . . usually works at this job?
- A regular daytime schedule
 - A regular evening shift
 - A regular night shift
 - A rotating shift—one that changes periodically from days to evenings or nights
 - A split shift—one consisting of two distinct periods each day
 - Other

The May 1985 data on shift work are not comparable to those which were published for the 1973-80 period. The earlier data were based on beginning and ending hours of work questions (as in 34 and 35 above). At that time, the day shift was defined as one at which the majority of hours

worked was between 8 a.m. and 4 p.m.; the evening shift had a majority of its hours between 4 p.m. and midnight; and the night shift had a majority of its hours worked between midnight and 8 a.m. In the event of a tie (for example, 12 noon to 8 p.m.), day took precedence over evening, and evening took precedence over night. "Shifts" were limited to 6- to 12-hour periods; those shorter or longer were classified as "miscellaneous" shifts. In addition, the 1973-80 data excluded farm workers but included any self-employed workers whose businesses were incorporated. The 1985 data are based on the self-identification of usual shift; the data include farm workers and exclude self-employed workers.

A limited amount of the 1985 shift work data was cross-tabulated according to the old definition of shifts. Of those reporting a regular daytime schedule, 97 percent would have been classified as working a day shift based on beginning and ending hours. There is far less conformity among those tabulated as working evening (90 percent) or night (63 percent) shifts, as many of these would have fallen into the miscellaneous category based on the "old" way of tabulating shifts. As expected, those reporting that they usually work a rotating shift were distributed among each of the categories based on beginning and ending hours; and many of

those reporting that they usually work a split or "other" shift would have fallen into the previous "miscellaneous" category.

The data on the presence of flexitime were obtained from the question:

40. Is . . . on flexitime or some other schedule that allows workers to vary the time they begin and end work?

Yes

No

Don't know . . .

The May 1985 data on flexitime are not comparable to those collected in May 1980, because of a difference in coverage. The earlier survey included self-employed workers whose businesses were incorporated (most of whom—by definition—can vary their work hours) and excluded farm workers, while the 1985 survey did not ask the flexitime question to the incorporated self-employed, but did include farm workers. Even though the 1985 data indicated only a small rise in the incidence of flexible work times—from 11.9 percent to 12.3 percent for full-time workers—the rise would have been larger if the incorporated self-employed had been included.

A note on communications

The *Monthly Labor Review* welcomes communications that supplement, challenge, or expand on research published in its pages. To be considered for publication, communications should be factual and analytical, not polemical in tone. Communications should be addressed to the Editor-in-Chief, *Monthly Labor Review*, Bureau of Labor Statistics, U.S. Department of Labor, Washington, D.C. 20212.
