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No. 92-1
January 1992

## WOMEN WORKERS: OUTLOOK TO 2005

## LABOR FORCE OUTLOOK

What role will women play in the labor force of the 21st century? Of the 26 million net increase in the civilian labor force between 1990 and 2005, women will account for 15 million or 62 percent of net growth. In 1990 women were 45 percent of the labor force and will become 47 percent of the civilian labor force in 2005. In 1970 and 1980, women's share of the labor force was only 38 percent and 42 percent, respectively. Projections for the period 1990-2005 indicate that men will leave the labor force in greater numbers than women--by more than 4 million. Men will, however, continue to remain the major segment of labor force participants.

Female labor force participation in all racial groups will rise during the period between 1990 and 2005 (see table 1). Women of Hispanic origin and Asian and other ${ }^{1}$ women will have the fastest growth--both at 80 percent. Net labor force growth for all women between 1990 and 2005 is projected to be 26 percent. Black women's labor force growth of 34 percent will also exceed the average for all women. White women will remain the dominant female participants, but their labor force growth of 23 percent will be the lowest among all female groups.

Labor force participation rates--the percentage of persons of working age who are actually working or looking for work--are also expected to rise for women, while those of men will continue to decline slowly. Participation rates for both white and black women are expected to exceed 60 percent, but for the first time, during the decade at the turn of the century, white women's participation rate ( 63.5 percent) is projected to exceed that of black women ( 61.7 percent). The projected rate for women of Hispanic origin will be 58.0 percent in 2005, up from 53.0 percent in 1990. During this same period, the enormous rise in labor force participation for Asian women (see table 1) will result in a projected participation rate of 58.9 percent--just slightly above that of Hispanic women.

The labor force will continue to age. The median age of persons in the labor force will rise from 36.6 years in 1990 to a projected 40.6 years in 2005. The labor force is also becoming more and more concentrated with prime working age persons-- 25 to 54 -year-olds. By 2005 nearly 7 out of every 10 workers will be in this age group. There will also be more workers age 55 and over. Their percentage share of the labor force will rise from 12.3 percent in 1990 to a projected 14.7 percent in 2005.

[^0]Table 1
Civilian Labor Force 16 Years of Age and Over, by Sex, Race, and Hispanic Origin,

1975, 1990, and 2005 (numbers in thousands)

| Group | Level |  |  | Labor Force Change |
| :---: | :---: | :---: | :---: | :---: |
|  | 1975 | 1990 | 2005 | 1990-2005 |
| Total | 93,775 | 124,787 | 150,732 | 25,945 |
| Women | 37,475 | 56,554 | 71,394 | 14,840 |
| Men | 56,299 | 68,234 | 79,338 | 11,104 |
| White | 82,831 | 107,177 | 125,785 | 18,608 |
| Women | 32,508 | 47,879 | 58,934 | 11,055 |
| Men | 50,324 | 59,298 | 66,851 | 7,553 |
| Black | 9,263 | 13,493 | 17,766 | 4,273 |
| Women | 4,247 | 6,785 | 9,062 | 2,277 |
| Men | 5,106 | 6,708 | 8,704 | 1,996 |
| Hispanic Origin | (1) | 9,576 | 16,790 | 7,214 |
| Women | (1) | 3,821 | 6,888 | 3,067 |
| Men | (1) | 5,755 | 9,902 | 4,147 |
| Asian and other | 1,643 | 4,116 | 7,181 | 3,065 |
| Women | 712 | 1,890 | 3,398 | 1,508 |
| Men | 931 | 2,226 | 3,783 | 1,557 |

[^1]
## INDUSTRIAL OUTLOOK

Approximately 25 million new jobs will be added to the economy, raising total employment from 123 million in 1990 to 147 million by 2005. Just as in the previous 15 -year period from 1975-1990, the majority of newly created jobs will be nonfarm wage and salary jobs in the service-producing industries.

The service-producing sector will continue to dominate job growth and will account for nearly 94 percent of all newly created jobs. Its share of all jobs will rise from 69 percent in 1990 to 73 percent in 2005. There are six divisions within the service-producing sector--transportation, communications, and utilities; wholesale trade; retail trade; finance, insurance, and real estate; services; and government.

The services division is currently the largest source of employment in either the service-producing sector or the goods-producing sector. It will also account for nearly one-half of all newly created jobs. These jobs span a wide variety of areas--retail trade, hotels and lodging services, business and repair services, personal services, entertainment and recreational services, educational and social services, legal services, health services, and public administration. In 1990 women held 62 percent ( 24.3 million) of all services division jobs (see table 2 ).

The retail trade division will replace manufacturing as the second largest source of total employment. By the year 2005, the addition of 5.1 million new jobs will put retail trade employment at 25 million. Despite this increase, many new retail trade jobs will be part time (less than 35 hours a week), tend to offer low pay, require little training and skills, demand little work experience, offer very limited chances for advancement, and will be very sensitive to shifts in the economy. Women have historically been the dominant participants in parttime employment. In 1990 women accounted for 68 percent of all part-time workers (women and men). Women held 52 percent of retail trade industry jobs in 1990 and will continue to dominate this segment as well as the services division.

Table 2
Employment of Persons 16 Years of Age and Over, by Major Industry Division, 1990
(numbers in thousands)

| Industry | Total <br> Employed | Percent <br> Women | Total <br> Women |
| :--- | ---: | ---: | ---: |
| Total | 117,914 | 45.4 | 53,533 |
| Nonfarm wage and salary | 114,728 | 46.0 | 52,821 |
| Goods-producing | 29,610 | 25.8 | 7,639 |
| Mining | 730 | 15.5 | 113 |
| Construction | 7,696 | 8.6 | 662 |
| Manufacturing | 21,184 | 32.4 | 6,864 |
| $\quad$ Durable goods | 12,557 | 26.5 | 3,328 |
| $\quad$ Nondurable goods | 8,626 | 41.0 | 3,537 |
| Service-producing |  |  |  |
| Transportation and utilities | 85,118 | 53.1 | 45,182 |
| Wholesale trade | 8,136 | 28.5 | 2,319 |
| Retail trade | 4,651 | 28.4 | 1,321 |
| Finance, insurance, and | 19,618 | 51.9 | 10,182 |
| real estate |  |  |  |
| Services | 8,021 | 58.6 | 4,700 |
| Public Administration | 39,084 | 62.1 | 24,271 |
|  | 5,608 | 42.6 | 2,389 |

[^2]By 2005 the third largest division within the service-producing sector will be government--Federal, State, and local. The United States Office of Personnel Management reported in September 1988 that women accounted for 42.2 percent of total non-Postal Executive Branch Federal civilian employment. Federal civilian employment has been relatively constant for the past 20 years at 2.7 million to 3.0 million and is projected to remain at this level through the end of this century. Women have made gains in Federal employment within recent years despite numerous cutbacks, hiring freezes, and staff reductions. Some of these advances are listed below:
o Between 1982 and 1988 women gained 108,000 jobs--minority women gained 64,000 jobs and nonminority women gained 44,000 jobs.
o Women accounted for 45 percent of the U.S. civilian labor force in 1990. In 1988, 6 of the 13 Federal departments--Labor, Commerce, Treasury, Education, Housing and Urban Development, and Health and Human Services--had work forces that were between 46 percent and 50 percent female.
o From 1982 to 1988, women executives increased from 714 to 845 and women professionals increased from 91,349 to 128,083 .

Despite the advances of women in Federal employment service, 3.0 million of the 3.2 million newly created government jobs will originate mainly at the State and local levels. These jobs will include the areas of passenger transit, electric utilities, hospital care, education, and general government.

The goods-producing sector--mining, manufacturing, and construction--will show a slight gain in employment. The employment share of nonfarm jobs, however, will drop from 23 percent in 1990 to 19 percent in 2005. While the manufacturing and mining industries will experience declines in employment, construction industry employment will increase enough for a net gain of 248,000 jobs in the goods-producing sector. In 1990 women held only 26 percent of all goods-producing jobs.

Despite the overall employment decline within the manufacturing division, several manufacturing industries will grow faster than average--miscellaneous publishing, engineering and scientific instruments, medical and dental instruments and supplies, miscellaneous plastic products, and office and miscellaneous furniture. Women seeking employment here will find that these industries are smaller and will offer fewer job opportunities. Yet women will continue to find jobs in manufacturing, not only in growing industries, but also in stable or declining industries. New workers will replace current workers who leave the labor force for such reasons as retirement, illness, or death. They will also replace workers who shift to other industries. The total number of jobs available will be somewhat limited considering the country's steady movement into a service economy.

There are growing occupations within the manufacturing division that will provide women with greater opportunities. Increased computerization and higher output in health care products will result in job growth for computer systems analysts, programmers, technicians, and salespersons. The number of engineers will increase as a result of more research being conducted. The number of female engineers and computer systems analysts and programmers is increasing every year. More managers will be needed to deal with the growing demands and complexities of business operations. Currently, women account for 40 percent of all executive, administrative, and managerial positions.

The construction industry will add 923,000 jobs between 1990 and 2005. Industrial building construction should increase as companies invest in more modern factory and plant facilities. Residential construction may experience a slight slowdown because of the slowdown in population growth and formation of new household

The construction industry has always been a nontraditional area for women. Consequently, only 9 percent of construction jobs were held by women in 1990. A major Department of Labor initiative--"Women in the Skilled Trades"--was begun in 1990 to encourage women to enter the skilled trades. The skilled trades encompass precision production, craft, and repair occupations, such as mechanics, repairers, and the construction trades. Most jobs in the skilled trades offer stability in employment and are well paying. Construction jobs were heavily emphasized in this initiative because of their propensity to be unionized. They generally offer earnings commensurate with a person's skills level, paid training opportunities, and health and life insurance benefits.

## OCCUPATIONAL OUTLOOK

Women planning their careers, anticipating career changes, or aspiring to keep up with labor market changes should pay close attention to jobs that offer employment opportunities, good pay, and promotion potential. Job opportunities are usually more favorable in growing occupations, but occupations with the fastest growth do not necessarily provide the most new jobs (see table 3).

The three fastest growing major occupational groups--executive, administrative and managerial; professional specialties; and technicians and related support--require the highest levels of educational attainment. They also have the highest proportion of workers with college degrees and workers with the highest earnings when compared with other major groups. In 1990 women represented 45 percent of all workers in these three groups. The executive, administrative, and managerial group will gain nearly 3 million jobs, professional specialties will gain 3.5 million jobs, and technicians and related support occupations will grow by 1.2 million jobs. More and more women are entering these professions each year. Between 1983 and 1990, women accounted for an additional 303,000 accountants and auditors, 132,000 computer systems analysts and scientists, 80,000 financial managers, 56,000 lawyers, 29,000 physicians, and 24,000 electrical and electronic engineers.

General managers and top executives, computer programmers and systems analysts, teachers (secondary, elementary, and kindergarten), accountants and auditors, lawyers, electrical and electronic engineers, food service and lodging managers, and physicians are examples of occupations that will experience large employment increases. Most of these jobs will require at least a bachelor's degree or related experience.

Professional specialty jobs have the highest proportion of employees who acquired their training in college degree programs--architects, engineers, physicians, surgeons, dentists, lawyers, and teachers. During the 1986-1987 academic year, women accounted for a substantial share of master's degree confirmations--79 percent in health sciences; 74 percent in education; 33 percent in business and management; 27 percent in law; 25 percent in physical science; and 13 percent in engineering.

Four-year college training is not always a prerequisite for management and professional jobs. Personnel, training, and labor relations managers, computer programmers, and securities and financial services sales workers, among others, are some exceptions. As recently as 1990,51 percent of all professional specialty workers were women.

Employment will grow fastest for technicians and related support occupations. These jobs require training after high school but may not require a 4 -year college degree. Generally, they do require some specific formal training, but not to the extent required in most professional specialty jobs. Some of these occupations are paralegals, registered nurses, data processing equipment repairers, surgical technologists, respiratory therapists, electrical and electronic technicians, and computer programmers. In many of these occupations, women have traditionally outnumbered men.

Table 3
The Fastest Growing Occupations, 1990-2005
(numbers in thousands)
Employment Change in Employment

| Occupation | 1990 | 2005 | Number | Percent |
| :---: | :---: | :---: | :---: | :---: |
| Home health aides | 287 | 550 | 263 | 91.7 |
| Paralegals | 90 | 167 | 77 | 85.2 |
| Systems analysts and computer scientists | 463 | 829 | 366 | 78.9 |
| Personal and home care aides | 103 | 183 | 79 | 76.7 |
| Physical therapists | 88 | 155 | 67 | 76.0 |
| Medical assistants | 165 | 287 | 122 | 73.9 |
| Operations research analysts | 57 | 100 | 42 | 73.2 |
| Human services workers | 145 | 249 | 103 | 71.2 |
| Radiologic technologists and technicians | 149 | 252 | 103 | 69.5 |
| Medical secretaries | 232 | 390 | 158 | 68.3 |

Occupations with the Largest Growth, 1990-2005
(numbers in thousands)
Employment Change in Employment

| Occupation | 1990 | 2005 | Number | Percent |
| :--- | :---: | :---: | :---: | ---: |
| Salespersons, retail | 3,619 | 4,506 | 887 | 24.5 |
| Registered nurses | 1,727 | 2,494 | 767 | 44.4 |
| Cashiers | 2,633 | 3,318 | 685 | 26.0 |
| General office clerks | 2,737 | 3,407 | 670 | 24.5 |
| Truckdrivers, light and heavy <br> General managers and <br> top executives | 2,362 | 2,979 | 617 | 26.1 |
| Janitors and cleaners, <br> including maids and | 3,086 | 3,684 | 598 | 19.4 |
| housekeeping cleaners | 3,007 | 3,562 | 555 | 18.5 |
| Nursing aides, orderlies, <br> and attendants | 1,274 | 1,826 | 552 | 43.4 |
| Food counter, fountain, and <br> related workers | 1,607 | 2,158 | 550 | 34.2 |
| Waiters and waitresses | 1,747 | 2,196 | 449 | 25.7 |

[^3]Employment for service workers will expand dramatically between 1990 and 2005--by 5.6 million workers. This will be the largest increase among all major occupational groups. Service workers tend to have lower educational attainment and lower earnings, except for occupations such as firefighters and police officers-nontradtional occupations that women should consider because of higher salaries and other benefits. Highly skilled service workers often increase their incomes substantially with tips and many women parlay their experience as service workers by establishing businesses in personal and other services. Women accounted for 62 percent of all service workers in 1990 and should increase their share by the year 2005.

Precision production, craft, and repair workers make up one of the slower growing occupational groups. Similar to service workers, they may have relatively lower educational attainment when compared with other workers. They do, however, have a highly developed degree of skills. Usually trained through apprenticeships or on-the-job training programs, skilled workers have higher than average earnings. Heavy equipment mechanics, millwrights, electricians, plumbers, and tool and die makers are examples of such workers. Known as nontraditional occupations for women, only 9 percent of precision production, craft, and repair jobs were held by women in 1990.

Agricultural, forestry, and fishing occupations will halt their decline in employment from the previous 15 -year period (1975-1990) but will only increase by 5 percent from 1990 through 2005. This major occupational group will gain about 159,000 jobs by the year 2005--mainly in animal caretakers, farmworkers, nursery workers, and farm managers. The number of female farm managers in $1990(26,752)$, however, has more than tripled since 1983 when there were only 8,505 .

Table 4


A-Executive, administrative, and managerial
B-Professional specialty
C-Technicians and related support
D-Marketing and sales
E-Administrative support

F-Service
G-Agricultural, forestry, and fishing H-Precision production, craft and repair I-Operators, fabricators, and laborers

Source: U. S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, November 1991.
U.S. Department of Labor

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Penalty for Private Use, \$300
M-020


[^0]:    ${ }^{1}$ The "Asian and other" group includes American Indians, Alaskan Natives, and Pacific Islanders.

[^1]:    (1) Comparable data on Hispanics were not available before 1980.

    Source: U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, November 1991.

[^2]:    Source: U.S. Department of Labor, Bureau of Labor Statistics, Employment and Earnings, January 1991.

[^3]:    Source: U.S. Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, November 1991.

