

# Training and Employment Report Of the Secretary of Labor

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Covering the Period July 1991– September 1992

Transmitted to Congress, 1995

U.S. Department of Labor  
Robert B. Reich, Secretary

Employment and Training Administration  
Doug Ross, Assistant Secretary of Labor

Office of Policy and Research  
Raymond J. Uhalde, Deputy Assistant Secretary of Labor

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U.S. DEPARTMENT OF LABOR

SECRETARY OF LABOR  
WASHINGTON, D.C.

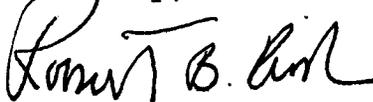
To the Congress of the United States:

I am transmitting to the Congress the annual report on training and employment programs for Program Year 1991 and Fiscal Year 1992. The report is required by Section 169(d) of the Job Training Partnership Act.

As you are aware, President Clinton has proposed a Middle Class Bill of Rights that is designed to help Americans meet the demands of the new economy. One of its four elements--a G.I. Bill for America's Workers--will replace the outmoded and confusing maze of Federal job training programs by putting resources directly into workers' hands to learn and apply new skills. It will also provide workers with the labor market information, advice, and job search help they need to get and keep good jobs. And it will transform the welter of current youth programs to support the education and school-to-work reforms already underway in States and local communities.

I look forward to working with you on this proposal as it moves through the Congress.

Sincerely,



Robert B. Reich

March 1995

## ***Abbreviation and Acronym List***

The following are abbreviations and acronyms used throughout the *Training and Employment Report of the Secretary of Labor*.

|                |   |
|----------------|---|
| AFDC . . . .   | Aid to Families with Dependent Children                           |
| AODA . . . .   | Alcohol and Other Drugs of Abuse                                  |
| APDOT . . .    | Advisory Panel for the <i>Dictionary of Occupational Titles</i>   |
| BAT . . . . .  | Bureau of Apprenticeship and Training                             |
| BLS . . . . .  | Bureau of Labor Statistics  |
| BQC . . . . .  | Benefits Quality Control  |
| CDTI . . . . . | Career Development Training Institute                             |
| CGPA . . . .   | Council of Governors' Policy Advisors                             |
| CMI . . . . .  | Computer-Managed Instruction                                      |
| CY . . . . .   | Calendar Year   |
| DCAP . . . .   | Defense Conversion Adjustment Program                             |
| DOT . . . . .  | <i>Dictionary of Occupational Titles</i>                          |
| DUA . . . . .  | Disaster Unemployment Assistance                                  |
| EB . . . . .   | Extended Benefits   |
| ECD . . . . .  | Employee Career Development                                       |
| EDEPS . . .    | Economic Development and Employer Planning System                 |
| EDWAA . . .    | Economic Dislocation and Worker Adjustment Assistance             |
| EEO . . . . .  | Equal Employment Opportunity                                      |
| ENJSC . . .    | Employers' National Job Service Council                           |
| ES . . . . .   | Employment Service  |
| ESA . . . . .  | Employment Standards Administration                               |
| ESD . . . . .  | Employment Security Department (Washington State)                 |
| ESL . . . . .  | English-as-a-Second Language                                      |
| ETA . . . . .  | Employment and Training Administration                            |
| EUC . . . . .  | Emergency Unemployment Compensation                               |
| FY . . . . .   | Fiscal Year   |
| GED . . . . .  | General Educational Development (also General Equivalency Degree) |
| HHS . . . . .  | U.S. Department of Health and Human Services                      |
| HUD . . . . .  | U.S. Department of Housing and Urban Development                  |
| IJB . . . . .  | Interstate Job Bank   |
| INA . . . . .  | Indian and Native American  |
| INRA . . . .   | Immigration Nursing Relief Act                                    |
| INS . . . . .  | Immigration and Naturalization Service                            |
| IUOE . . . .   | International Union of Operating Engineers                        |
| JOBS . . . .   | Job Opportunities and Basic Skills Training Program               |
| JSA . . . . .  | Job Search Assistance   |
| JSEC . . . .   | Job Service Employer's Committee                                  |
| JTHDP . . .    | Job Training for the Homeless Demonstration Program               |
| JTPA . . . .   | Job Training Partnership Act                                      |
| JTQS . . . .   | Job Training Quarterly Survey                                     |
| LMC . . . . .  | Labor-Management Committee  |
| NAB . . . . .  | National Alliance of Business                                     |
| NAHRO . . .    | National Association of Housing and Redevelopment Officials       |
| NAM . . . . .  | National Association of Manufacturers                             |
| NCEP . . . .   | National Commission for Employment Policy                         |
| NIST . . . . . | National Institute for Standards and Technology                   |

## ***Abbreviation and Acronym List*** (continued)

|                |   |
|----------------|---|
| NOICC . . .    | National Occupational Information Coordinating Committee              |
| NTIS . . . . . | National Technical Information Service                                |
| OJT . . . . .  | On-the-job training   |
| OPM . . . . .  | Office of Personnel Management  |
| OTI . . . . .  | Office of Treatment Improvement                                       |
| P&D . . . . .  | Pilot and Demonstration   |
| PI . . . . .   | Program Improvement   |
| PIC . . . . .  | Private Industry Council  |
| PMR . . . . .  | Performance Measurement Review  |
| PY . . . . .   | Program Year  |
| QC . . . . .   | Quality Control   |
| RQC . . . . .  | Revenue Quality Control   |
| SAC . . . . .  | State Apprenticeship Council  |
| SCANS . . . .  | Secretary's Commission on Achieving Necessary Skills                  |
| SCSEP . . . .  | Senior Community Service Employment Program                           |
| SDA . . . . .  | Service Delivery Area   |
| SEED . . . . . | Self-Employment and Enterprise Development Project (Washington State) |
| SESA . . . . . | State Employment Security Agency                                      |
| SJTCC . . . .  | State Job Training Coordinating Council                               |
| SOICC . . . .  | State Occupational Information Coordinating Committee                 |
| SPIR . . . . . | Standardized Participant Information Report                           |
| SST . . . . .  | Social Skills Training  |
| STEP . . . . . | Summer Training and Education Program                                 |
| STI . . . . .  | State Training Inventory  |
| TAA . . . . .  | Trade Adjustment Assistance   |
| TEAMS . . . .  | Technical Education & Assistance for Mid- and Small-Sized Firms       |
| TJTC . . . . . | Targeted Jobs Tax Credit  |
| TRA . . . . .  | Trade Readjustment Allowance  |
| TTRC . . . . . | Training Technology Resource Center                                   |
| UCFE . . . . . | Unemployment Compensation for Federal Civilian Employees              |
| UCX . . . . .  | Unemployment Compensation for Ex-servicemembers                       |
| UI . . . . .   | Unemployment Insurance  |
| VA . . . . .   | U.S. Department of Veterans Affairs                                   |
| WARN . . . . . | Worker Adjustment and Retraining Notification                         |
| WBA . . . . .  | Weekly Benefit Amount   |
| WIST . . . . . | Women in the Skilled Trades   |
| YFC . . . . .  | Youth Fair Chance   |
| YOU . . . . .  | Youth Opportunities Unlimited   |

## **Acknowledgments**

This edition of the *Training and Employment Report of the Secretary of Labor* was written under the direction of the Department of Labor's Employment and Training Administration (ETA), Office of Policy and Research. It was prepared under Department Contract No. J-9-A-1-0040 by Oliver & Associates: Frances Oliver and Michael Landini. The project manager for the contract was Abby Martin, who was assisted by Mary Vines.

The major components of ETA contributed material and valuable assistance. The text was reviewed by appropriate agencies within the Department and by the Office of Management and Budget.

## **CHAPTER 1**

# **PROGRAM ACTIVITIES**

# PROGRAM ACTIVITIES

## INTRODUCTION

This chapter of the annual *Training and Employment Report of the Secretary of Labor* describes the programs operated by the Department of Labor's Employment and Training Administration (ETA) during Program Year 1991 (July 1991 through June 1992) and Fiscal Year 1992 (October 1991 through September 1992). ETA is the Federal agency that oversees the Nation's major job training, employment, and unemployment compensation programs.

Throughout the *Report* period, many of the Department's efforts focused on assisting a growing number of unemployed workers—as the impact of the 1990–91 recession pushed the unemployment rate up from 6.8 percent in October 1991 to 7.7 percent in June 1992. (Chart 1 shows the national unemployment rate during this period by quarter.)

In Fiscal Year (FY) 1992, four million people received benefits under the Emergency Unemployment Compensation (EUC) program, which extended payments to people who had exhausted their regular unemployment insurance benefits.

In addition, in Program Year (PY) 1991 over 20.4 million people registered with local Employment Service (ES) offices, up more than 1.2 million from PY 1990. Expenditures for ES transactions totaled \$768 million during the year—an increase of \$60 million from the PY 1990 level of \$708 million.

While providing services and income maintenance for unemployed workers, the Department also continued its focus on building a globally competitive, highly skilled, and trained workforce, both to strengthen the Nation's economy and to improve the upward mobility and earning power of American workers. To this end, the Department built on the work of the National Advisory Commission on Work-Based Learning and the Secretary's Commission on Achieving Necessary Skills (SCANS).<sup>1</sup>

<sup>1</sup> The National Advisory Commission on Work-Based Learning was chartered for a two-year period, from October 1990 through September 1992. The Commission, composed of business, education, and labor leaders, was appointed to advise the Department on ways to increase the skill levels of the American

While both groups completed their missions during the *Report* period, their work helped to lay a foundation for special Departmental activities that included assisting U.S. companies with work-based learning programs and the reorganization of work, and strengthening workforce literacy efforts.

This introductory section of Chapter 1 describes special activities of the Department during the period covered by the *Report*. The remainder of the chapter reports on individual programs for which ETA is responsible: Job Training Partnership Act programs, the Job Training for the Homeless Demonstration Program, Apprenticeship, the Senior Community Service Employment Program, the Employment Service, Unemployment Insurance, Trade Adjustment Assistance, and the Labor Surplus Areas Program. It also summarizes the activities of two independent Federal organizations responsible for employment-related activities, the National Commission for Employment Policy and the National Occupational Information Coordinating Committee.

## Special Program and Legislative Activities

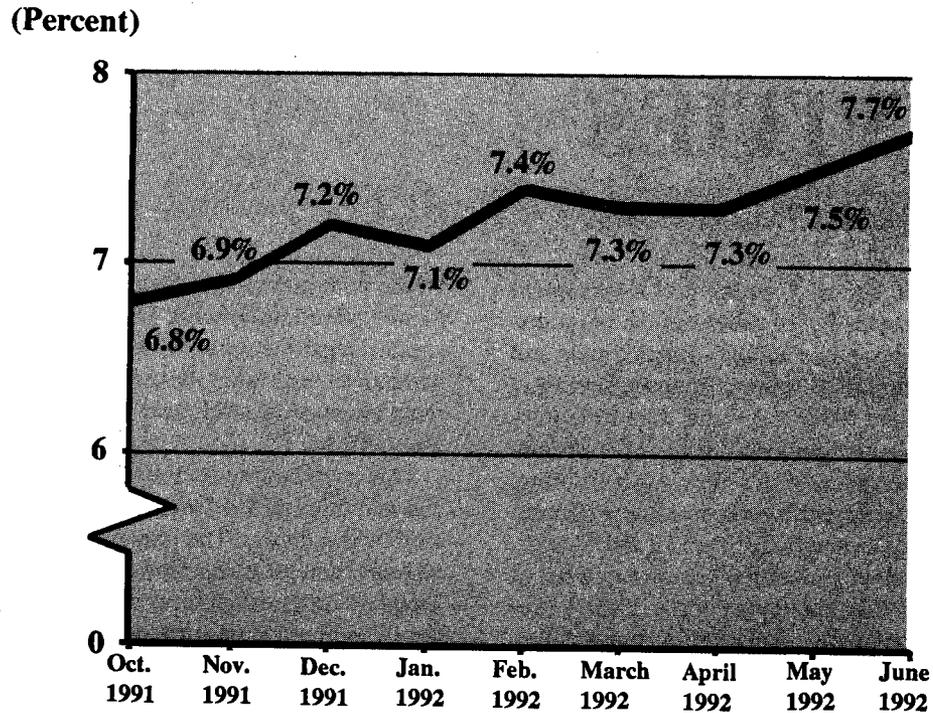
The Department initiated its TEAMS (Technical Education and Assistance for Mid- and Small-sized Firms) effort to help smaller firms enhance their productivity by developing a highly skilled and flexible workforce.<sup>2</sup>

The TEAMS strategy focuses on interagency partnerships and joint agreements with business assistance intermediaries to deliver technical assistance to small

<sup>1</sup> (continued) workforce and to expand workers' access to work-based learning at all stages of their careers. SCANS, established in February 1990 to determine the skills people need to succeed in the world of work, completed its work in PY 1991 with the release of its final publication, *Learning a Living: A Blueprint for High Performance*. The report calls for the reinvention of American education, a reorganization of work and work-based learning, and a restructuring of educational assessment. The Commission's report is summarized in Chapter 2.

<sup>2</sup> TEAMS has been incorporated into the larger Incumbent Worker Training Initiatives effort of the Department.

**Chart 1. National Unemployment Rate, October 1991 - June 1992**



**Source: U.S. Department of Labor, Bureau of Labor Statistics.**

companies. Traditionally, these entities have focused on financial assistance needs, promoting the sharing and adoption of technology, and industrial modernization. The TEAMS effort recognizes that major productivity gains can be realized by integrating the human element—through training and work redesign—with traditional services.

Among several intermediaries involved in the TEAMS effort is the Department of Commerce's National Institute for Standards and Technology (NIST). During FY 1992, the Department of Labor worked with NIST to develop a human resource assessment tool to include with the technology assistance that NIST provides to firms through its Manufacturing Technology Centers. The Department and NIST also worked together to explore human resource development through NIST's State Technology Extension Program.

The National Association of Manufacturers (NAM) is another TEAMS intermediary. The Department worked with NAM to develop and implement an effective strat-

egy to ensure that employers have a source of information and technical assistance to cover current and future worker readiness needs. Part of this effort was joint sponsorship of a series of 14 focus group sessions with manufacturing firms and their employees. Findings from the focus groups were used to design two pilot workshops which were conducted with chief executive officers. A report on the focus group sessions, entitled *Workforce Readiness: A Manufacturing Perspective*, was completed in June 1992.

A National Workforce Assistance Collaborative, which was authorized by the National Literacy Act of 1991, was established in 1993 to develop and disseminate technical assistance tools on human resource development and management systems that reflect characteristics of high-performance workplaces. The products and services of the Collaborative are targeted to the intermediaries that assist small businesses.

The Training Technology Resource Center (TTRC) is the Department's central repository of information on best

practices, emerging training technology, and the reorganization of work. TTRC, one of whose functions is to support the TEAMS effort, serves as an ETA in-house clearinghouse for information on workforce development.

In response to the National Literacy Act, the Department began working with the Departments of Education and Health and Human Services to create a National Institute for Literacy. The Institute, established in PY 1992, is jointly administered by the three Departments. It is designed to conduct and coordinate studies on adult literacy and learning programs; provide technical assistance and training to public and private policymakers and literacy practitioners; and operate a toll-free hotline offering information on literacy.

The Department also jointly funded with the Department of Education exploratory research to develop a new testing tool based on the SCANS "know-how" (see the discussion of SCANS findings in Chapter 2) that will provide for assessments of national workforce readiness. The research project is administered jointly by the two Departments and the Office of Personnel Management (OPM). The Department and OPM also planned to investigate ways in which the instrument could be used for individual diagnosis.

One of the Department's major, ongoing research efforts during PY 1991 was the analysis of data obtained in its 1990 Workplace Literacy Survey, conducted by the Educational Testing Service. This is the culmination of a two-phased project which surveyed and profiled the workplace literacy levels of Job Training Partnership Act (JTPA), Employment Service, and Unemployment Insurance (UI) program participants and produced a workplace literacy testing instrument for use by job training programs, schools, and others in evaluating individual clients' literacy levels.

Department staff worked throughout the *Report* period on a variety of issues related to passage of the amendments to JTPA, which were signed into law in September 1992. The Job Training Reform Amendments of 1992, which became effective July 1, 1993, target JTPA programs to those seriously in need or at risk of failure in the labor market, enhance the quality of services, strengthen accountability, and promote coordination of human resource programs serving the disadvantaged. (See the JTPA section in this chapter for more information on the amendments.)

## Other Special Initiatives

During the *Report* period, the Department undertook activities to examine the reorganization of work and to enhance computer technology and automation in several programs.

The Department awarded two contracts to examine how companies can introduce "high performance work systems," which combine decentralized authority with training and employment security to increase quality, productivity, and customer service. A number of companies have adopted this nontraditional approach to increase their profitability and competitive performance. By studying the experiences of firms which have implemented changes in work organization and culture, the projects will identify factors that promote success for companies and their employees.

The Department also funded upgrades to several automated information systems during the *Report* period. Among programs receiving funds to enhance their technological capacities were the Employment Service (for its labor exchange function), Alien Labor Certification, and Unemployment Insurance. In February 1992, 29 States were awarded a total of \$12 million to enhance ES delivery systems. Most of the States used the funds to automate job search delivery and Interstate Job Bank systems, enhance existing automated systems used by employers and jobseekers, or implement self-search employment systems.

A total of \$3.2 million was awarded to 10 States and the District of Columbia to automate the processing of alien labor certifications and requests for prevailing wage information from employers who want to hire certain eligible foreign workers. These States handle approximately 90 percent of all alien labor certification cases.

In April 1992, \$18.2 million was awarded to 12 States to upgrade their UI systems. The funds were used for a wide variety of activities, which included redesigning benefit and tax systems, developing expert systems, replacing central processing units, and purchasing imaging systems.

## JOB TRAINING PARTNERSHIP ACT PROGRAMS

### Program Overview

JTPA authorizes the largest system of Federal job training and retraining programs in the United States. These programs are designed to prepare economically disadvantaged youths and adults and dislocated workers to compete in the labor market. During PY 1991—July 1, 1991, through June 30, 1992—JTPA programs served approximately 2.4 million people, with expenditures totaling \$4.3 billion.<sup>3</sup> Table 1 presents summary information on the

<sup>3</sup> The number of people served by JTPA represents the total number of participants served under the individual titles (Titles II, III, and IV, including veterans' programs). Some participants were enrolled under more than one title. Expenditures cover costs of Titles II, III, and IV, including veterans' activities.

**Table 1. JTPA Expenditure and Participant Levels for Selected Programs, PY 1991**

| Title                                  | Expenditures<br>(in Millions) | Total Number of<br>Participants |
|--|-------------------------------|---------------------------------|
| II-A: Adult and Youth .....            | \$1,746.1                     | 1,021,800                       |
| II-B: Summer Youth <sup>a</sup> .....  | 1,022.9                       | 795,100                         |
| III: Dislocated Workers .....          | 486.1                         | 332,200                         |
| IV: National Programs:                 |                               |                                 |
| Indian and Native Americans .....      | 58.9                          | 26,600                          |
| Migrant and Seasonal Farmworkers ..... | 67.1                          | 48,500                          |
| Job Corps .....                        | 849.3                         | 101,100                         |

Note: The total number of people served by JTPA represents the total number of participants served under the individual titles. Some participants were enrolled under more than one title at different times during the year.

<sup>a</sup>The summer figures (Title II-B) are for the summer of 1992. They include Indian and Native American youth programs, as well as SDA programs.

Source: U.S. Department of Labor, Employment and Training Administration.

number of participants and expenditures for selected programs during the *Report* period. Detailed data on JTPA funding and participants, by State, for several JTPA programs are provided in the Statistical Appendix of this *Report*.

Under the JTPA legislation, the Department sets broad program policy; allocates funds to the States; prescribes standards for program performance; monitors and conducts audits of State and local program activities; provides technical assistance to States and local program operators; evaluates programs and supports research and demonstration projects; and directly administers programs for certain groups of workers.

State and local governments, in partnership with the private sector, manage and administer most JTPA programs. Governors approve locally developed plans and monitor programs to ensure compliance with Federal regulations and standards.

Job training services are delivered through the following administrative structures:

- **State Job Training Coordinating Councils (SJTCCs)**, which provide Governors with advice and counsel on training activities and recommend the designation of Service Delivery Areas. Members, appointed by Governors, represent business, State legislatures, State agencies, local government and educational agencies, labor, community-based organizations, and the general public.
- **Service Delivery Areas (SDAs)**, which are the administrative districts into which the Nation is divided

for JTPA purposes. They are designated by the Governors to receive Federal job training funds. Among the areas automatically eligible to be SDAs are units of local government with populations of 200,000 or more. There were 641 SDAs during PY 1991.

- **Private Industry Councils (PICs)**, which are established by local elected officials in each SDA to provide guidance and oversight for job and training programs at the SDA level. PICs enlist representatives from various segments of the private sector to actively manage job training programs. PIC membership includes representatives from business, educational agencies, organized labor, rehabilitation agencies, community-based organizations, economic development agencies, and the Employment Service. The majority of a PIC's members must represent business and industry within the SDA, and the PIC chairperson must be a business representative.

The JTPA legislation mandates standards for program performance, reflecting its emphasis on training outcomes and State and local accountability. Through quantified measures, performance standards assess program outcomes and thus gauge how well the JTPA system is meeting the Department's objectives.

### **PY 1991 Initiatives**

The following are highlights of special JTPA activities undertaken in PY 1991.

## **JTPA Amendments**

Department staff provided technical assistance to Congressional members and staff throughout PY 1991 on issues related to the development of the JTPA amendments, which were enacted in September 1992 as the Job Training Reform Amendments of 1992 (P.L. 102-367). The law, the culmination of a four-year effort to revise JTPA, became effective on July 1, 1993. (See accompanying box for highlights of the legislation.)

## **Grants to Streamline Training Programs**

During the *Report* period, the Department made funds available to all States to begin streamlining and integrating Federal vocational education and training programs. Distribution of the funds was based on the relative size of each State's JTPA Title II-A allotments, with nine-month grants ranging from \$20,000 to \$50,000. The total amount awarded was \$1,990,000.

## **Development of Performance Standards**

The Department awarded a contract for analytical and statistical support to refine and update models used for performance standards for JTPA programs (and for the Employment Service) and to help develop new measures and standard-setting approaches for Program Years 1994 and 1995. The contract calls for the provision of training in standard-setting methodologies and in developing appropriate formats for new types of data systems. It also includes a review of relevant empirical research and an examination of the feasibility of developing alternative performance models.

## **Coordination with the JOBS Program**

The Department continued its collaboration with the Departments of Health and Human Services and Education in a jointly funded, three-year effort to coordinate

technical assistance in the implementation of the Job Opportunities and Basic Skills (JOBS) Training Program. Created by the Family Support Act of 1988 (P.L. 100-485), JOBS is designed to provide education, training, and employment assistance to recipients of Aid to Families with Dependent Children (AFDC), with the goal of enabling them to become self-sufficient.

In the second year of the effort, several regional workshops were provided for program administrators and service providers, including five on program design and a pilot workshop on marketing. A coordination handbook was completed and distributed by the three agencies. Efforts during the final year focused on providing technical assistance to States to enhance the coordination between the JTPA and JOBS programs.

## **JTPA Presidential Awards**

Sixteen winners were recognized by the Secretary of Labor at the fifth annual JTPA Presidential Awards ceremony. These awards were presented to private sector volunteers, PICs, and training programs that made exemplary contributions to the JTPA system by providing quality job training opportunities to economically disadvantaged people. The recipients were honored for their commitment to effective programs for youth, dislocated workers, and others with multiple barriers to employment; for their ability to coordinate various resources to provide streamlined program services; and for offering effective training services for those individuals most at risk.

## **JTPA Programs By Title**

The following sections describe services and programs authorized under Titles II, III, and IV during PY 1991. They include a brief description of each program's operations, participant outcomes, and performance standards.

### **Job Training Reform Amendments of 1992**

#### **P.L. 102-367**

Effective July 1, 1993, the Job Training Reform Amendments of 1992:

- Target the program to those disadvantaged people with the most serious skill deficiencies and other barriers to employment.
- Improve the quality of services provided through participant assessment and the development of individual service strategies.
- Establish a separate year-round youth title but retain the summer jobs program.
- Institute new, rigorous fiscal and procurement controls in order to strengthen program accountability.
- Create a new national capacity-building and replication program to improve program quality and the skills of staff who administer and deliver JTPA services.
- Authorize the creation of State Human Resource Investment Councils to provide Governors with an important new tool for planning and overseeing a coherent statewide system of vocational education and training.

## Adult and Youth Programs, Title II-A

Title II-A, JTPA's basic block grant program, provided training and other services during PY 1991 for over one million participants—economically disadvantaged adults and youth, and others who faced significant employment barriers. Services included classroom instruction, on-the-job training (OJT), job search assistance, work experience, remedial education, supportive services, and other types of job-related assistance, such as counseling and skills assessment. Expenditures during the period totaled more than \$1.7 billion.<sup>4</sup>

According to a formula based on the relative shares of jobless and economically disadvantaged people in each State, funds were made available for local programs through block grants to States. Seventy-eight percent of a State's Title II-A funds were allocated by formula to local SDAs. States retained the remaining 22 percent of funds for:

- Coordination with State education programs (eight percent);
- Incentive grants for programs exceeding performance standards or technical assistance (six percent);
- Training programs for older workers (three percent); and
- State administrative responsibilities, including support for the State Job Training Coordinating Council (five percent).

Most of the Title II-A projects were provided by the network of 641 SDAs across the Nation. These SDA programs served over 796,000 people in PY 1991 (78 percent of Title II-A's total enrollment).

In PY 1991, 44 percent of Title II-A participants received classroom training, an increase of four percentage points from the previous program year. Chart 2 compares the distribution of program activity for Title II-A for Program Years 1990 and 1991. Participants in OJT and job search assistance had the highest entered employment rates, followed by those who received classroom training, work experience, and other services. The average length of stay in all programs was 27 weeks.

Participant characteristics for PY 1991 are similar to those of the previous year. Increased coordination with the JOBS training program resulted in an increase in the

proportion of adult terminees who are welfare recipients. By statute, up to 10 percent of Title II-A participants are not required to be economically disadvantaged if they face other barriers to employment. Ninety-three percent of the participants were economically disadvantaged in PY 1991. Table 2 lists the participant characteristics of adult and youth Title II-A terminees.

In PY 1991, the adult and adult welfare entered employment rates for SDA programs were 63 percent and 53 percent, respectively. The average hourly wage at placement for adults increased in PY 1991, up from \$5.85 to \$6.08. The youth positive termination rate was 74 percent.<sup>5</sup>

With the exception of the youth entered employment rate, Title II-A performance standards were generally met. Table 3 compares the standards with national average program outcomes for the year.

The measures for the Title II-A performance standards reflected the following Department of Labor goals: targeting services on a more at-risk population; improving the quality and intensity of services that lead to long-term employability and increased earnings; placing greater emphasis on basic skills acquisition and on improving participants' ability to qualify for employment or advanced education and training; and promoting comprehensive, coordinated human resource programs to address the multiple needs of at-risk populations.

The adult and welfare followup measures indicate a program's ability to contribute to participants' longer-term employability and economic self-sufficiency, as measured 13 weeks after leaving the program. The youth measures reinforce the Department's emphasis on developing employability skills and employment—including acquiring educational and vocational credentials—and dropout prevention and recovery.

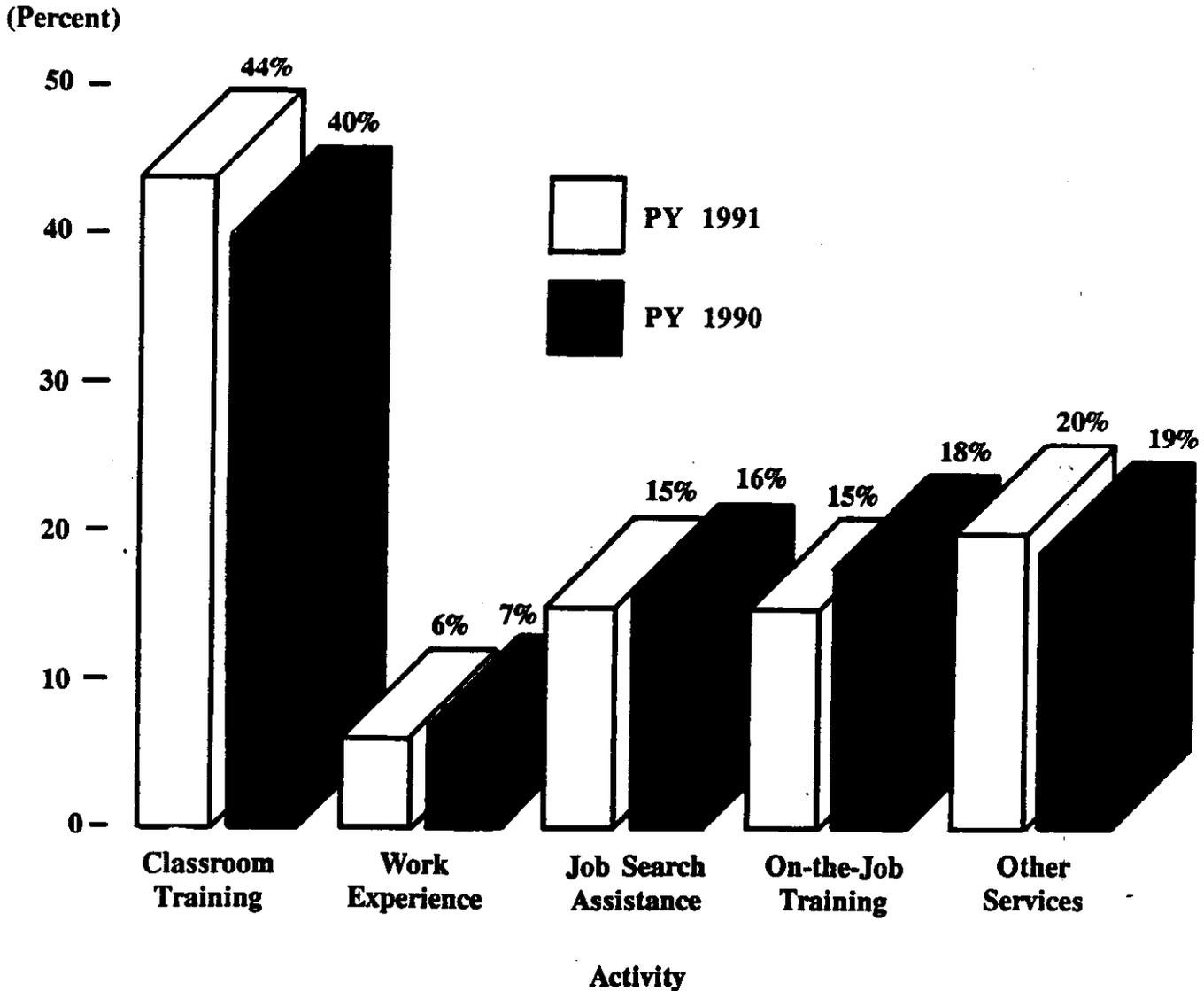
In addition to providing information on these outcomes, an expanded reporting system included data on the level of service provided to additional hard-to-serve groups, including homeless individuals, people with multiple barriers to employment, people lacking a significant work history, JOBS program participants, and veterans.

Governors retained their discretion to establish additional noncost standards to reflect State policy and their authority to modify national standards to account for local conditions that can have an impact on SDA performance, such as economic factors and participant mix. The Department annually updates an adjustment model that helps Governors set standards for their SDAs and prevents SDAs from being penalized for operating in an economically depressed environment or for serving large numbers of hard-to-serve participants.

<sup>4</sup> Title II-A expenditures are from the JTPA Semiannual Status Report. Title II-A participant data are from the JTPA Annual Status Report, except the following, which are from the Job Training Quarterly Survey (JTQS): percentage of participants economically disadvantaged, entered employment rates by program activity, percentage of clients served by program activity, and hourly wage by program activity. All participant characteristics and experiences are those of PY 1991 terminees—that is, persons who left JTPA programs during the program year. (The JTQS provides information on a nationally representative sample of terminees.)

<sup>5</sup> Specific State funds and numbers of participants for Title II-A are shown in the Statistical Appendix of this Report.

**Chart 2. Title II-A Program Activity Distribution,  
PY 1991 and PY 1990**



**Source: U.S. Department of Labor, Employment and Training Administration.**

Performance standards for PY 1992 were developed in PY 1991. The Department decided to retain in PY 1992 the same types of measures used in the PY 1990-91 period, to provide stability in the JTPA system in anticipation of operational changes resulting from the pending amendments and from implementation of the Standardized Participant Information Report (SPIR)<sup>6</sup> for Titles II-A and III.

<sup>6</sup> The SPIR system requires States to report annually to the Department individual records rather than summary data on client demographics, program participation, and outcomes for those enrolled in Titles II-A and III. The new reporting system, phased in during PY 1992 and fully operational in PY 1993, makes possible more meaningful comparisons of client characteristics, service delivery, and program results, thus contributing to improved services and better program management. It replaced previous administrative reporting requirements and surveys used to supplement federally required reports.

**Table 2. JTPA Titles II-A and II-B Selected Participant Characteristics  
(Percent Distribution), PY 1991**

| Characteristic                 | Title II-A:<br>Adult | Title II-A:<br>Youth | Title II-B:<br>Summer Program |
|--------------------------------|----------------------|----------------------|-------------------------------|
| Sex:                           |                      |                      |                               |
| Male .....                     | 42                   | 47                   | 50                            |
| Female .....                   | 58                   | 53                   | 50                            |
| Age:                           |                      |                      |                               |
| 14-15 .....                    | —                    | 16                   | 41                            |
| 16-18 .....                    | —                    | 32                   | 37                            |
| 19-21 .....                    | —                    | 51                   | 21                            |
| 22-54 .....                    | 97                   | —                    | —                             |
| 55+ .....                      | 3                    | —                    | —                             |
| Education:                     |                      |                      |                               |
| Dropout .....                  | 25                   | 26                   | 5                             |
| Student .....                  | —                    | 49                   | 85                            |
| HS graduate .....              | 74                   | 20                   | 10                            |
| Race/Ethnicity:                |                      |                      |                               |
| White .....                    | 54                   | 43                   | 26                            |
| Black .....                    | 29                   | 35                   | 42                            |
| Hispanic .....                 | 13                   | 19                   | 27                            |
| Native American .....          | 2                    | 2                    | 1                             |
| Asian .....                    | 2                    | 2                    | 3                             |
| Limited English .....          | 6                    | 5                    | 11                            |
| Disability .....               | 10                   | 15                   | 13                            |
| Single Head of Household ..... | 34                   | 12                   | 5                             |

Note: Title II-A data are based on characteristics of terminees—persons who left JTPA during PY 1991—and are for programs operated by SDAs. Title II-B data, also for programs operated by SDAs, are for the summer of 1992. Figures may not add to 100 percent due to rounding.

Source: JTPA Annual Status Report for Title II-A and Summer Youth Performance Report for Title II-B. U.S. Department of Labor, Employment and Training Administration.

However, the numerical levels were revised to reflect PY 1991 experience and, in the case of earnings measures, to account for inflation and increases in the minimum wage. The adjustment models were also updated for PY 1992 to account for changes in economic conditions and services for new hard-to-serve clients. As for Program Years 1990 and 1991, cost standards were not included because experience has shown that they discouraged providing hard-to-serve clients with the intensive training services they needed.

As part of its ongoing technical assistance on performance standards, the Department conducts nationwide training annually for the JTPA community. The training is designed both to ensure proper use and application of performance standards and to provide the JTPA system with the latest information on Department initiatives, research, and measures to improve quality. In addition to the traditional technical tracks on reporting and standards calculations, major topics covered in PY 1991 included youth employability enhancements, effective OJT

**Table 3. Title II-A Performance Standards and Outcomes, PY 1991**

| Measure                                    | Standards | Outcomes <sup>a</sup> |
|--|-----------|-----------------------|
| Postprogram:                               |           |                       |
| Followup Employment Rate . . . . .         | 62%       | 61%                   |
| Welfare Followup Employment Rate . . . . . | 51%       | 51%                   |
| Followup Weekly Earnings . . . . .         | \$204     | \$247                 |
| Welfare Followup Weekly Earnings . . . . . | \$182     | \$233                 |
| Title II-A Youth:                          |           |                       |
| Entered Employment Rate . . . . .          | 45%       | 42%                   |
| Employability Enhancement . . . . .        | 33%       | 50%                   |

<sup>a</sup>National averages.

Source: U.S. Department of Labor, Employment and Training Administration.

programs, capacity building, improving the quality of training, and use of followup data.

**Summer Youth Programs, Title II-B**

Title II-B provides economically disadvantaged youth with work experience and training services during the summer months. The Summer Youth Employment and Training Programs are conducted by SDAs, which are required to assess the reading and math levels of eligible Title II-B participants and to provide basic remedial education services for enrollees who do not meet locally determined education standards. In addition to education services and work experience with public and private non-profit agencies, summer participants may receive classroom training, on-the-job training, counseling, and other supportive services.

In June 1992, \$500 million in supplemental funds was allocated to the SDAs to provide summer jobs and training to additional disadvantaged youth under Title II-B. The supplement, part of an emergency urban aid package, was in response to the need of inner cities to provide meaningful job opportunities to youth.

Most Title II-B funds were distributed to States and SDAs in PY 1991 by the same formula used for Title II-A

monies.<sup>7</sup> In 1992, total SDA summer expenditures exceeded \$1 billion, an increase of \$319 million over the previous year, reflecting the supplemental funding provided. The first \$100 million of the supplement was targeted to the Nation's largest 75 cities, while the balance was spread nationwide and used the statutory formula based principally on unemployment.

The 1992 summer program<sup>8</sup> provided jobs, education, and training to over 782,000 participants—227,000 more than the previous summer. Thus, the States and the SDAs appear to have made exceptional efforts to recruit additional participants into the program, given the late timing of the supplemental appropriation.

Title II-B participant characteristics, displayed in Table 2, changed somewhat in 1992, probably reflecting, in part, the targeting of the supplemental funding. Some of the changes are as follows:

- The proportion of white participants dropped from 30 percent in 1991 to 26 percent in 1992. During the same time period, the proportion of black participants increased from 40 percent to 42 percent and the proportion of Hispanic participants increased from 26 percent to 27 percent.
- The number of participants with disabilities decreased from 15 percent to 13 percent in 1992.
- The proportion of participants with limited English-speaking abilities increased from six percent to 11 percent.
- The number of participants who were single heads of households with dependents under the age of 18 increased from three percent in 1991 to five percent in 1992.
- The number of participants who were school dropouts increased from four percent to five percent, while the number who were students decreased from 87 percent to 85 percent.

**Dislocated Worker Programs, Title III**

Title III authorizes employment-related assistance to dislocated workers, including those who have lost their jobs because of plant closings or layoffs. Services provided to dislocated workers include assessment, retraining, job search assistance, job development, needs-related payments, and supportive services.

Eighty percent of the Title III annual appropriation is allotted by formula to the States. Up to 40 percent of each State's allotment may be used by the Governor to administer

<sup>7</sup> Specific State funds and numbers of participants for Title II-B are shown in the Statistical Appendix of this Report.

<sup>8</sup> This Report discusses the 1992 summer program because funds for it were included in JTPA appropriations for PY 1991. The source of statistics on these programs is the JTPA Summer Youth Performance Report.

the JTPA dislocated worker system, to provide “rapid response” in the event of plant closures and substantial layoffs, and to provide Statewide, regional, or industry-wide dislocated worker activities. The remaining 60 percent of a State’s allotment must be distributed to substate areas to provide retraining and other services at the local level.

The other 20 percent of the Title III appropriation is retained in the Secretary’s National Reserve Account for discretionary projects serving workers affected by plant closings and mass layoffs, projects in areas of special need (including emergency response to natural disasters), technical assistance and training, and exemplary and demonstration programs. Discretionary funds are awarded in response to applications that Governors may submit at any time throughout a program year and may be spent during the following two program years.

Expenditures of formula funds totaled nearly \$413 million in PY 1991, an increase of almost \$70 million, or about 20 percent, from the level in PY 1990. As required by legislation, excess unexpended formula funds are recaptured and reallocated annually; funds recaptured in PY 1991 totaled approximately \$5 million. Approximately \$91 million was awarded during PY 1991 for discretionary projects to serve dislocated workers in 32 States and American Samoa.<sup>9</sup>

Participants in the Title III program in PY 1991 numbered over 332,000, a 13 percent increase from PY 1990. The average cost per participant was \$1,463, a seven percent increase from the year before. For the 193,000 participants who terminated from the program, the average length of participation was 28 weeks, up from 22 weeks the year before; almost 131,000, or 68 percent, had a job when they left the program. The average hourly wage at termination was \$8.46.

Forty-five percent of Title III terminees received classroom training services—a significant increase from 38 percent in PY 1990. (Chart 3 compares services received by Title III terminees for PY 1991 and PY 1990.)

Table 4 provides data on selected participant characteristics and program activity for Title III.

Title III performance standards have remained unchanged since PY 1988, with the national standard for the entered employment rate set at 64 percent for PY 1991. Governors were encouraged to set an average wage at placement standard for dislocated worker programs.

**Defense-Related Dislocations.** During PY 1991, the Department awarded over \$23 million for 18 projects under the Defense Conversion Adjustment Program (DCAP). DCAP, part of Title III, was authorized by Congress in 1990 to help workers who lose their jobs as a

result of decreased defense spending. Under a memorandum of agreement with the Department of Defense, up to \$150 million can be transferred to the Department of Labor to fund DCAP projects. With this funding, the Labor Department anticipated serving some 70,000–80,000 civilians specifically affected by defense-related cuts.

Eligible grantees for DCAP funds are States, substate area grantees designated under Title III, employers, employer associations, and representatives of employees. The funds are used exclusively for retraining and reemployment-related assistance, and include such services as counseling, job development, and relocation assistance. The box on page 14 lists the projects funded in PY 1991.

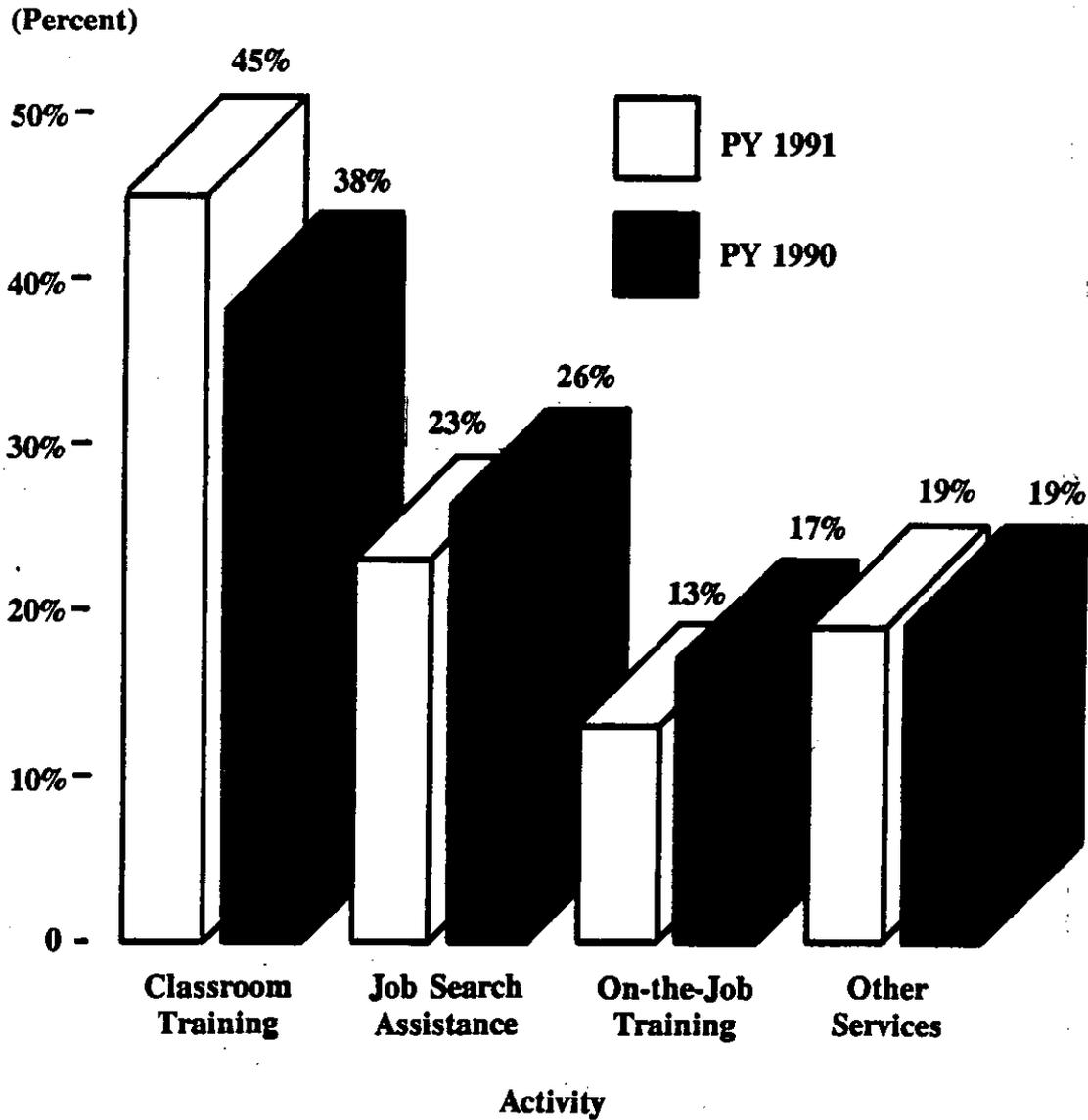
**Table 4. JTPA Title III Selected Participant Characteristics and Program Activity, PY 1991**

|                                  |     |
|----------------------------------|-----|
| Characteristic:                  |     |
| Sex:                             |     |
| Male .....                       | 55% |
| Female .....                     | 45  |
| Age:                             |     |
| 29 and under .....               | 23  |
| 30–54 .....                      | 69  |
| 55+ .....                        | 8   |
| Education:                       |     |
| Less than high school .....      | 13  |
| High school graduate .....       | 49  |
| Post-high school attendee .....  | 38  |
| College graduate and above ..... | 11  |
| Race/Ethnicity:                  |     |
| White .....                      | 74  |
| Black .....                      | 15  |
| Hispanic .....                   | 8   |
| Native American .....            | 1   |
| Asian .....                      | 2   |
| UI Claimant .....                | 58  |
| Limited English .....            | 3   |
| Disability .....                 | 3   |
| Single Head of Household .....   | 12  |

Note: All data reflect characteristics/activities of terminees. Source: Statistics are from the Worker Adjustment Annual Program Report. U.S. Department of Labor, Employment and Training Administration.

<sup>9</sup> Funding and participant levels for Title III, by State, are included in the Statistical Appendix of this Report.

**Chart 3. Title III Program Activity Distribution,  
PY 1991 and PY 1990**



**Source: U.S. Department of Labor, Employment and Training Administration.**

**Rapid Response.** A key goal in dislocated worker programs is the ability to provide services as soon as possible upon notification of a plant closing or layoff. After extensive review of rapid response issues with the JTPA system and the Department's regional offices, the Secretary announced rapid response initiatives in letters to all

Governors. As part of the initiatives, during the period March through May 1992, the Department conducted six Targeted Rapid Response Emergency Assistance Team visits to States that were most in need of immediate rapid response technical assistance—New York, Ohio, Louisiana, Texas, California, and Florida.

**Defense Conversion Adjustment Program  
Projects Funded in PY 1991**

| Project  | State          |
|--|----------------|
| Aerospace Industry . . . . .   | Arizona        |
| Williams Air Force . . . . .   | Arizona        |
| George Air Force Base . . . . .  | California     |
| Sacramento Army Depot,<br>McClellan Air Force Base,<br>Mather Air Force Base . . . . . | California     |
| Lowry Air Force Base . . . . .   | Colorado       |
| General Dynamics Electric Boat . . . . .   | Connecticut    |
| UNC Naval Products . . . . .   | Connecticut    |
| Chamberlain Manufacturing . . . . .  | Iowa           |
| Fansteel/Wellman Dynamics . . . . .  | Iowa           |
| England Air Force Base . . . . .   | Louisiana      |
| Fort Peck Indian Reservation . . . . .   | Montana        |
| General Dynamics-Land . . . . .  | Ohio           |
| GE-Aerospace . . . . .   | Pennsylvania   |
| Charleston Naval Shipyard . . . . .  | South Carolina |
| Charleston Naval Base . . . . .  | South Carolina |
| Bergstrom Air Force Base . . . . .   | Texas          |
| Carswell Air Force Base . . . . .  | Texas          |
| Chase Naval Air Station . . . . .  | Texas          |

In addition, the Department's regional offices conducted on-site visits in all States and the District of Columbia to discuss issues of concern with rapid response units and to agree upon any corrective actions which needed to be taken. Among the issues identified were insufficient staffing levels and limited establishment of Labor-Management Committees (LMCs). Regional office staff then followed up with the States until all issues were resolved.

In May and June, 12 Rapid Response Training Workshops were conducted and representatives from all States were invited to attend. The purpose of the training was to improve the delivery of rapid response assistance in the event of plant closures and substantial layoffs nationwide, and to stress the importance of LMCs.

The LMCs are ad hoc groups of workers and managers in a plant or office where workers are about to lose their jobs. Group members organize to devise and implement a strategy to respond to the needs of these workers (see box).

**Other Activities.** A total of \$1.7 million was earmarked in PY 1991 for a program to test innovative strategies in response to farmworker dislocations. The demonstration program was operated in Iowa, Minnesota, North Dakota, and South Dakota. Also, \$2.5 million funded a demonstration program to evaluate job creation and entrepreneurial training in response to worker dislocation. Awards for the

six-site demonstration were made to projects in Georgia, Illinois, Michigan, Mississippi, and New York (two sites).

During the *Report* period, officials from the Department met with representatives from the General Motors (GM) Corporation, the United Auto Workers, and the State of Michigan to discuss how best to coordinate support services for workers affected by planned GM shutdowns. In response to GM's announcement of 12 eventual plant closings affecting workers in four States, the Department formed an in-house task force to assist employees dislocated as a result of the corporate cutbacks and to coordinate activities among the States and local communities affected.

The Department also provided an emergency grant of up to \$2 million to assist communities and workers affected by civil unrest in California. The funds were used for temporary jobs in public or private nonprofit agencies to begin clean-up and repair of public structures and to provide support services over a six-month period. A number of workers permanently dislocated from their jobs because of the civil unrest found temporary work as a result of the grant.

**National Programs, Title IV**

Title IV authorizes the Job Corps and other programs administered directly by the Department that serve Indians and Native Americans, migrant and seasonal farmworkers, and veterans. Title IV also authorizes the National Commission for Employment Policy (NCEP), the National Occupational Information Coordinating Committee (NOICC), and federally administered technical assistance, labor market information, research and evaluation, and pilots and demonstrations (P&D).

Four categories of Title IV activities are described in this section: programs for Indians and Native Americans,

**Characteristics of Labor-Management  
Committees**

- Shared and equal participation by workers and management.
- Shared financial participation between the company, the State, and in some instances labor unions, in paying for operating expenses of the committee.
- A jointly selected neutral chairperson.
- The ability to respond flexibly to the needs of affected workers.
- A formal agreement terminable at will by workers or the company management, and terminable for cause by the Governor.
- Local job identification activities by the chairperson and members of the committee on behalf of the affected workers.

programs for migrant and seasonal farmworkers, the Job Corps, and pilot and demonstration programs.<sup>10</sup>

**Indian and Native American Programs.** To help eligible individuals prepare for and hold productive jobs, Indian and Native American (INA) programs offer job training, job referrals, counseling, and other employment-related services, such as child care, transportation, and training allowances. Those eligible for the programs include Indians, Eskimos, Aleuts, Hawaiians, and other persons of Native American descent who are economically disadvantaged, unemployed, or underemployed.

In PY 1991, 180 program grantees served 26,600 Native American participants in all States and the District of Columbia. The grantees included Indian tribes, other Native American communities, and various related organizations. Their expenditures totaled \$58.9 million. Chart 4 shows the distribution of services provided to participants in Indian and Native American programs in PY 1991.

Approximately 52 percent of the 21,500 participants who left the programs were placed in jobs. Another 31 percent attained an "employability enhancement," indicating that they returned to school, entered another training program or completed a major level of education, completed a worksite training objective, or attained basic or occupational skills proficiency. Of those who left the program during the year, 50 percent were male, 28 percent were 21 years or younger, and 22 percent were high school dropouts.

During the *Report* period, the Department continued to encourage grantees to coordinate their activities with those of other human resources programs.

In addition to programs authorized under JTPA Title IV-A, INA grantees also received JTPA Title II-B funds to operate summer programs for Native American youth. Approximately 13,000 Native American youth participated in such programs in the summer of 1992, at a cost of \$17.5 million.

With the program goals of JTPA expanding to emphasize skill development for harder-to-serve populations, it became necessary to update the measures upon which INA program performance was assessed. To encourage development of skills as well as employment, grantees were required in PY 1991 to meet individually determined standards for two out of the three following measures used to assess performance: (1) an entered employment rate, (2) a positive termination rate, and (3) a new employability enhancement rate.

<sup>10</sup> The activities of NCEP and NOICC are described at the end of this chapter. Veterans' services, administered by the Department of Labor's Office of the Assistant Secretary for Veterans' Employment and Training, are reviewed in the Secretary's annual report to Congress on veterans' activities. These programs are targeted to veterans with service-connected disabilities, veterans of the Vietnam era, and veterans recently separated from military service. The findings of research and evaluation projects completed during the period covered by this *Report* are summarized in Chapter 2.

The cost measure was dropped for PY 1991, as it was for other JTPA programs, to encourage more intensive training and program flexibility. However, for plan review and monitoring purposes only, an upper limit of a \$4,000 average cost per participant was established for PY 1991. Any grantee exceeding this limit was required to justify and document the need for higher per-participant expenditures.

The level of each performance standard is individually determined for each grantee using a statistical model. Standards are based on a uniform, objective, and equitable approach. Adjustments are made to each grantee's standards to reflect comparative differences in the participants served and in local labor market conditions, such as the unemployment rate, percent of the workforce in manufacturing, and whether the population is urban or rural.

**Migrant and Seasonal Farmworker Programs.** Title IV programs also help address chronic unemployment, underemployment, and substandard living conditions among migrant and seasonal farmworkers and their families nationwide. They are designed to help migrant and seasonal farmworkers who seek alternative job opportunities to secure stable employment at an income above the poverty level and to improve the living standard of those who remain in the agricultural labor market.

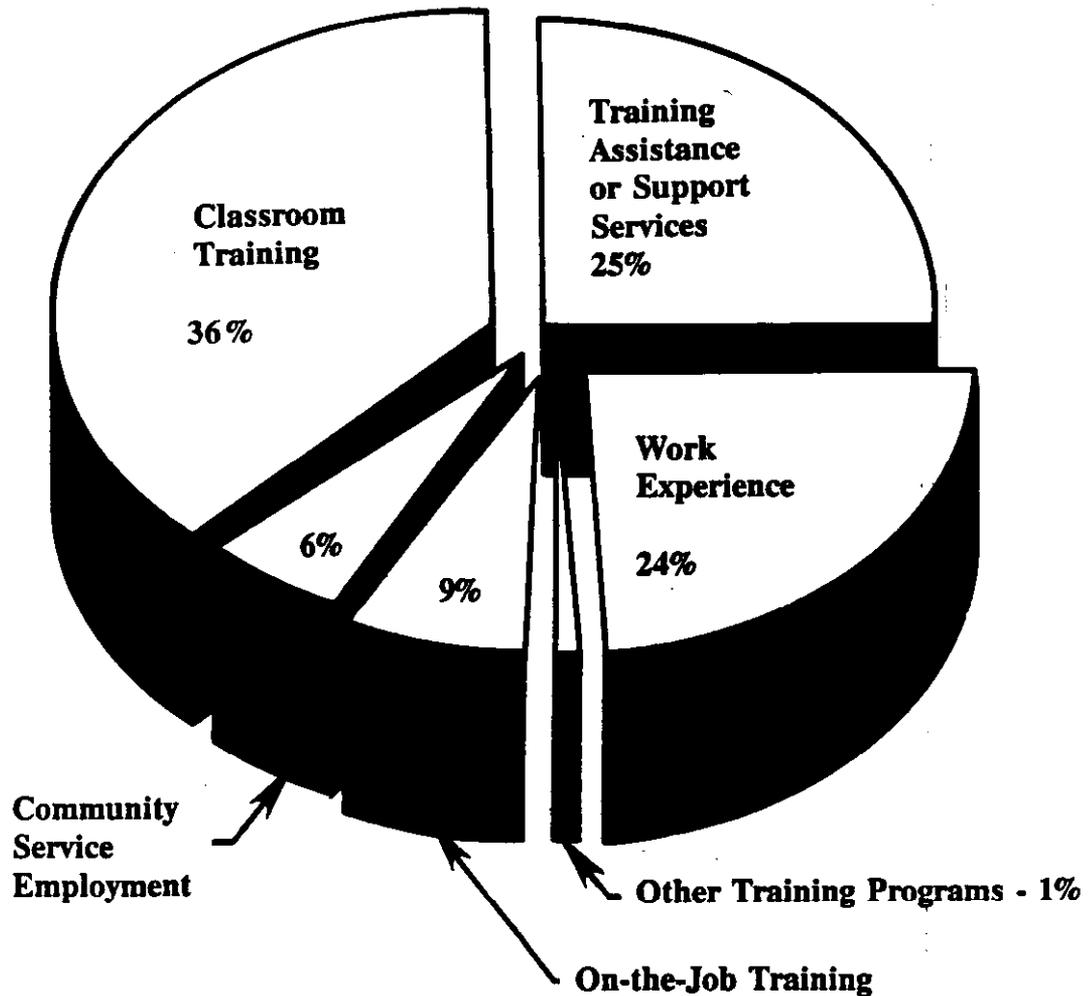
Through competitively awarded grants to public and private nonprofit institutions, eligible economically disadvantaged farmworkers and their families are provided training and other employment-related services, including classroom instruction, on-the-job training, work experience, and supportive services (which may include child care, health care, legal aid, transportation assistance, and food and housing in emergency situations).

In PY 1991, regular migrant and seasonal farmworker employment and training activities served approximately 48,500 eligible individuals at a cost of \$67 million. Fifty-three nonprofit organizations and State agencies operated migrant and seasonal farmworker projects in 48 States and the Commonwealth of Puerto Rico during the period. Of the 48,500 total, over 39,000 participants received services and left the program during PY 1991.

Well over half of those who left the program received stand alone supportive services, such as child care, medical care, or emergency housing. Another 16,400 received occupational or educational training. (About 10,100 of those participants—62 percent of those who received training—were placed in unsubsidized employment.) The balance of the trainees received job search assistance or employability enhancement, or left the program before significant intervention by the grantees.

Thirty-five percent of those placed in jobs in PY 1991 were women; 19 percent were farmworker youth ages 21 and under. The average annual income of trainees prior

**Chart 4. Distribution of Services Provided to Participants In Indian and Native American Programs, PY 1991**



Source: U.S. Department of Labor, Employment and Training Administration.

to enrollment was \$4,267, while the average annualized wage of participants who obtained jobs was \$11,773. Classroom instruction and on-the-job training continued to be the main employment strategies used by migrant and seasonal farmworker grantees.

As program goals expanded to include basic education and occupational skills development to enhance employability of harder-to-serve populations, the Department updated measures upon which program performance was assessed, to encourage both skills development and em-

ployment. Two performance measures—Entered Employment Rate and Average Wage at Placement—were used in PY 1991.

The cost measure, Cost per Entered Employment, was dropped in PY 1991, as it was for all other JTPA programs, to encourage more intensive training and program flexibility.

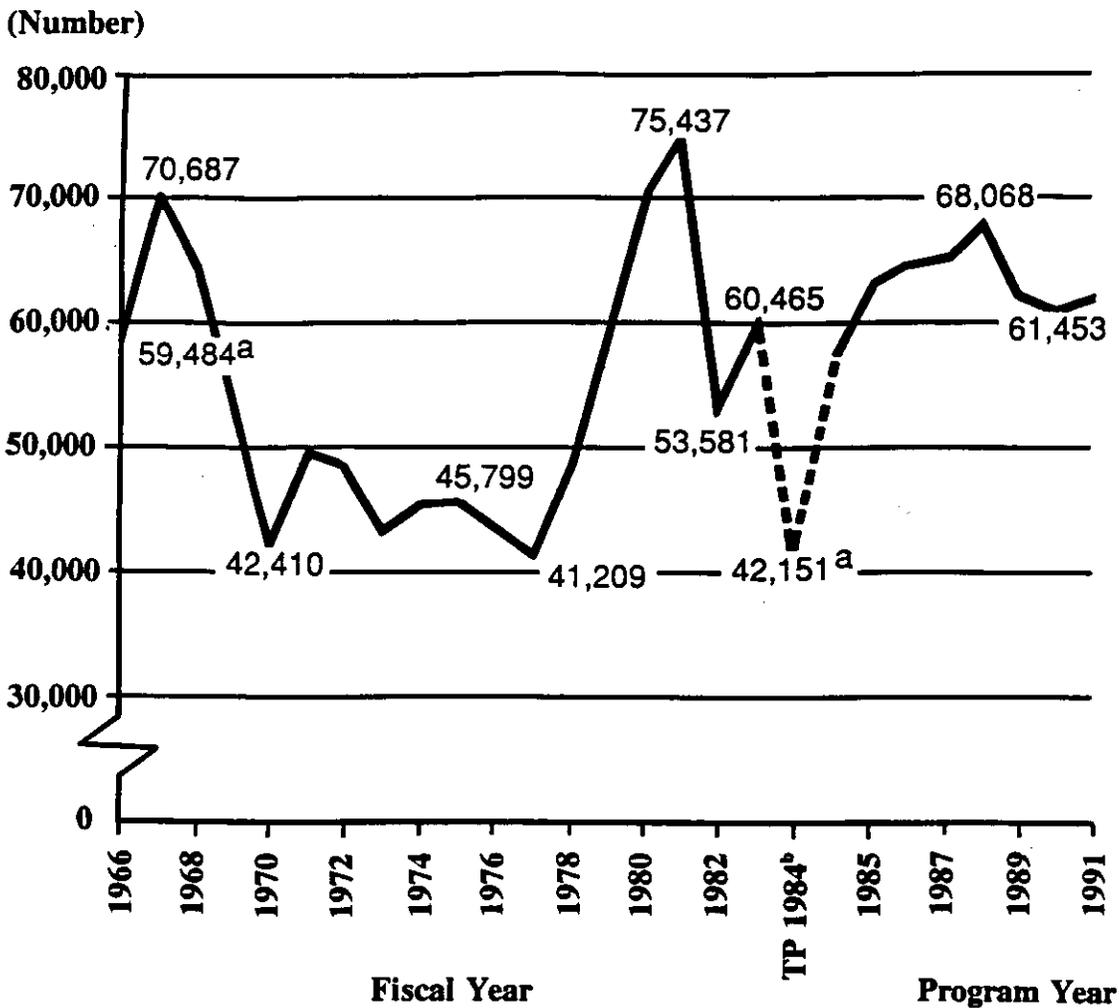
As with the Indian and Native American programs, performance standards used a statistical model that took into account both participant characteristics and local labor market conditions.

**Job Corps.** Job Corps is a major national training and employment program which is administered directly by the Department to address the multiple barriers to employment faced by disadvantaged youth, ages 16 through 22, throughout the United States. Its residential aspect distinguishes Job Corps from other employment and training programs and enables it to provide a comprehensive array of services in one setting 24 hours a day, seven days a week. The program provides youth with a comprehen-

sive mix of services, including entry diagnostic testing, occupational exploration and world-of-work training, occupational training, academic education, intergroup relations, counseling, life skills development, regular student progress reviews, and work experience programs.

One hundred and eight Job Corps centers served 101,052 enrollees, including some 62,205 new trainees, during PY 1991. Job Corps expenditures during the period totaled \$796.2 million for program operations and \$53.1 million for

**Chart 5. Job Corps New Enrollments, FY 1966 Through PY 1991**



<sup>a</sup>Includes FY 1985 enrollments of 13,321.

<sup>b</sup>Nine-month transition period.

Source: U.S. Department of Labor, Employment and Training Administration.

capital. Chart 5 provides data on new enrollments in Job Corps since FY 1966. (The first center opened in January 1965.)

*Enrollee Characteristics and Outcomes.* Approximately 81 percent of the PY 1991 trainees were high school dropouts. The average reading level at the time of enrollment was seventh grade. Nearly 74 percent of the students had never held a full-time job. Sixty-eight percent were minority youth, and 62 percent were male.

An analysis of the total number of trainees who left Job Corps in PY 1991 and who were available for placement in the six-month followup period during which placements were tracked indicates that 75.6 percent were either placed in jobs or went on to further education or other training programs.

A breakdown by sex shows that almost 64 percent of the men available for placement were placed in jobs (including military) at an average hourly wage of \$5.18, and that 14 percent of the available men went on to other education/training programs. Approximately 52 percent of the women available for placement were placed in jobs (including military) with an average hourly wage of \$4.86, and 19.8 percent of the available women enrolled in other education/training programs.

*Job Corps Initiatives.* Because the workplace of the 1990s and beyond requires additional and advanced skills, Job Corps developed an expanded, comprehensive, and competency-based preliteracy to precollege academic education program. The new program was introduced in Program Years 1991 and 1992.

In the areas of reading, math, world-of-work, and General Educational Development (GED), the new program stresses problem-solving and the learning of higher level cognitive skills. Additions to the program include structured courses in writing and thinking skills, English-as-a-second language (ESL), and health education.

Effective and efficient delivery of the new academic education program demands an innovative approach in order to meet the requirements of an open-entry/open-exit educational system based on individual student needs. Attainment of this goal will be accomplished by implementing a networked Computer-Managed Instructional (CMI) system.

CMI system databases contain all instructional assignments and answer keys for progress tests and computer-scorable assignments. By eliminating manual record-keeping and assisting with the scoring and recording of assignments, the system will free instructors to spend more time with students in individual and small group instruction.

Job Corps received \$1.5 million in its PY 1991 appropriation to increase the availability of child care services for Job Corps students. These funds were used to coordinate with State and local agencies to increase child care services through both on-center child development programs and off-center linkages.

During PY 1991, on-center child development programs were operated for children of nonresidential students by the Atlanta, San Jose, South Bronx, Pittsburgh, Potomac (in Washington, D.C.), and San Diego Job Corps Centers. The Turner (Albany, Ga.) and Flint Hills (Manhattan, Kan.) Job Corps Centers initiated residential single-parent programs in which young children and their parents live on-center in special dormitories; the children participate in on-center child development programs while their parents attend classes.

Because job skills may not be enough to ensure a young person's success in the labor force, a comprehensive Social Skills Training (SST) program was implemented at all centers during PY 1991. SST is a structured program consisting of 50 skills which students are expected to master. Included are skills such as teamwork, how to ask a question, dealing with anger and embarrassment, self-control, and arriving on time for work or appointments. Techniques such as modeling, role-playing, performance feedback, and other components determine how well students apply the skills in different situations. Materials include videos, training tapes, student activity guides, training achievement records, pamphlets, and other instructional items. All center staff are trained to work with students on social skills competencies.

During PY 1991, Job Corps implemented a national prevention and intervention program involving alcohol and other drugs of abuse (AODA). As part of this initiative, centers conduct biochemical testing on all new students when they enroll, on students who are suspected of using alcohol and/or other drugs, and on students who have a written intervention plan. All centers have at least one AODA specialist on staff.

During the *Report* period, the Department signed an interagency vocational training agreement with the Department of Veterans Affairs (VA) to train Job Corps students for a wide range of positions in the health care support field. Qualified graduates are assisted with placement as nursing assistants, food handlers, ward clerks, and physical therapy assistants in VA Medical Centers around the country. Trained workers for these positions are in high demand, and the VA has had difficulty recruiting employees.

Six performance standards are used to measure the outcomes of Job Corps programs. Two of the standards measure learning gains in reading and math (based on pre- and posttest scores of the Test of Adult Basic Education). One standard measures placement for trainees, two standards measure program retention, and another standard measures GED attainment. During PY 1991, a vocational program completion standard was incorporated into the system for information purposes only.

*Pilot and Demonstration Programs.* P&D programs, authorized under Part D of Title IV, are administered at

the national level to test innovative approaches and strategies for enhancing the employability skills of people facing particular labor force barriers. They serve the special needs of targeted client groups—including youth, offenders, individuals of limited English-language proficiency, individuals with disabilities, displaced homemakers, single parents, and other individuals who the Secretary determines require special assistance.

P&D activities include training demonstration programs, partnership programs, coordination models, programs designed to address industry-wide shortages, and programs to develop information networks among local programs with similar objectives under JTPA. A major goal of P&D programs is the adoption or replication at State and local JTPA levels of the successful approaches and models resulting from these efforts. Approximately \$32 million was committed to P&D programs in PY 1991.

*New P&D Projects.* The following new projects were initiated during the *Report* period.

- The Geriatric Demonstration Project, designed to demonstrate innovative, comprehensive strategies and model approaches for providing job opportunities for disadvantaged adults and youth as certified geriatric nurse's aides, home health care aides, and personal home attendants. The project developed career ladders to upgrade the skills participants needed to attain occupational advancement.
- The Utah JTPA Demonstration Project, funded to develop quick implementation strategies for anticipated JTPA legislative changes in the areas of targeting, program quality, increased fiscal and program accountability, and data collection.
- The Workplace Literacy Pilot Project, designed to provide instruction in workplace literacy skills for disadvantaged adults and youth. The project also tests the use of integrating these skills into the operation of job training programs through a partnership between local employers, the community, and the New York City Department of Employment.
- Immigrant Demonstration Projects, developed to test innovative, replicable, and effective approaches to help immigrants attain necessary basic education and occupational skills and long-term employment with career advancement potential. The four projects—in California, Massachusetts, Washington, and Michigan—are administered by PICs through subagreements with community-based organizations that traditionally serve the needs of newly arrived immigrants. They all offer ESL training, occupational skills training, case management, and necessary support services.
- In PY 1991, the Department initiated a new inter-agency demonstration effort with the Department of Health and Human Services' Office of Treatment

Improvement (OTI), which linked ETA's local training and employment services with OTI residential substance abuse treatment programs in three localities—Atlanta, Baltimore, and Boston. The purpose of this effort is to enhance the effective rehabilitation of substance abusers by preparing them for re-entry into stable employment.

- In June 1992, the Department awarded six Federal-State partnership grants to design and implement statewide youth apprenticeship programs, based on the integration of academic curriculum, work-site learning, and paid work experience. The States of California, Iowa, Maine, Michigan, Oregon, and Wisconsin each received \$200,000 for a one-year period.<sup>11</sup>

In August and September 1992, the Department conducted a competition to award up to \$300,000 to national trade associations to form coalitions with affected stakeholders (business, industry, labor, workers, educators, trainers, community-based organizations, and government) to pilot-test the development and implementation of skill standards in various U.S. industries.

The competition grew out of the Department's work to develop and implement a strategy to create and promote a national system that identifies standard skills needed for jobs and "certifies" workers who have obtained these skills. The voluntary standards can serve as a tool to assist employers, as well as other stakeholders, and help American workers compete more successfully in the global marketplace.<sup>12</sup>

*Field Initiated Competition.* Several P&D projects which had been funded in PY 1990 under a trial "Field Initiated Competition" were funded again in PY 1991.<sup>13</sup> These included the following:

- A collaborative effort between the American Society for Training and Development and the United

<sup>11</sup> On May 4, 1994, President Clinton signed into law the School-to-Work Opportunities Act. This legislation establishes a national framework in which States will create comprehensive and effective school-to-work systems. These systems offer young Americans the opportunity to participate in a high-quality, performance-based program resulting in a high school diploma, a degree or diploma certifying successful completion of one or two year(s) of postsecondary education (if appropriate), and an occupational skill certificate.

<sup>12</sup> The Goals 2000: Educate America Act, signed into law by President Clinton on March 31, 1994, creates a National Skill Standards Board responsible for promoting the development and adoption of a nationwide voluntary system of skill standards and certification.

<sup>13</sup> "Field initiated" projects were those projects generated in specific program areas by interested individuals and organizations in the public and private sectors. They were not in response to Department-generated Solicitations for Grant Awards or to Requests for Proposals.

Auto Workers-Chrysler National Training Center to identify and develop effective approaches and strategies for addressing the needs of the Nation's increasingly diverse and multicultural workforce.

- A project to develop and demonstrate effective approaches to increasing employers' sensitivity and understanding of the cultural backgrounds of employees with limited English, and to provide workplace literacy training that enhances successful assimilation of these workers into the mainstream labor force.
- A research and demonstration effort that focused on developing model training approaches and policy recommendations to address issues and practices that adversely affect job retention of women in the building trades.

*Partnership Programs.* As in previous years, P&D efforts included "partnership programs" designed to increase the involvement in JTPA of key national business, labor, and community-based organizations that represent broad constituencies and can promote JTPA training and cooperation within their own organizations and with the private sector and local government. Six organizations in this category were funded in PY 1991: National Urban League, Inc.; SER-Jobs for Progress, Inc.; Opportunities Industrialization Centers of America, Inc.; National Alliance of Business (NAB); Human Resources Development Institute, AFL-CIO; and National Council of La Raza.

Noteworthy partnership activities included: SER's installation and implementation of its Family Learning Center (an intergenerational computer-assisted educational training model) in 55 locations; National PIC Leadership Institutes and conferences on the JTPA amendments which were developed and conducted by NAB; and training workshops conducted by the Urban League for 250 affiliate and nonprofit staff on the JTPA procurement process, amendments, and performance-based contracting.

*Programs for People with Disabilities.* P&D programs served approximately 7,300 people with disabilities in PY 1991, with nearly 6,600 placed in jobs. These programs serve to increase the number and quality of job opportunities for disabled persons by providing training and employment opportunities that allow them to compete equitably in both the private and public sectors.

Projects for people with disabilities recognize that each participant is unique and has a special combination of abilities apart from the disability. Projects must provide equal pay for equal productivity and job placement at the highest skill level commensurate with qualifications.

The programs were operated by eight national organizations that have expertise in working with the disabled: Goodwill Industries of America, Inc.; Association for Retarded Citizens; National Association of Rehabilitation Facilities; Epilepsy Foundation of America; Electronic

Industries Foundation; Mainstream, Inc.; National Federation of the Blind; and International Association of Machinists.

*Other P&D Projects.* Several other projects were operated by the Department in PY 1991. These projects included the following.

The Youth Opportunities Unlimited (YOU) demonstration program, which began in PY 1989, is aimed at high-poverty urban neighborhoods and rural counties. It provides an array of concentrated services to young people, including employment and training resources, in poor, inner-city neighborhoods and rural areas and creates "model neighborhood" programs that combine other public and private resources into a comprehensive network of youth services.<sup>14</sup> The program's effectiveness depends on successfully coordinating and linking a wide range of interventions, such as school restructuring, public health improvements, and child development programs.

Grants in the amount of \$2.7 million each, over a period of three years, were awarded to the State of Mississippi and the cities of Atlanta, Baltimore, Columbus, Los Angeles, San Diego, and Philadelphia for YOU demonstrations, and in PY 1991 these seven jurisdictions received their third increment of YOU funding. A total of \$2 million also was awarded in PY 1991 to four new YOU projects in Boston, Fresno (Calif.), Denver, and Pittsburgh.

Education and training services have been at the core of the YOU projects since their inception. Among other activities, the seven initial experiments established alternative schools that enroll dropouts or potential dropouts, and learning centers that offer basic skill development, vocational training, and supportive services.

During the *Report* period, implementation of a nine-site pilot phase of the Parents' Fair Share demonstration began. Under the lead of the Department of Health and Human Services (HHS), the six-year project is being conducted under the JOBS program to investigate the feasibility and effectiveness of linking child support enforcement with training and employment services for noncustodial parents (usually fathers) of children receiving AFDC. The training and employment services are provided primarily by the JTPA system. The project receives P&D funds for research purposes from the Department of Labor and funds from several private foundations, as well as from HHS.

<sup>14</sup> YOU was the prototype for the Youth Fair Chance (YFC) program, which was established under the Job Training Reform Amendments of 1992. YFC ensures access to education and training assistance for youth residing in high-poverty areas, provides a comprehensive range of services to eligible youth, and enables communities with high concentrations of poverty to establish and meet goals for improving opportunities available to youth. In PY 1993, 16 of the Nation's poorest communities received grants from the Department to operate YFC projects.

In another joint venture with HHS, the Department continued to provide funds to six demonstration projects to develop approaches that use coworkers and volunteers to help young people with moderate and severe disabilities make the transition from school or supported work environments into unsubsidized employment. The projects were located in Nashua, N. H.; Boston, Mass.; Portland, Ore.; Minneapolis, Minn.; San Francisco, Calif.; and Rockville, Md.

Three other joint Labor Department-HHS grants continued to support projects for criminally at-risk youth in Detroit, Mich.; San Diego, Calif.; and Monmouth, Ore. The three-year demonstrations used a service integration approach to move into jobs and independent living young people who were in the custody of the courts, were at risk of being incarcerated, or already had criminal records.

The Department continued to collaborate with other Federal agencies on ways to increase the efficiency and effectiveness of literacy and basic skills training by funding activities such as the National Center for Adult Literacy at the University of Pennsylvania. The Departments of Labor, Education, and Health and Human Services jointly funded this activity in PY 1991. The primary mission of the five-year National Center effort is to conduct applied and basic research in the area of adult literacy and to examine ways of disseminating information on effective programs and techniques to schools, job training programs, business, labor, community organizations, and government at all levels.

Additional JTPA P&D projects are discussed elsewhere in this *Report*. They include TEAMS, JTPA streamlining grants, and special training activities administered by the Bureau of Apprenticeship and Training.

## **JOB TRAINING FOR THE HOMELESS DEMONSTRATION PROGRAM**

### **Program Objectives**

Section 731 of the Stewart B. McKinney Homeless Assistance Act of 1987 (P.L. 100-77) authorizes the Department to operate the Job Training for the Homeless Demonstration Program (JTHDP),<sup>15</sup> the first comprehensive nationwide Federal program specifically designed to train homeless people and place them in jobs.

<sup>15</sup> Federal agencies responsible for administering other programs authorized by the McKinney Act are the Departments of Housing and Urban Development, Health and Human Services, Veterans Affairs, and Education, and the Federal Emergency Management Agency. The Act also authorizes the Homeless Veterans Reintegration Projects, which are administered by the Department's Office of the Assistant Secretary for Veterans' Employment and Training and reviewed in the Department's annual report to Congress on veterans' activities.

One of JTHDP's primary objectives is to provide the Department with the information and direction needed to develop future job training policies for homeless people. Its major goal is to obtain information on how to provide effective employment and training services for homeless people; a related goal is to determine how States, local public agencies, private nonprofit organizations, and private businesses can develop effective coordination systems to address the causes of homelessness and meet the diverse needs of homeless people throughout the country.

Chart 6 provides a model of the various components of the homeless demonstration project.

### **Funding and Services**

JTHDP began in October 1988 with funding of \$7.7 million, which supported 32 grants to State and local public agencies and to private nonprofit organizations. Organizations receiving the grants designed and implemented innovative and replicable approaches for providing job training services for homeless people.

Services authorized under the Act include basic skills instruction, remedial education activities, basic literacy instruction, instructional skill training, work experience, job search efforts, and other initiatives that help homeless people find and retain jobs. The demonstration emphasizes a case management approach, to best provide participants with the wide array of services commonly required by homeless people and their families.

In Fiscal Years 1990 and 1991, the Department awarded a total of \$17 million to 45 projects, 15 of which had been funded in FY 1989. In FY 1992, \$8.5 million was allocated for JTHDP, and 21 of the 45 projects were refunded for an additional year.

### **Long-Term Employment And Housing**

In November 1990, the Department of Labor entered into a memorandum of understanding with the Department of Housing and Urban Development (HUD). The memorandum emphasized the need to develop and use more structured service strategies which enhance the prospects for long-term employment and housing for participants and their eventual achievement of economic self-sufficiency. The agreement strengthened the transitional and permanent housing component of the program by encouraging participation and coordination of the efforts of local public housing agencies. The agreement also encouraged HUD Field Offices to offer technical assistance to grant applicants and provide project managers with contacts who are involved with existing housing projects that can help homeless people.

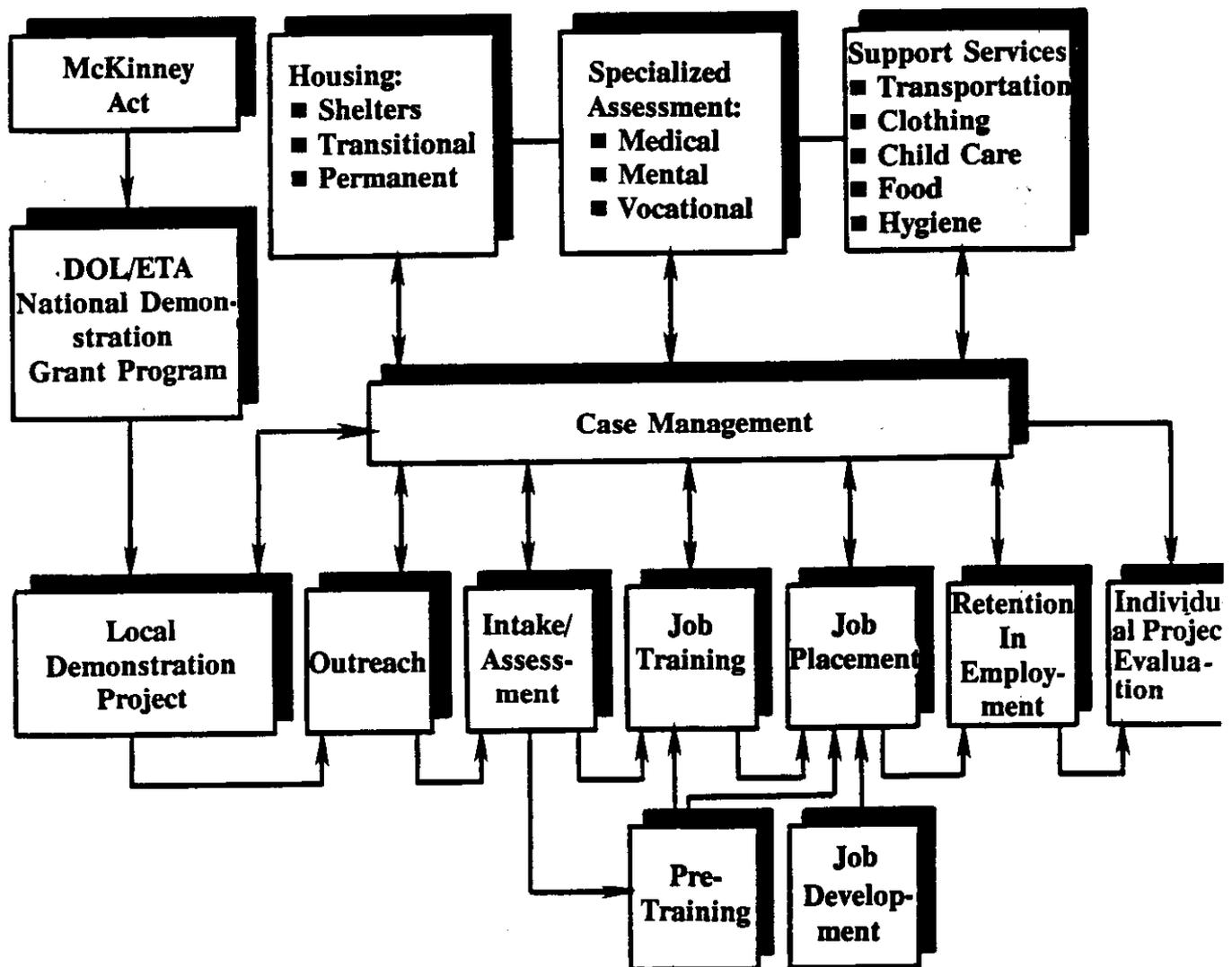
With this new initiative as a key component, 12-month grants were awarded in May 1991 to 20 grantees. The

grantees were selected from among the 45 existing ones. An additional grant award was made in September 1991 for a program for homeless Native Americans in Tucson, Ariz.<sup>16</sup> All of these projects were refunded in FY 1992.

<sup>16</sup> Grant recipients were: American Indian Association, Tucson, Ariz.; Argus Community, Inc., Bronx, N.Y.; Boys & Girls Club, Wash., D.C.; Center for Independent Living, Berkeley, Calif.; Elgin Community College, Elgin, Ill.; Fountain House, New York,

<sup>16</sup> (continued) N.Y.; Friends of the Homeless, Columbus, Oh.; Hennepin County, Minneapolis, Minn.; Home Builders Institute, Wash., D.C.; Jefferson County Public Schools, Louisville, Ky.; Jobs for the Homeless, Wash., D.C.; Kentucky Domestic Violence Association, Frankfurt, Ky.; Knoxville/Knox Community Action Committee, Knoxville, Ky.; Massachusetts Career Development Institute, Springfield, Mass.; Pima County PIC, Tucson, Ariz.; City of San Diego, Calif.; Seattle-King PIC, Seattle, Wash.; Snohomish County PIC, Everett, Wash.; Southeast Tennessee PIC, Chattanooga, Tenn.; City of St. Paul, Minn.; the City of Waterbury, Conn.

**Chart 6. Local Job Training for the Homeless Demonstration Project Model**



Source: Job training for the homeless demonstration model as reported in *Job Training for the Homeless: Report on Demonstration's First Year*.

The projects continued to refine and expand services to homeless people and emphasize improvements in job retention, postplacement followup, and the attainment of permanent housing for participants.

## Program Results

From program inception through April 30, 1992, approximately 28,000 homeless people received assistance under JTHDP. Over 20,000 received training, 9,500 were placed in unsubsidized jobs, and 9,775 received assistance to obtain upgraded housing.

During the 12-month period May 1991 through April 1992, 6,740 participants were served; funding for the period was \$8.5 million.

An interim evaluation of JTHDP was released in FY 1991.<sup>17</sup> The evaluation, based on a study of the program's first operational year (October 1988 through September 1989), indicated that most of the projects exceeded planned levels of participants served, trained, and placed in jobs.

An evaluation report describing JTHDP's accomplishments through April 1992 was published in November 1993.<sup>18</sup>

## APPRENTICESHIP

### Program Objectives

In FY 1992, apprenticeship programs helped prepare over 360,000 U.S. workers for employment in the skilled trades. The apprenticeship system, which combines structured on-the-job training with related theoretical instruction, usually in a classroom setting, has long been an effective method for preparing people to enter and succeed in a variety of occupations.

The Federal role in apprenticeship is defined by the National Apprenticeship Act of 1937 (P.L. 75-308), known as the Fitzgerald Act. The Federal Government, through the Bureau of Apprenticeship and Training (BAT), establishes and promotes the adoption of labor standards necessary to safeguard the welfare of apprentices, registers programs and apprentices that meet the standards, and provides technical assistance to employers and organized labor to help plan and promote quality apprenticeship programs.

<sup>17</sup> Lawrence N. Bailis, Margaret Blasinsky, Stephanie Chesnutt, and Mark Tecco, *Job Training for the Homeless: Report on Demonstration's First Year* (Rockville, Md.: R.O.W. Sciences, Inc., 1991).

<sup>18</sup> John W. Trutko, et al., *Employment and Training for America's Homeless: Report on the Job Training for the Homeless Demonstration Program* (Arlington, Va.: James Bell Associates, Inc., 1993).

Employers or groups of employers and unions design, organize, manage, and finance apprenticeship training under standards developed and registered with BAT or State apprenticeship agencies. They also select apprentices.

In 27 States, the District of Columbia, the Virgin Islands, and Puerto Rico, programs are registered by State Apprenticeship Agencies or Councils (SACs) which are recognized by the Department. Most of these State agencies receive policy guidance from apprenticeship councils comprised of employers, labor groups, and public representatives.

BAT maintains staff in all States and registers programs in States where there is no SAC.

### FY 1992 Highlights

During FY 1992, about 300,000 civilian apprentices received training in over 41,000 civilian apprenticeship programs registered with BAT or State Apprenticeship Agencies. About 22 percent of these apprentices were minorities and 7.6 percent were women.

An additional 64,000 uniformed military apprentices were registered in 20 programs. About 34 percent of these military apprentices were minorities and seven percent were women. Table 5 shows selected apprenticeship program data for Fiscal Years 1989 through 1992.

Over half of all apprentices received training in the construction industry in FY 1992. At the end of FY 1992, the Department recognized 822 apprenticeable occupations, including two new ones: Cooling Tower Technician and Grinder Set-Up Operator, Jig.

Promoting equal employment opportunity (EEO) in apprenticeship has been an increasingly important function of the Department over the past few decades. EEO in apprenticeship is pursued through promotion and technical assistance efforts and compliance reviews. During the fiscal year, over 1,200 federally serviced apprenticeship programs were reviewed by Federal staff for EEO compliance.

As part of an ongoing effort to ensure high-quality programs, Federal staff also conducted about 1,200 on-site quality reviews during the *Report* period. These reviews help to ensure that apprentices successfully learn all aspects of the trade needed to gain journeyworker status and to produce high-quality goods and/or services. Reviews also ensure that the learning experience is current, the training is responsive to actual job needs, and the program is in conformance with regulatory standards.

### Special Program Activities

The Bureau of Apprenticeship and Training supported a number of special programs during the year, including

**Table 5. Selected Apprenticeship Program Data, Fiscal Years 1989-92**

| Item   | Fiscal Year |         |         |         |
|--|-------------|---------|---------|---------|
|  | 1992        | 1991    | 1990    | 1989    |
| Total Civilian Apprentices:                      |             |         |         |         |
| Receiving Training <sup>a</sup> .....            | 300,000     | 374,000 | 361,000 | 350,000 |
| Percent Minority .....                           | 22.2        | 22.5    | 22.5    | 21.6    |
| Percent Women .....                              | 7.6         | 7.1     | 7.1     | 7.2     |
| Number of Civilian Apprenticeship Programs ..... | 41,000      | 42,000  | 44,000  | 44,000  |
| Military Apprentices: <sup>b</sup> .....         | 64,000      | 45,000  | 41,500  | 39,700  |
| Percent Minority .....                           | 34.0        | 35.6    | 35.8    | 35.6    |
| Percent Women .....                              | 7.0         | 6.7     | 6.5     | 6.1     |
| Number of Reviews Conducted:                     |             |         |         |         |
| EEO Compliance Reviews .....                     | 1,200       | 1,700   | 1,600   | 1,680   |
| On-Site Quality Reviews .....                    | 1,200       | 2,000   | 1,857   | 1,988   |
| Apprenticeship Actions:                          |             |         |         |         |
| New Registrations .....                          | 63,000      | 99,500  | 98,200  | 96,900  |
| Completions .....                                | 41,000      | 40,000  | 39,400  | 43,400  |

<sup>a</sup>Includes new registrations, cancellations, and completions. Excludes military apprentices.

<sup>b</sup>Data are for the number of apprentices at the end of the year.

Source: U.S. Department of Labor, Employment and Training Administration.

a construction craft skills training program, a pre-employment training program for skilled tooling and machining technicians, a program to increase access to apprenticeship for women and minorities, another to provide jobs and training for public housing and Indian housing residents, and a project to increase participation of certain targeted groups in apprenticeship programs. BAT also continued its efforts to recruit and place women in the skilled trades throughout the year.

**Construction Craft Skills Training Program**

Operated by the Home Builders Institute of the National Association of Home Builders, the Construction Craft Skills Training Program provides preapprenticeship classroom and on-the-job training for economically disadvantaged people and displaced workers, with trainees entering registered apprenticeship programs.

During Program Years 1991 and 1992, 216 economically disadvantaged program participants were enrolled in carpentry or building and apartment maintenance training; 186 participants were placed in employment, entered school or the military, or were placed in other training.

**Preemployment Training Program**

The National Tooling and Machining Association operated a national preemployment training program for skilled tooling and machining technicians at 12 project sites across the country. The goal of the program was to have 530 JTPA-eligible people enter training and to place 80 percent of those who completed the program in unsubsidized, training-related fields. The program emphasized services to youth and displaced workers.

**STEP-UP Program**

STEP-UP, a new pilot program that provides jobs, job training, and career opportunities for public housing and Indian housing residents and other low-income people, is a temporary (one-year maximum) first step in a longer-term training and employment effort. The National Association of Housing and Redevelopment Officials (NAHRO), with HUD, provides training, technical assistance, and oversight for STEP-UP sponsors and participants. The Department, HUD, and State Apprenticeship Agencies work with local sponsors to develop program standards and register programs and apprentices. NAHRO

added the STEP-UP component to their National Apprenticeship and Training Standards in June 1992.

### **IUOE Programs**

Special programs operated by the International Union of Operating Engineers' (IUOE) target economically disadvantaged individuals, dislocated workers, minorities, and women for participation in IUOE local union apprenticeship programs. The IUOE provides these individuals with preemployment training and technical assistance in nationally recognized operating engineer occupations (primarily heavy equipment operation) at over 70 sites throughout the United States.

### **Women in the Skilled Trades**

Many jobs in the skilled trades have the potential to improve the economic status of women. Well-paid skilled trade workers include electricians, carpenters, auto mechanics, painters, and laborers. They are generally concentrated in the public utility, construction, and manufacturing industries.

During FY 1992, the Department continued the Secretary's Initiative for Women in the Skilled Trades (WIST). Begun in 1990, the WIST initiative was designed to develop and operate an aggressive enforcement, outreach, and educational program to increase recruitment and retention of women in apprenticeship in the skilled trades. The initiative has helped remove barriers that make it difficult for women to enter the skilled trades or to successfully work in a trade once employed by:

- Enhancing the enforcement of laws protecting equal employment opportunity in apprenticeship by assigning enforcement authority to the Employment Standards Administration's (ESA) Office of Federal Contract Compliance Programs in addition to BAT;
- Encouraging the placement of women in the skilled trades through Departmental job training programs such as the Job Corps;
- Developing policies that improve the retention of tradeswomen;
- Producing a manual on tradeswomen's rights;
- Expanding model apprenticeship programs for women through the Department's Workforce Quality Clearinghouse (which is operated by the Women's Bureau), the National Tradeswomen Network, and cooperative efforts with other agencies of the Department;
- Supporting education and technical assistance activities, including outreach programs with employers, unions, women's groups, technical assistance conferences, and marketing efforts; and
- Developing a directory of nontraditional training and employment programs for women.

## **Federal Committee on Apprenticeship**

The Federal Committee on Apprenticeship was established by Executive Order in March 1934 and continued under the National Apprenticeship Act of 1937. The Committee was expanded in 1974 and rechartered in 1991 as part of the Department's expansion of apprenticeship concepts and programs. It advises the Secretary of Labor on approaches for promoting and expanding apprenticeship and journeyworker training.

The Committee consists of eight members representing labor, eight representing employers, and ten representing the public. There are also three ex-officio members: the president of the National Association of State and Territorial Apprenticeship Directors, a representative of the Department of Education, and the Assistant Secretary of Labor for Employment and Training.

During the year, the Committee examined a number of issues, including: (1) the role of apprenticeship in training the Nation's workforce; (2) expanding the apprenticeship concept to new industries; (3) increasing the number of women in apprenticeship; (4) linking apprenticeship to schools and other government training programs; and (5) the role of government in an expanded apprenticeship system.

The Committee provided the Secretary with a number of recommendations regarding the apprenticeship system. The recommendations were contained in a series of papers entitled: *The Meaning of Apprenticeship*; *A Strategic Plan for Preparing America's Work Force of Tomorrow*; *Principles for Establishing National Training Standards for Apprenticeable Occupations*; and *The Role of Apprenticeship in Youth Training and Education*.

Other issues the Committee considered included the appropriate use of the General Aptitude Test Battery, an employment aptitude test used mainly by State Employment Service agencies; inclusion of the Department's Occupational Health and Safety Administration safety standards in apprentice training; and the impact of selected legislative initiatives on the apprenticeship system.

## **SENIOR COMMUNITY SERVICE EMPLOYMENT PROGRAM**

### **Program Objectives**

The Senior Community Service Employment Program (SCSEP), authorized by the Older Americans Act, as amended,<sup>19</sup> provides part-time community service jobs for jobless low-income people who are at least 55 years old and have poor employment prospects.

<sup>19</sup> P.L. 102-375, Older Americans Act Amendments of 1992.

Almost one-third of the program's participants were 70 years of age or older in PY 1991. Chart 7 shows the age distribution of SCSEP participants.

The program supports an array of services to senior citizens, including nutrition programs, recreation, health and home care, and transportation. It also helps communities by creating jobs for SCSEP participants in government agencies or nonprofit organizations such as United Way agencies and hospitals.

Enrollees receive annual physical examinations, personal and job-related counseling, job training, and, in some cases, placement into unsubsidized employment.

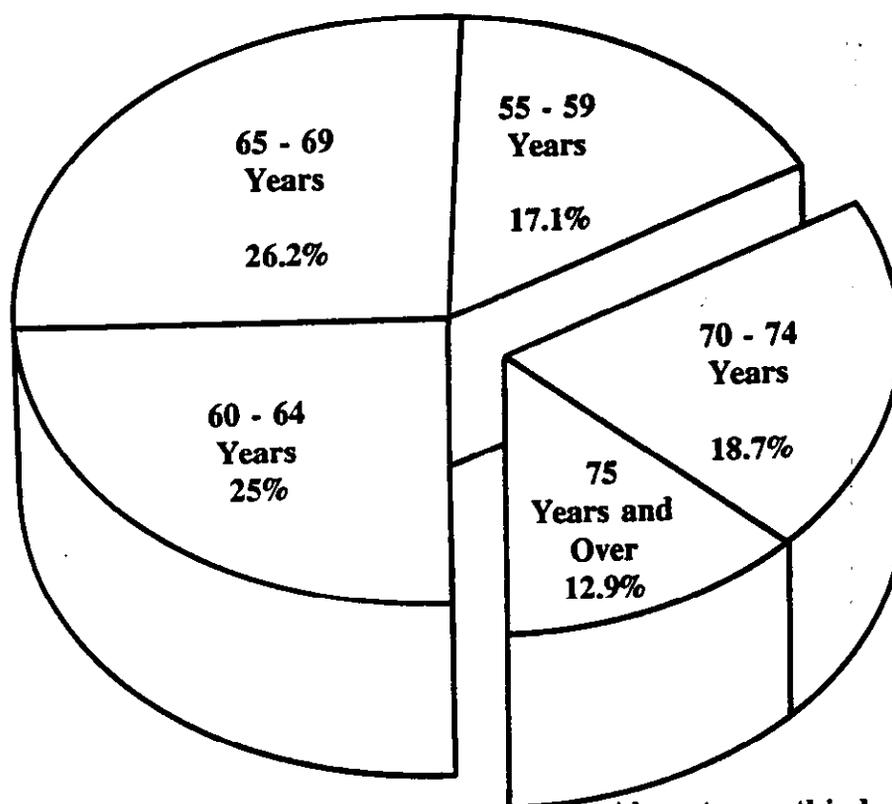
The program is operated by State and territorial governments and ten national sponsors.<sup>20</sup> Most States operated the SCSEP program through their own agencies on aging.<sup>21</sup>

<sup>20</sup> The national sponsors are the American Association of Retired Persons; Asociacion Nacional Pro Personas Mayores; Green Thumb, Inc.; National Caucus and Center on Black Aged, Inc.; National Council on the Aging; National Council of Senior Citizens; National Indian Council on Aging, Inc.; National Asian Pacific Center on Aging; National Urban League; and the U.S. Forest Service.

<sup>21</sup> Seven States assigned responsibility for their grants to one or more of the national sponsors. These States were Alabama, Arizona, Florida, Montana, New Jersey, North Dakota, and South Dakota.

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**Chart 7. Age Distribution of SCSEP Participants, PY 1991**



**Almost one-third of SCSEP participants were 70 years or older in PY 1991**

**Note: Numbers do not add to 100 due to rounding.**  
**Source: U.S. Department of Labor, Employment and Training Administration.**

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## Funding and Services

In PY 1991, SCSEP allocations totaled over \$390 million, an increase of over \$23 million from the previous year. Of this amount, \$304 million was provided to national sponsors and \$86 million to State agencies. Only 11.3 percent of the funds appropriated by the Congress were used for program administration; the remainder went either directly or indirectly to program enrollees.

SCSEP provided over 94,000 part-time subsidized jobs for senior citizens in PY 1991. Over 14,000 of the enrollees left the program for unsubsidized jobs during the year.

Program sponsors coordinated their activities with other programs and agencies that provide training-related services and job opportunities, including JTPA Service Delivery Areas, Private Industry Councils, Job Corps centers, State Employment Service offices, area agencies on aging, and community colleges. Program sponsors also worked during the year to improve the geographical distribution of program positions so that all eligible people have an equal opportunity to participate in the program.

Table 6 shows selected characteristics of SCSEP participants for Program Years 1988 through 1991.

**Table 6. Selected Characteristics of Senior Community Service Employment Program Participants, Program Years 1988-91 (Percent)**

| Characteristic                                     | Program Year |      |      |      |
|--|--------------|------|------|------|
|  | 1991         | 1990 | 1989 | 1988 |
| <b>Sex:</b>  |              |      |      |      |
| Male .....   | 28.9         | 28.7 | 29.2 | 29.7 |
| Female .....                                       | 71.1         | 71.3 | 70.8 | 70.3 |
| <b>Age:</b>  |              |      |      |      |
| 55-59 .....  | 17.1         | 17.4 | 17.4 | 18.5 |
| 60-64 .....  | 25.0         | 25.4 | 26.1 | 27.3 |
| 65-69 .....  | 26.2         | 26.3 | 26.7 | 26.4 |
| 70-74 .....  | 18.7         | 18.1 | 17.3 | 16.3 |
| 75 and over .....                                  | 12.9         | 12.7 | 12.5 | 11.5 |
| <b>Ethnic Group:</b>                               |              |      |      |      |
| White .....  | 61.3         | 62.2 | 62.3 | 63.3 |
| Black .....  | 23.9         | 23.8 | 23.9 | 23.3 |
| Hispanic .....                                     | 9.4          | 9.1  | 9.0  | 8.8  |
| Indian/Alaskan .....                               | 1.6          | 1.6  | 1.7  | 1.6  |
| Asian/Pacific Islander .....                       | 3.7          | 3.3  | 3.1  | 3.1  |
| <b>Veteran .....</b>                               | 13.2         | 13.3 | 13.4 | 13.1 |
| <b>Education:</b>                                  |              |      |      |      |
| 8th grade and under .....                          | 24.3         | 25.1 | 26.4 | 27.4 |
| 9th-11th grade .....                               | 20.6         | 21.3 | 21.6 | 27.4 |
| High school .....                                  | 36.1         | 35.4 | 34.8 | 34.2 |
| 1-3 years of college .....                         | 13.5         | 13.0 | 12.4 | 12.3 |
| 4 years of college .....                           | 5.6          | 5.1  | 4.8  | 4.7  |
| <b>Family income below the poverty level .....</b> | 78.7         | 80.2 | 80.9 | 79.9 |

Note: Percentages may not add to 100 due to rounding.

Source: U.S. Department of Labor, Employment and Training Administration.

## EMPLOYMENT SERVICE

### Program Objectives

The Employment Service helps place jobseekers in appropriate jobs listed by employers. Local ES offices also offer individuals and employers a wide range of employment-related services, including testing, counseling, job search workshops, resume-writing instruction, interviewing techniques, job fairs, labor market information, mass screening, restructuring jobs analysis, outplacement assistance, and specialized recruitment to meet affirmative action plans.

Authorized by the Wagner-Peyser Act (29 U.S.C. Section 49 *et seq.*), ES is a joint effort of the Department of Labor, 54 affiliated State Employment Security Agencies (SESAs), and their network of over 1,700 local offices.

Today's Employment Service also responds to many other Federal and State mandates. These responsibilities, financed directly with Federal and State funds, include certifying the need for alien workers; providing vouchers to jobseekers in connection with the Targeted Jobs Tax Credit (TJTC) program and certifying employer eligibility for TJTC; recruiting domestic migrant and seasonal farmworkers, and monitoring ES services to this group of workers for regulatory compliance; and certifying individual eligibility for such programs as Federal guaranteed loans and work programs. Developments in most of these areas during the program year are described below.

### Labor Exchange and Special Activities

In PY 1991, over 20 million people registered with local ES offices. About 41.3 percent of these jobseekers were women and 13.4 percent were economically disadvantaged. Following an interview and assessment of their experience, education, training, and aptitude, they were assigned one or more occupational codes to help match their job skills with employers' job orders.

Local ES offices referred about 7.6 million people to interviews with employers who had listed 5.6 million job openings with the ES in PY 1991. Almost 2.6 million individuals (34 percent of those referred to employers) were placed in jobs in PY 1991. ES offices also referred over 357,000 people to training and provided 684,000 with employment-related counseling during the year.<sup>22</sup> Chart 8 shows services provided to ES applicants for PY 1991 and PY 1990.

Over 3.5 million placement transactions, including the multiple placement of some individuals, occurred in PY 1991, with expenditures totaling \$768 million.

<sup>22</sup> The number of applicants who received services from local ES offices in each State, and the characteristics of people served by the ES by State, can be found in the Statistical Appendix of this Report.

Also during the year, 29 States received a total of over \$12 million in grants to help automate their ES delivery systems. An overview of these grant activities is presented in the box on page 30.

Special ES efforts in PY 1991 included improving and refining the Interstate Job Bank, supporting the Employers' National Job Service Council, and improving the *Dictionary of Occupational Titles*. Details of these activities follow.

### Interstate Job Bank

The Interstate Job Bank (IJB), established to list job openings not readily filled locally, is a compilation of job vacancy information which employers have submitted to State-operated employment services, and which the States or the employers request be publicized nationwide. The listing of available jobs is updated daily. For the most part, the IJB center distributes the listings of interstate orders electronically to ES local offices in the 50 States, the District of Columbia, Puerto Rico, and the Virgin Islands, and to over 300 libraries and universities throughout the country.

While most job orders received are from private sector employers, job information is also provided on Federal job opportunities nationwide, including Federal Senior Executive Service vacancies.

During the *Report* period, SESAs listed about 179,000 openings in the IJB, to publicize hard-to-fill job opportunities and to help people find jobs in other States. This represents an increase of 25,000 from the number of openings listed during the previous program year. About 39 percent of the listings were in professional and managerial occupations.

### Supporting ENJSC

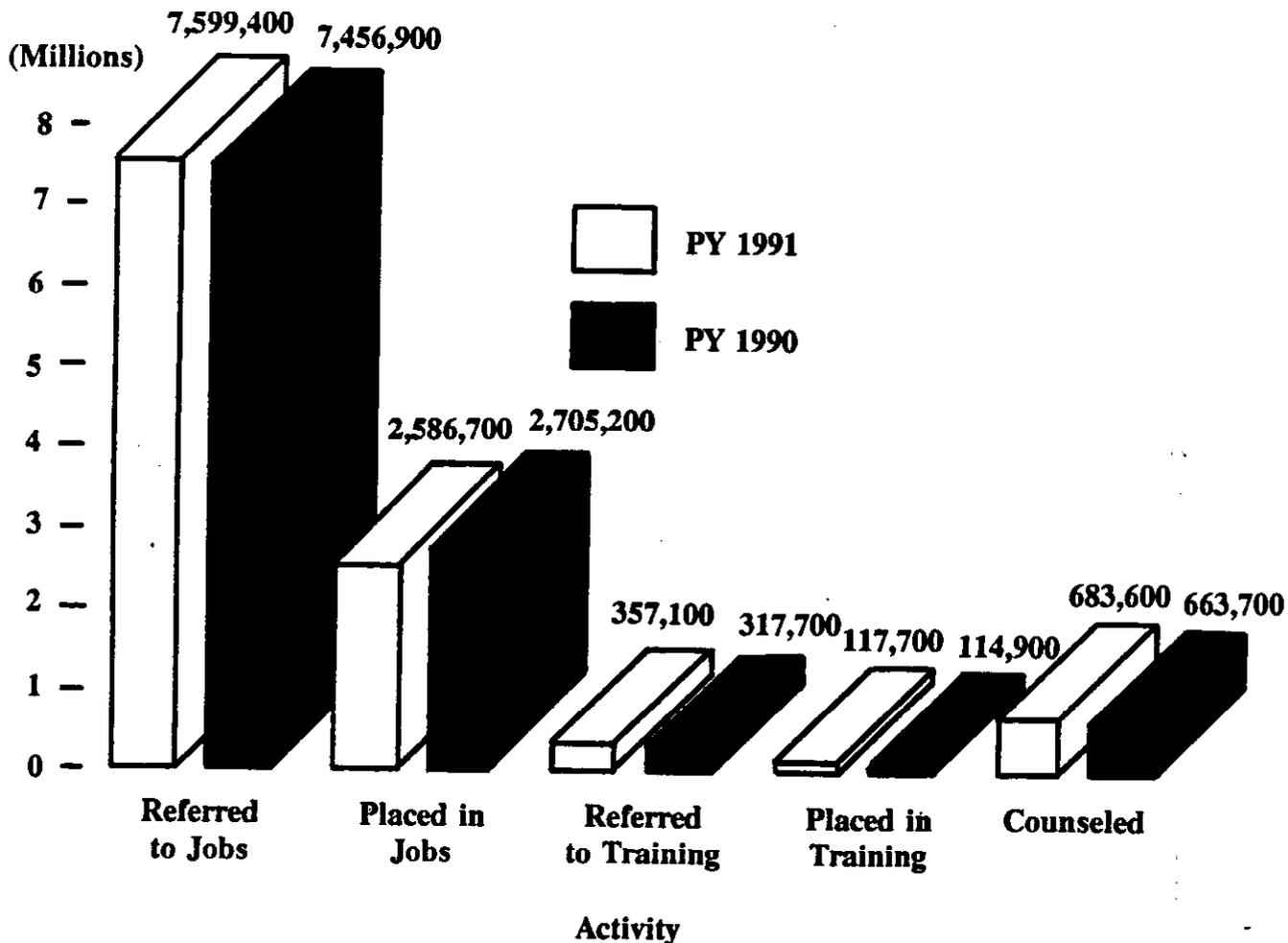
In PY 1991, the Department continued to fund the Employers' National Job Service Council (ENJSC), a volunteer organization of 35,000 employers who work with ES through 1,400 local Job Service Employer's Committees (JSECs). ENJSC helps ES improve its labor exchange system and informs employers of the Interstate Job Bank system and other ES initiatives. It also helps employers understand the process for hiring and training special groups of workers, including economically disadvantaged people, at-risk youth, veterans, and people with disabilities.

### Improving the *Dictionary of Occupational Titles*

In PY 1991, the *Dictionary of Occupational Titles* (DOT) review effort continued to be the major focus of the Department's occupational analysis program.

First developed in the 1930s to assist the Employment Service with job-matching efforts, the DOT is now an

**Chart 8. Services Provided to Applicants by the Employment Service, PY 1991 and PY 1990**



Source: U.S. Department of Labor, Employment and Training Administration.

integral part of training, placement, and counseling activities in the private sector and in dozens of Federal programs. Produced by ES, the *DOT* is the most comprehensive single source of information about occupations in the United States. It defines, classifies, and provides useful information about hundreds of occupations.

For each occupation, the *DOT* gives information about worker characteristics (aptitudes, interests, and temperaments), occupational education and experience requirements, and required basic and occupational skills. It also describes occupational tasks and how the tasks are per-

formed, the tools or materials used in an occupation, and the physical environment in which the occupation is performed. The Fourth Edition, revised in 1991, is the latest edition of the *DOT*.

In 1990, in an effort to make the *DOT* more useful to both the Federal Government and private sector employers, the Secretary of Labor established the *DOT* review effort and appointed the Advisory Panel for the *Dictionary of Occupational Titles* (APDOT) to make recommendations for improving the development, publication, and dissemination of the *DOT*. During the *Report* period,

## Automating ES Delivery Systems

Because the Employment Service encourages all States to automate their local office operations, the Department made a total of \$12,199,000 available in grants to 26 States, the District of Columbia, Puerto Rico, and Guam, in FY 1992 to help automate their systems. The grants helped these jurisdictions enhance both the way in which jobseekers gain access to information about jobs and the way employers fill job vacancies.

After reviewing proposals submitted by 41 States, the Department selected grantees based on their plans to automate job search delivery and Interstate Job Bank systems, innovative enhancements of existing automated systems for use by jobseekers and employers, and the planned implementation of self-search employment systems. The funds must be used for service delivery enhancements rather than for administrative purposes. The grantees were:

|                            |           |                      |         |
|----------------------------|-----------|----------------------|---------|
| Alabama .....              | \$ 46,409 | Nevada .....         | 599,853 |
| Alaska .....               | 418,002   | New Jersey .....     | 288,413 |
| District of Columbia ..... | 155,926   | New Mexico .....     | 136,250 |
| Florida .....              | 234,998   | New York .....       | 422,444 |
| Guam .....                 | 130,000   | Oregon .....         | 481,300 |
| Hawaii .....               | 733,733   | Pennsylvania .....   | 898,640 |
| Idaho .....                | 308,624   | Puerto Rico .....    | 412,674 |
| Kentucky .....             | 95,660    | Rhode Island .....   | 461,890 |
| Maine .....                | 129,346   | South Carolina ..... | 326,314 |
| Massachusetts .....        | 944,685   | Texas .....          | 131,795 |
| Michigan .....             | 807,910   | Virginia .....       | 150,432 |
| Mississippi .....          | 618,914   | Washington .....     | 860,336 |
| Missouri .....             | 718,000   | West Virginia .....  | 42,500  |
| Montana .....              | 131,960   | Wyoming .....        | 515,007 |
| * Nebraska .....           | 996,826   |                      |         |

the APDOT recommended changing the current *DOT* into a database system that identifies and describes the skills, knowledge, and competencies needed in a high-performance workplace. This change will help students, workers, and employers make more informed education, training, and job analysis decisions. The revised *DOT* will also provide a common language for all occupational information users.<sup>23</sup>

### Reimbursable Grant Activities

In addition to its labor exchange and other related activities, ES certifies the need for permanent and temporary alien workers, provides TJTC vouchers to jobseekers, and certifies employer eligibility for TJTC. These activities are described below.

#### Alien Labor Certification

Alien labor certification programs help ensure that the permanent or temporary admission of aliens to work in this country does not adversely affect the job opportunities, wages, and working conditions of U.S. workers. Most alien labor certification programs are jointly administered by the Department and the SESAs.

During the program year, the Department awarded funds to several States to automate the processing of alien labor certification applications. A summary of these grants is shown in the accompanying box.

The following is an overview of the labor certification programs administered jointly by the Department and the SESAs. With the exception of students and crewmembers, the labor certification and attestation processes are the first of a three-step procedure to enable an employer to legally employ a foreign worker in the United States.

**Permanent Labor Certification.** An alien seeking to immigrate to the United States on the basis of employment must obtain an offer of permanent full-time employment from a U.S. employer. The alien cannot be admitted as a permanent resident unless, among other things, the employer obtains a labor certification from the Department that qualified U.S. workers are not available for the employment offered to the alien, and that the wages and working conditions offered will not adversely affect those of similarly employed U.S. workers. (ES efforts to improve prevailing wage determinations during the year are highlighted in the accompanying box.)

The labor certification process requires employers to recruit U.S. workers at prevailing wages and working conditions through the State employment service by

<sup>23</sup> The APDOT's final report was issued in June 1993.

**Automating Alien Labor Certification  
Application Processing**

During FY 1992, 11 SESAs received a total of \$3.2 million in grant awards to automate the processing of alien labor certification applications.

The funds also support the automation of requests for prevailing wage information from employers who want to hire foreign workers in accordance with provisions of the Immigration and Nationality Act. The 11 States that received grants handle about 75 percent of all requests for permanent certification. They were:

|                           |           |
|---------------------------|-----------|
| California .....          | \$702,500 |
| District of Columbia..... | 200,000   |
| Florida .....             | 227,900   |
| Illinois.....             | 24,000    |
| Massachusetts.....        | 170,000   |
| Michigan.....             | 102,600   |
| New Jersey.....           | 195,000   |
| New York.....             | 807,600   |
| Ohio.....                 | 174,820   |
| Texas.....                | 400,000   |
| Virginia.....             | 201,300   |

advertising, posting notices of job opportunities, and other appropriate means. A Department of Labor regional certifying officer determines if the labor certification should be granted based on the results of the employer's recruitment efforts and compliance with Departmental regulations. In FY 1992, the Department received 34,607 applications from employers to allow foreign workers to fill permanent jobs (each application was for certification of one job opening); a total of 32,343 applications were certified.

**H-2B Temporary Labor Certification.** Under the H-2B nonimmigrant visa classification, aliens may be admitted temporarily to the United States to perform nonagricultural work. The process for obtaining an H-2B labor certification is similar to, but less extensive than, that required for permanent labor certification.

The labor certification may be issued for a period of up to one year and is renewable for up to three years. The Immigration and Nationality Act places an annual limit of 66,000 on the number of aliens who can be admitted to the United States on H-2B visas.

In FY 1992, the Department received 2,113 applications from employers requesting certification for 13,200 temporary nonagricultural job opportunities; 1,540 applications were certified.

**H-2A Temporary Labor Certification.** The H-2A temporary agricultural program establishes a way for agri-

cultural employers who anticipate a shortage of domestic workers to bring nonimmigrant aliens to the United States to perform agricultural labor or certain temporary or seasonal services. Before the Department of Justice's Immigration and Naturalization Service (INS) can approve an employer's petition for such workers, the employer must file an application with the Department of Labor stating that there are not sufficient workers who are able, willing, qualified, and available to do the work, and that the employment of aliens will not adversely affect the wages or working conditions of similarly employed U.S. workers.

Legislation and Departmental regulations provide for a variety of special worker protections that include the monitoring of wages and working conditions. The Department's Employment Standards Administration enforces the provisions of H-2A worker contracts.

In Calendar Year 1992, the Department received 3,243 applications requesting certifications to fill 22,720 job openings with temporary agricultural foreign workers; 3,125 applications, covering 18,939 job openings, were approved.

**H-1A Nurses.** The Immigration Nursing Relief Act of 1989 (INRA) established a new H-1A nonimmigrant classification for registered nurses for a five-year period. In order for a health care facility to employ foreign nurses under INRA, it must take "timely and significant" steps to develop, recruit, and retain U.S. registered nurses, while simultaneously ensuring the protection of their wages and working conditions.

**Improving Prevailing Wage Determinations**

The concept of prevailing wages allows the Department to ensure that there are no adverse effects on the wages of U.S. workers when employers hire alien workers. Employers must agree to pay alien workers the prevailing wage rate for the occupation in the area of intended employment.

The Department awarded \$124,000 during the year to Washington State's Employment Security Department in Olympia, Wash., to examine current methods used to determine wage rates for hiring foreign workers under permanent or temporary immigration programs involving nonagricultural occupations throughout the United States.

The grant was used to establish a panel to investigate wage survey standards and recommend appropriate changes. The panel will develop a model form for employer requests and receipts of prevailing wages for specific occupations and make recommendations about automating the wage determination and survey process.

H-1A documents are currently filed with, processed by, and maintained for public disclosure in the Department's headquarters, although the Department plans to decentralize the program to regional offices in the future.

In FY 1992, 1,336 health care facilities filed 1,745 documents (of which 1,088 were accepted) attesting that appropriate steps had been taken to obtain U.S. registered nurses.

**H-1B Specialty (Professional) Workers.** Employers who want to temporarily employ alien workers in certain professional occupations, or as fashion models, must file an application with the Department stating that: (1) they will pay the appropriate wage rate to the alien; (2) they have notified the bargaining representative or otherwise posted notice of their intent to employ alien workers; and (3) there is no strike or lockout at the place of employment.

Aggrieved parties may file complaints with the Department for misrepresentation or the failure of employers to comply with the statements made in the application. If a complaint is successful, ESA may assess penalties prohibiting the employer from filing petitions for permanent and temporary workers for at least one year.

H-1B applications may be approved for periods of up to six years, which is the maximum allowable period of stay in the United States under the H-1B status.

The number of aliens that may be admitted to the United States on H-1B visas is limited to 65,000 per year. In FY 1992, the Department received 53,485 applications (covering 120,776 job openings) of which 43,808 were certified.

**F-1 Students.** Under the pilot F-1 program, foreign students may work off-campus after their first year of study for up to 20 hours per week; they may work full-time during vacation periods and between academic terms.

In order to hire these students, employers must file a document attesting that they have made appropriate efforts to recruit U.S. workers for at least 60 days, that the efforts have been unsuccessful, and that they will pay the appropriate wage rate to F-1 students and similarly employed workers.

Employers may be disqualified from hiring foreign students if the Department finds misrepresentation or non-compliance with the statements made in the document.

In FY 1992, the Department received 2,566 F-1 student attestations, of which 1,216 were certified. The F-1 program is scheduled to expire on September 30, 1996.

**D-1 Crewmembers.** With few exceptions, performance of longshore work at U.S. ports by alien workers from foreign vessels is prohibited. One exception requires an employer to file a document with the Department attesting that hiring D-1 crewmembers is the prevailing practice at the port, that there is no strike or lockout at the place of employment, and that notice of the hiring has been given to U.S. workers or their representatives.

Violations may result in penalties of up to \$5,000 for each alien crewmember wrongfully performing longshore work, and vessels owned or chartered by the employer may be prohibited from entering U.S. ports for up to one year.

The Department received 311 D-1 crewmember attestations in FY 1992, all of which were filed by Japanese shippers and covered ports in Alaska. Two hundred and fifty-seven attestations were certified.

### Targeted Jobs Tax Credit

Another reimbursable grant activity for which the Employment Service performed a variety of functions was the Targeted Jobs Tax Credit. TJTC, first authorized by the Revenue Act of 1978 (P.L. 95-600), provided tax credits to employers who hired people from specific target groups.<sup>24</sup>

Employers who hired people from most of these groups could claim a credit of 40 percent of the first-year wages paid, up to \$6,000 per employee, for a maximum credit of \$2,400. The value of the credit that employers could claim for economically disadvantaged summer youth hired between May 1 and September 15 was 40 percent of their wages up to \$3,000, for a maximum credit of \$1,200.

Individuals from the designated groups received vouchers indicating that they met the eligibility criteria.<sup>25</sup> Employers who hired these workers could subsequently obtain certifications from SESA offices documenting their eligibility to receive the credit.

During PY 1991, over 727,000 TJTC vouchers and 500,000 certifications were issued.<sup>26</sup>

<sup>24</sup> These groups were people with disabilities who were referred to employers from the vocational rehabilitation programs of either a State or the U.S. Department of Veterans Affairs; youth aged 18-22 from economically disadvantaged families; youth aged 16-19 from economically disadvantaged families who participate in a qualified cooperative education program; economically disadvantaged youth 16 to 17 years old on the hiring date, who had not previously worked for the employer, and were hired for a summer job; economically disadvantaged Vietnam-era veterans; recipients of Federal Supplemental Security Income; recipients of State and local general assistance payments for at least 30 days; economically disadvantaged ex-felons who were hired no later than five years after their date of release from prison or the date of conviction, whichever was more recent; and recipients of AFDC who were eligible for AFDC on the hiring date and had received it for 90 days immediately prior to being hired.

<sup>25</sup> While most vouchers were issued by local Employment Service offices, other agencies authorized to issue them include qualified cooperative education programs, local welfare offices, and local offices of the Department of Veterans Affairs.

<sup>26</sup> TJTC expired on June 30, 1992. The Omnibus Reconciliation Act (P.L. 103-66, signed into law in August 1993) reauthorized the credit for an additional 30-month period, beginning retroactively on July 1, 1992, and extending through December 31, 1994.

## UNEMPLOYMENT INSURANCE PROGRAM

### Program Objectives

The Federal-State unemployment insurance system provides cash payments to people who lose jobs that are covered under State UI laws. Almost everyone who works for salaries or wages in the United States is eligible for UI payments if they become unemployed through no fault of their own and are in the process of finding a new job. Today's system provides income protection for almost 106 million workers.

### Funding and Services

The UI system is financed almost entirely through State payroll taxes paid by employers on the wages of their covered workers. Three States, however, also collect small taxes from employees. The U.S. Treasury holds the funds collected from the States in the Unemployment Trust Fund.

State agencies take applications for and administer the unemployment insurance program. Cash payments are made to eligible job losers for up to 26 weeks in most States and extended benefits (EB), which provide an additional 13 weeks of payments, are available to eligible workers in States that experience relatively high unemployment. The Federal and State governments equally share the costs of EB. In addition, as agents of the Federal Government, States also offer benefits to jobless veterans with recent service in the Armed Forces, civilian Federal employees who lose their jobs, and workers who lose their jobs as a result of a disaster.

### FY 1992 Highlights

The UI system continued to respond to the needs of jobless workers during FY 1992 as the year was marked by an economy that was slowly regaining some of the ground lost during the 1990-91 recession. The downward slide in employment that occurred in the second half of Calendar Year (CY) 1990 and early CY 1991 ended in the spring of 1991. Although nonfarm payroll employment increased by about 786,000 between the fourth quarters of CY 1991 and CY 1992, the number of people employed was about 975,000 below the prerecession peak.

These employment gains were in the services industry and government, with an increase in employment of 881,000 in the services industry in CY 1992. In other industries, employment fell or was little changed during the year. Chart 9 shows the change in employment by major industry group for CY 1992.

As labor force growth accelerated sharply in late 1991, unemployment increased throughout the first half of 1992,

despite some gains in employment. As labor force growth subsided during the second half of 1992, unemployment declined. In the fourth quarter of 1992, the number of unemployed workers, at 9.3 million, was half a million higher than a year earlier. The unemployment rate, at 7.3 percent, was up slightly over the year and remained about two percentage points higher than the 5.3 percent that prevailed for nearly two years prior to mid-1990.

Initial claims for unemployment benefits, at 1.74 million in the first month of FY 1992 (October 1991), peaked in January 1992 at 2.92 million. By the end of the fiscal year (September 1992), initial claims had declined to 1.42 million. However, the duration in weeks that recipients received unemployment insurance compensation increased from 16.7 weeks in October 1991 to 19.6 weeks in September 1992 and peaked at 20 weeks in May 1992. Table 7 shows the number of initial claims and the average duration of benefits for FY 1992.

In FY 1992, more than 9.6 million people received UI benefits under the regular State UI programs, with expenditures of over \$25.5 billion. This compares to 10.1 million individuals who received benefits under the regular State UI programs in FY 1991 and expenditures of \$24.4 billion.

Because the number of unemployed grew throughout most of 1991, and a few States had triggered on to the standby EB program, Congress created the Emergency Unemployment Compensation Program to substitute for EB. The EUC, a temporary program which started in November 1991, provided additional benefits, depending on the unemployment level in each State. The program continued until April 30, 1994. Unlike EB, the Federal Government pays for all benefits under the EUC program.

Over four million people received benefits under the EUC program during the year and an additional 28,000 received EB payments paid by one State. Table 8 shows the amount paid and the number of beneficiaries for the regular UI, EB, and EUC programs and other unemployment compensation programs in FY 1991 and FY 1992.<sup>27</sup>

### Special Automation Grants

During the *Report* period, almost \$18.2 million was awarded to 24 SESAs to help them better automate their UI systems. The Department evaluated 78 proposals (submitted by 33 States) based on urgency of need, projected improvements in system performance, technical merit, administrative and Trust Fund savings, and financial savings for the State. An overview of the grants is provided in the accompanying box.

<sup>27</sup> Regular State UI benefit data, by State, are shown in the Statistical Appendix of this *Report*.

## Automating State UI Systems

In FY 1992, over \$18.2 million was awarded to 12 States to help automate UI systems. These funds were available through the Unemployment Insurance Automation Support Account, an annually allocated funding source that helps State agencies meet automation needs that cannot be financed under their basic UI grants. Highlights of the State grants follow.

**Alaska** (\$1.1 million). Funds were used to replace Alaska's central processing computer.

**Arizona** (\$1 million). Arizona acquired and installed document scanners, an image server, and associated software. The State purchased image-capable personal computers which enable UI tax personnel to store and retrieve document images locally. Funds were also used for staff training.

**Arkansas** (\$5.4 million). Funds were used to replace the State's central processing computer, which will allow the use of new UI program software.

**Florida** (\$.4 million). Florida purchased developmental computer workstations, expert system software, and associated training (for more information about expert system software, see the summary of the report entitled *Papers and Materials Presented at the Unemployment Insurance Expert System Colloquium*, June 1991—Unemployment Insurance Occasional Paper 92-5—which is included in Chapter 2 of this *Report*). Funds also allowed for temporary staff to develop an expert system to help UI personnel in fact-finding and adjudication of UI claims. Personal computers and peripheral equipment which speed the processing of employer wage tapes were also purchased.

**Illinois** (\$1.8 million). Funds were used to purchase contractor services to develop and implement an employer UI wage record replacement system.

**Maryland** (\$.2 million). Maryland purchased two microcomputer systems that optically scan source documents for quarterly UI tax returns and wage records. Printers, phone modems, software, and associated training were also purchased.

**Nebraska** (\$2.3 million). Funds were used to purchase laptop computers for UI field tax auditors, automated workstations, software for statewide communications, and mail machines. They also supported staff and training costs, the development of an automated tax management system, equipment, software, and the development of a new UI benefit audit tracking system.

**North Carolina** (\$1.9 million). The State implemented an imaging system, expanded its on-line database system, and purchased computer workstations, optical character scanners, and printers. Funds were also used to expand an automated on-line claimant database system by purchasing telecommunications upgrades, laser printers, and contractor services. Funds also supported site preparation, software products, software development services, staff training, and technical and administrative support to implement an imaging system for tax and benefit payment operations.

**Ohio** (\$2.5 million). Ohio purchased an integrated imaging system for UI tax administration. The system allows UI personnel to capture, store, annotate, display, route, and print documents previously available only on paper.

**Puerto Rico** (\$.9 million). Funds were used to implement an integrated image system for scanning, filing, and retrieving tax and wage reports and continued claims forms. This allows more timely processing of UI tax receipts and claims payments and increases document security.

**Utah** (\$.5 million). Utah upgraded its optical scanning system and replaced its central processing computer.

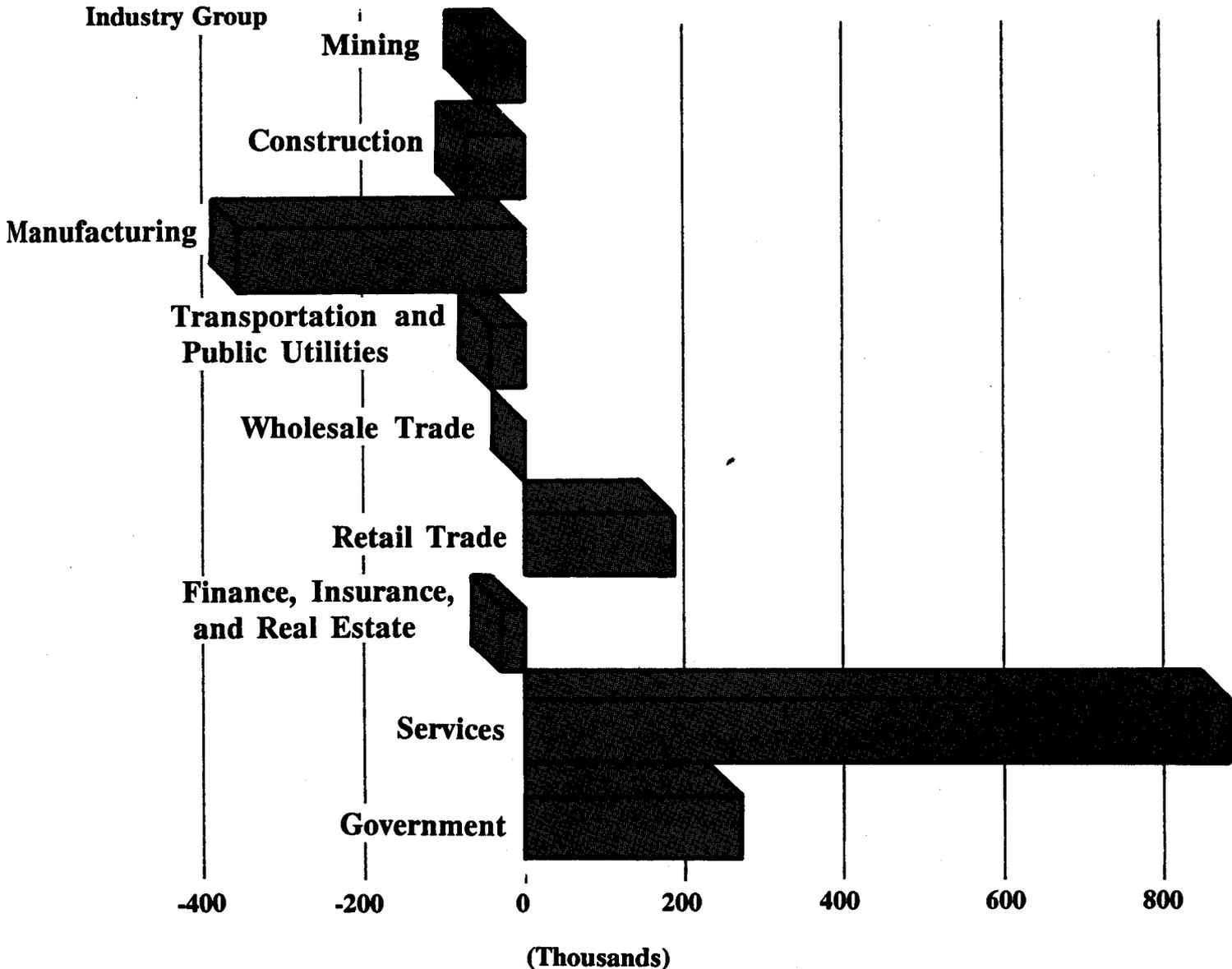
**West Virginia** (\$.2 million). West Virginia purchased laptop computers, phone modems, and printers to be used by field tax auditors who visit employers throughout the State, allowing them to produce tax reports on-site. Laptop computers were also used to support UI claims-taking at 11 itinerant sites.

**Reemployment and Self-Employment  
Demonstration Projects**

During the fiscal year, the Department continued to sponsor or evaluate several demonstration projects de-

signed to help UI recipients return to work as quickly as possible. These projects were the Pennsylvania and Washington State reemployment bonus projects, which tested the effect of reemployment bonuses on accelerating UI recipients' return to work; the Washington State and

**Chart 9. Employment Change by Major Industry Group, 1992**



**Note: Data are over-the-year changes in payroll employment, seasonally adjusted.**

**Source: U.S. Department of Labor, Bureau of Labor Statistics.**

**Table 7. Initial Claims and Average Duration of Benefits  
FY 1992**

| Month                | Number of Initial Claims | Average Duration (Weeks) |
|----------------------|--------------------------|--------------------------|
| October 1991 .....   | 1,735,110                | 16.7                     |
| November 1991 .....  | 1,890,764                | 15.1                     |
| December 1991 .....  | 2,602,576                | 14.0                     |
| January 1992 .....   | 2,923,317                | 10.6                     |
| February 1992 .....  | 1,887,269                | 15.1                     |
| March 1992 .....     | 1,774,610                | 19.6                     |
| April 1992 .....     | 1,655,775                | 19.9                     |
| May 1992 .....       | 1,413,560                | 20.0                     |
| June 1992 .....      | 1,651,595                | 19.1                     |
| July 1992 .....      | 2,039,867                | 14.8                     |
| August 1992 .....    | 1,443,622                | 15.5                     |
| September 1992 ..... | 1,425,441                | 19.6                     |

Source: U.S. Department of Labor, Employment and Training Administration.

Massachusetts self-employment projects, which examined the viability of self-employment as a reemployment option for some UI claimants; and the Maryland Work Search Demonstration, which tested alternative work search requirements for UI recipients.<sup>28</sup>

**Pennsylvania and Washington State Reemployment Bonus Projects.** Based on the promising results of a demonstration in New Jersey and an earlier experimental project conducted in Illinois, the Department sponsored two projects in Pennsylvania and Washington to test the feasibility of reemployment bonuses in shortening the length of unemployment of UI claimants.

The demonstrations were designed to test varying reemployment bonus amounts based on multiples of claimants' UI benefit payments and varying eligibility periods (the length of time during which claimants could find a new job and qualify to receive a bonus). Both demonstrations ended in 1989 and final evaluation reports were published in FY 1992,<sup>29</sup> as was an analysis of combined in-

formation from the demonstrations.<sup>30</sup> An expanded description of these demonstrations is included in Chapter 2 of this Report.

**Washington State and Massachusetts Self-Employment Projects.** The Washington State and Massachusetts Self-Employment Demonstrations examined the viability of self-employment as a reemployment option for some UI claimants. These demonstrations tested various packages of self-employment assistance for targeted UI recipients—a combination of financial payments (called self-employment allowances) and business development services such as business training, counseling, and technical assistance. Project operations for the self-employment demonstration conducted in Washington were completed in 1991 and the Massachusetts project was completed in 1993. The Department published an evaluation of these

<sup>28</sup> An earlier project in New Jersey tested three packages of services designed to reduce the length of time that people receive UI payments by helping them obtain jobs. The results of a four-year followup were published in 1991, and summarized in the previous edition of the *Training and Employment Report of the Secretary of Labor*.

<sup>29</sup> Walter Corson et al., *Pennsylvania Reemployment Bonus Demonstration Final Report*, Unemployment Insurance

<sup>29</sup> (continued) Occasional Paper 92-1 (Princeton, N.J.: Mathematica Policy Research, Inc., 1991) and Robert G. Spiegelman, Christopher J. O'Leary, and Kenneth J. Kline, *The Washington Reemployment Bonus Experiment Final Report*, Unemployment Insurance Occasional Paper 92-6 (Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, 1992).

<sup>30</sup> Paul T. Decker and Christopher J. O'Leary, *An Analysis of Pooled Evidence from the Pennsylvania and Washington Reemployment Bonus Demonstrations*, Unemployment Insurance Occasional Paper 92-7 (Princeton, N.J.: Mathematica Policy Research, Inc., 1992).

**Table 8. Unemployment Compensation Benefits Paid and Number of Beneficiaries by Program, FY 1991 and FY 1992**

| Program  | Amount<br>(In Millions) |          | Beneficiaries<br>(In Thousands) |         |
|--|-------------------------|----------|---------------------------------|---------|
|  | FY 1991                 | FY 1992  | FY 1991                         | FY 1992 |
| Regular State Unemployment Benefits .....  | \$24,420                | \$25,536 | 10,147                          | 9,646   |
| Federal-State Extended Benefits .....  | 281                     | 33       | 198                             | 28      |
| Emergency Unemployment Compensation.....   | —                       | 11,133   | —                               | 4,012   |
| Unemployment Compensation for Federal Civilian Employees (UCFE) <sup>a</sup> ..... | 296                     | 306      | 140                             | 121     |
| Unemployment Compensation for Ex-Servicemembers (UCX) <sup>a</sup> .....           | 152                     | 494      | 103                             | 197     |
| Trade Readjustment Allowances (TRA) <sup>b</sup> .....                             | 122                     | 69       | 25                              | 9       |
| Disaster Unemployment Assistance (DUA) <sup>c</sup> .....                          | 5                       | 6        | 5                               | 6       |
| Total <sup>d</sup> .....   | \$25,276                | \$37,577 | 10,315                          | 9,898   |

<sup>a</sup>The UCFE program provides benefits to jobless former Federal employees and the UCX program provides benefits to unemployed ex-servicemembers. Both programs are financed with Federal funds. States, through agreements with the Secretary of Labor, determine benefit amounts, terms, and conditions of receipt. Figures above include estimated joint claims.

<sup>b</sup>Trade readjustment allowances are provided to workers laid off by firms affected by import competition. Claimants must exhaust eligibility for regular UI and EB before collecting TRA. For more information, see the section on Trade Adjustment Assistance in this chapter.

<sup>c</sup>Disaster unemployment assistance helps people who lose their jobs because of a major disaster as declared by the President. Benefit payments are funded out of the Federal Emergency Management Agency's appropriation. Individuals eligible for regular UI benefits are not eligible for DUA.

<sup>d</sup>To avoid duplication, EB, EUC, and TRA recipients are not included in the total, and the estimated UCFE/UCX beneficiaries with joint claims are counted only once. The latter are estimated at 80,000 in FY 1991 and 72,000 in FY 1992.

Source: U.S. Department of Labor, Employment and Training Administration.

demonstration projects during the fiscal year and a summary of the findings is included in Chapter 2 of this Report.<sup>31</sup>

**Maryland Work Search Demonstration.** A demonstration project was designed in FY 1992 and initiated in Maryland during FY 1993 to test alternative work search requirements for UI recipients. The demonstration was designed to help determine how work search requirements can best be structured to speed UI recipients' return to work. The project will test various methods for promoting reemployment, including the provision of reemployment services for job losers and a requirement that claimants make an active search for suitable work.

### Ensuring Fiscal Integrity and Equitable Administration

Activities to ensure that the UI system remains fiscally sound and equitably administered by the States continued throughout the fiscal year. Among these activities were the Performance Measurement Review project, the Quality Control program, recovery of benefit overpayments, and efforts to detect fraud.

**Performance Measurement Review Project.** The Performance Measurement Review Project (PMR) is designed to help produce a comprehensive and integrated performance measurement system which supports the Secretary's statutory oversight responsibilities and assists SESAs to improve their UI program performance. An important aspect of the project is its coordination with complementary UI initiatives, such as Benefits Quality Control, Revenue Quality Control, and Cash Management.

<sup>31</sup> Stephen A. Wandner, et al., *Self Employment Programs for Unemployed Workers*, Unemployment Insurance Occasional Paper 92-2 (Washington, D.C.: U.S. Department of Labor, 1992).

Because of the project's scope and cost, it was initiated in phases. The first phase, completed in January 1992, recommended several improvements to the existing Quality Appraisal system: (1) strengthening the measures of quality of adjudications and appeals; (2) measuring the timeliness of all payment, adjudication, and appeals decisions, instead of only some; (3) making data more statistically valid; and (4) producing more frequent reports to ensure timely information about deficient performance. It also produced a design for field-testing the recommended changes.

The 12-month field test (the second phase) of the alternative performance measures, recommended in the first phase, began in October 1993. The test also assessed the cost of implementation and the use of performance measures to improve management. The New Hampshire, Wisconsin, Illinois, Kansas, Missouri, and California SESAs served as test sites.

The third phase involves a phased-in nationwide implementation of revised performance measures. As part of this phase, SESA and Federal staff receive training in performance measurement methods.

**Quality Control.** The Quality Control (QC) program also helps the Secretary exercise his responsibility to determine whether States are in compliance with Federal UI statutes by providing information on the quality of UI benefit payment and revenue operations. The information provided also helps SESAs to identify and correct certain operational problems.

Benefits Quality Control (BQC) provides statistically sound estimates of the accuracy of SESA benefit payment activities through its comprehensive verification of small random samples of benefit payments. Special State staff operate the program; periodic reviews by Federal regional and national office staff provide quality assurance.

During the first four full years of the program, the weighted average overpayment rate for the UI system declined steadily, from 10.1 percent in CY 1988, to 8.8 percent in CY 1989, 8.0 percent in CY 1990, and 7.41 percent in CY 1991. In CY 1992, however, the overpayment rate rebounded to 8.0 percent.

One of the reasons for the drop in overpayment rates from 10.1 to 8.0 percent has been program improvement actions taken by the SESAs in response to BQC findings. Some actions can be taken directly based on the extensive data compiled on each BQC case. The Department has provided each State with computer software that enables staff to analyze and display the QC findings in a variety of ways so that they can determine the causes, responsibilities, and magnitude of payment errors and make improvements directly.

Often, however, QC data indicate only where errors are occurring and their probable magnitude. To develop pro-

gram improvement plans, other management information or specially targeted studies are needed. The Department has encouraged this activity by allowing States to reduce sampling levels temporarily so that they can conduct such studies. Between late 1988 and September 30, 1992, 30 States conducted 137 program improvement (PI) studies; during FY 1992, 13 States conducted 21 approved PI studies.

A four-site pilot test in 1990 resulted in the development of a new BQC investigative methodology in which some facts are verified by telephone or mail instead of in person. Implemented in July 1993, it enables investigators to manage 20 percent more cases. It permitted States to add Core Revenue Quality Control activities without reducing the number of BQC cases investigated.

Unlike BQC which assesses only accuracy, Revenue Quality Control (RQC) assesses the accuracy, timeliness, and, as appropriate, the completeness of employer UI tax operations. Because of the complexity of UI revenue operations, RQC is being developed in a series of four components or "modules." Each module uses a different evaluation method and examines different aspects of tax quality. A brief overview of the modules, and their status, follows.

- **Core RQC.** As the most developed RQC component, the core module examines the quality assurance or internal control systems of State processing operations, their timeliness, and their completeness through a variety of automated reports. All States began implementing Core RQC on a voluntary basis in CY 1993.
- **Benefit Charging.** Employers' UI payroll tax rates are experience-rated, that is, they reflect certain UI benefits paid to former employees. Core RQC contains a simple way of assessing whether the process used to charge UI benefits to employers' accounts works properly. An alternative to this approach was pilot-tested in 1991 and evaluated in 1992. (The Department decided to continue the Core RQC approach.)

#### **National Interstate Telecommunications System**

When processing claims for workers who live and work in different States, it is important that States have a method for quickly and accurately sharing UI data. During the fiscal year, the Department granted \$1.2 million to the State of Utah to continue managing the operation of a national interstate telecommunications system for the UI program.

Over the next five years, the Utah Department of Employment Services will oversee the Internet Automated Data Processing Service operated by Martin-Marietta Corporation. The service will allow all States to share UI claims and wage information electronically.

- *Employer Compliance.* This module examines the accuracy of employers' contribution reports by auditing a random sample of known employers. The findings are used to guide future audit selections by estimating noncompliance rates and formulating profiles of firms likely to be out of compliance. Pilot testing of this module has been deferred at least until 1995.
- *Data Validation.* In order to ensure the validity of the reports-based measures used in the Core RQC module, this module developed and tested a methodology for validating key data in FY 1994.

**Identification of Benefit Overpayments.** In addition to operating the PMR and QC programs, the Department identified approximately \$482.5 million in FY 1992 in State UI benefit overpayments, and as of May 24, 1993, recovered \$276.2 million.

**Preventing Fraud.** During the fiscal year, all States operated systems that allowed them to more easily identify potential fraud cases and increase the amount of overpayments recovered. The most widely used detection and recovery systems used by States are the Model Crossmatch System and the Model Recovery System. All States participated in the Systematic Alien Verification for Entitlements program, a verification system designed to ensure that aliens meet immigration status requirements for UI program eligibility.

## TRADE ADJUSTMENT ASSISTANCE FOR WORKERS

### Program Objectives

Title II of the Trade Act of 1974 (P.L. 93-618), as amended, authorizes an array of reemployment services for workers who lose their jobs, experience a reduction in the number of hours of work, or receive reduced wages because of increased imports of articles which are like, or directly competitive with, those produced by the workers' firm.

### Eligibility Requirements and Services

Under the Act, workers who believe that their job loss, or the threat of job loss, is the result of import competition, may file a petition for Trade Adjustment Assistance (TAA) with the Department. The Department then conducts an investigation to determine if the worker separations from their firm are linked to import competition. Eligibility requirements for TAA are:

- A significant number or proportion of workers of the firm were totally or partially separated from their jobs, or threatened with job loss;

- Sales or production (or both) at the workers' firm decreased absolutely; and
- Increases of imports of articles like, or directly competitive with, articles produced by the workers' firm have contributed importantly to worker separations and to decreased company sales or production.

Workers certified by the Secretary of Labor as eligible to apply for TAA may receive training in new occupational skills, a job search allowance when suitable employment is not available in their normal commuting area, a relocation allowance if they obtain permanent employment outside their commuting area, and weekly cash trade readjustment allowances.

### FY 1992 Highlights

In FY 1992, 1,465 worker petitions were filed with the Department's Office of Trade Adjustment Assistance, and the Department certified 703 petitions which covered approximately 50,100 workers. Six hundred and eighty petitions were denied and 59 petitions were terminated during the year. At the end of the year, 293 petitions were being processed by the Department.

State agencies paid \$42.7 million in TRA benefits to 8,700 certified workers in FY 1992. This is a reduction from the \$115.7 million paid to 25,200 individuals certified during the previous year because Emergency Unemployment Compensation payments were made to workers in lieu of TRA payments for most of FY 1992.<sup>32</sup>

Over \$70 million in TAA funds were allocated to States for training and job search and relocation allowances, and for administering TAA program services to certified workers. Table 9 shows TAA activity and services for Fiscal Years 1989-92.

## LABOR SURPLUS AREAS PROGRAM

### Program Objectives

For about four decades, the Department has supported efforts to direct government procurement funds into areas with the greatest economic need by designating jurisdictions that experience high unemployment as "labor surplus areas."<sup>33</sup> Employers located in these areas receive preference when they bid on Federal procurement contracts.

The Department issues a list of labor surplus areas annually and adds new areas throughout the year under an "exceptional circumstances" provision. Under the provision,

<sup>32</sup> For a discussion of Emergency Unemployment Compensation payments, see the section on Unemployment Insurance in this chapter.

<sup>33</sup> The labor surplus areas program is authorized by P.L. 99-272, P.L. 95-89, and P.L. 96-302.

**Table 9. Trade Adjustment Assistance Program Activities, Fiscal Years 1989-92**

| Activity                                   | Fiscal Year |          |          |          |
|--|-------------|----------|----------|----------|
|  | 1989        | 1990     | 1991     | 1992     |
| <b>Program Services:</b>                   |             |          |          |          |
| Application for reemployment services..... | 41,994      | 38,459   | 35,872   | 31,628   |
| Placed directly in jobs by ES.....         | 12,416      | 12,199   | 12,881   | 10,460   |
| Entered training.....                      | 17,042      | 18,057   | 20,093   | 18,582   |
| Job searches <sup>a</sup> .....            | 863         | 565      | 525      | 594      |
| Relocations <sup>a</sup> .....             | 989         | 1,245    | 759      | 751      |
| State allocations (in millions).....       | \$62.6      | \$57.6   | \$64.9   | \$70.2   |
| <b>Trade Readjustment Allowances:</b>      |             |          |          |          |
| Workers filing for TRA.....                | 45,523      | 42,704   | 45,099   | 34,836   |
| Workers receiving first TRA payments.....  | 23,681      | 19,545   | 25,221   | 8,727    |
| Average weekly benefit paid.....           | \$174.69    | \$164.09 | \$168.72 | \$163.16 |

<sup>a</sup>Number of workers who receive allowances to conduct job searches and to move to another area to obtain suitable employment.

See also chart on benefits and beneficiaries in UI section of this chapter.

Source: U.S. Department of Labor, Employment and Training Administration.

areas that do not meet the high unemployment criterion when the annual list is compiled but subsequently experience major disruptions in their local economies due to natural disasters, plant closings, major layoffs, or contract cancellations may be added to the list.

### **FY 1992 Highlights**

For FY 1992, jurisdictions with an average unemployment rate of 6.6 percent or higher during the January 1989 through December 1990 period were designated as labor surplus areas. A total of 1,565 areas were designated initially, and 11 areas were added under the exceptional circumstances provision during the year.<sup>34</sup> This compares with 1,601 areas initially identified in FY 1991 and 25 more added under the exceptional circumstances provision during the year.<sup>35</sup> Chart 10 shows the number of labor surplus areas identified each year since 1987.

The labor surplus area listing and a complete description of the classification criteria, as well as updates to the

<sup>34</sup> These areas were Louisville City, Greenup County, Simpson County, and Pendleton County, Ky.; Lewiston City, the balance of Androscoggin County, and Piscataquis County, Me.; Orange County, Va.; Sullivan County, the balance of Lawrence County, and New Castle, Pa.

<sup>35</sup> The jurisdictions initially included as labor surplus areas in FY 1991 had an average unemployment rate of 6.6 percent or higher, the same as for FY 1992.

annual listing, are published in *Area Trends in Employment and Unemployment*, a monthly publication published by the Employment and Training Administration.

## **NATIONAL COMMISSION FOR EMPLOYMENT POLICY**

### **Commission Objectives**

The National Commission for Employment Policy is an independent Federal agency authorized by JTPA. Its 15 members, appointed by the President, represent business, labor, commerce, education, community-based organizations, and other sectors with an interest in employment and training issues. During PY 1991, the Commission's budget totaled \$1.8 million.

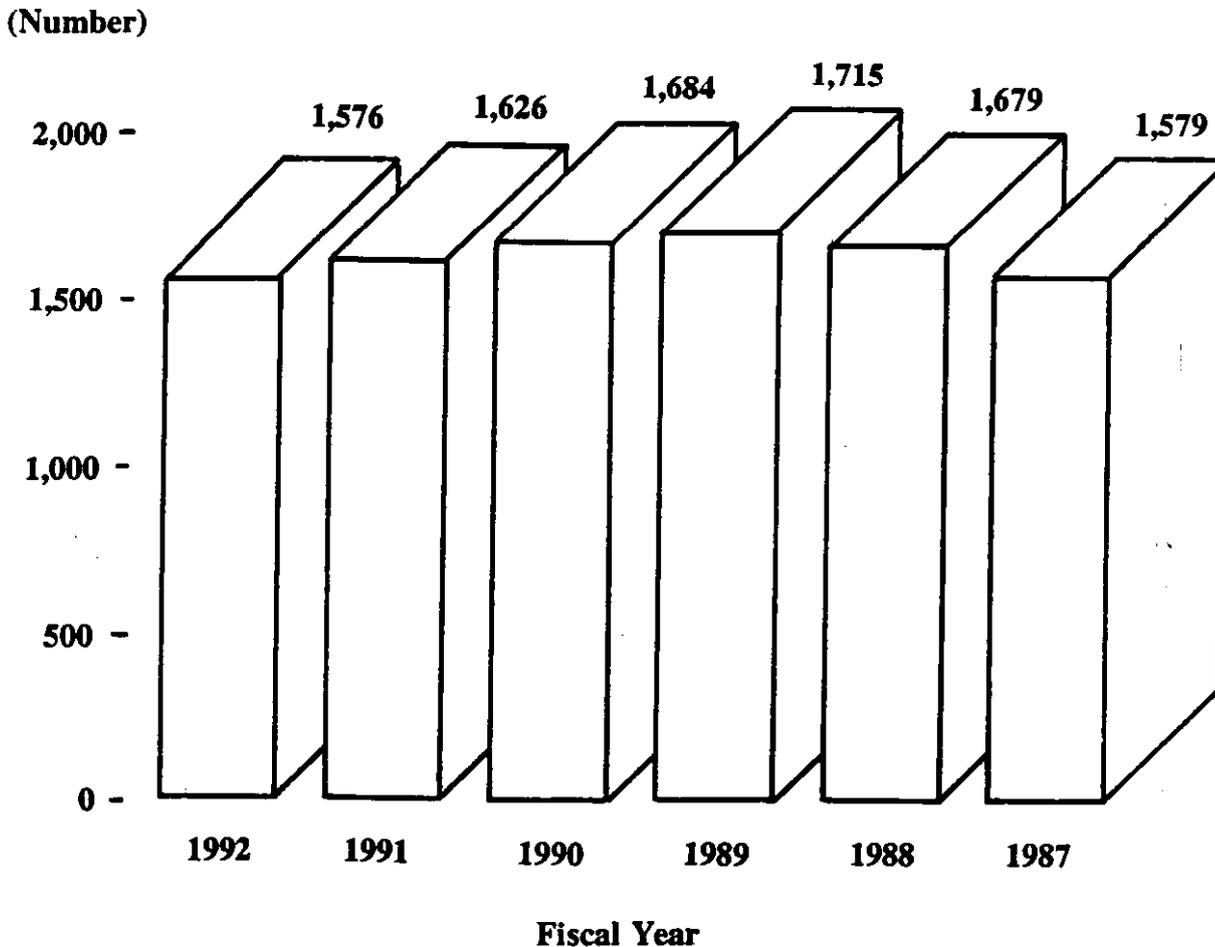
### **PY 1991 Highlights**

Commission activities in PY 1991 addressed five major topics: anticipating economic change, the changing labor force, overseeing the implementation of JTPA, improving coordination of Federal employment and training programs, and enhancing the scope of employment and training programs.

### **Anticipating Economic Change**

During PY 1991, the Commission looked at how economic change affects U.S. labor markets. Among the

**Chart 10. Labor Surplus Areas, FY 1987 - FY 1992\***



\*Total for each year includes labor surplus areas designated at the beginning of the fiscal year plus areas added under the exceptional circumstances provision.

Source: U.S. Department of Labor, Employment and Training Administration.

specific studies undertaken were: (1) the short- and long-term changes in the labor market due to current changes in the economy; (2) the effects of the North American Free Trade Agreement on U.S. labor markets and worker migration; (3) the impact of European economic integration on U.S. employment; and (4) the extent to which employment effects are considered in the Federal Government's regulatory processes.

An evaluation of State-financed, employer-based retraining programs, a project begun in PY 1987, concluded

in PY 1991, with the publication of the third and final report, *Evaluating State-Financed Workplace-Based Retraining Programs: Case Studies of Retraining Projects* (April 1992). The report presents case studies of 24 training projects in California, Illinois, Missouri, and New York, the four States on which the full project study was based. Two earlier reports had looked at the feasibility of and potential methodologies for evaluating these State projects.

### **Responding to a Changing Labor Force**

The Commission's activities in this area addressed the nature and characteristics of the diverse workforce and the potential for upward mobility in the service sector.

The final report from this project, *A Changing Nation—Its Changing Labor Force* (November 1991), examines the multidimensional nature of the demographic and economic diversity of the Nation's labor force. It provides a framework for assessing current programs and strategies and for planning future education and employment and training approaches.

Because of the strong growth in the service sector during the 1980s, the Commission examined the potential for upward mobility projects in service sector firms. A report, *Upward Mobility Programs in the Service Sector for Disadvantaged and Dislocated Workers* (May 1992), describes exemplary programs and factors related to successful program implementation.

### **Improving Coordination of Federally Sponsored Employment and Training Programs**

Three seminars held in PY 1990 and PY 1991 addressed national, State, and local level coordination issues. Participants were asked to develop ideas for coordination improvement. Drawing on findings from these hearings, the Commission supported the development of State Human Resource Investment Councils in testimony before the House Subcommittee on Employment Opportunities in May 1991.

Final recommendations from this project were transmitted to the President and the Congress in the fall of 1991, and a final report, *Coordinating Assistance Programs for the Economically Disadvantaged: Recommendations and Background Materials*, was published in October 1991. A separate report, *The JTPA-Education Coordination Set-Aside: States' Implementation of the Program*, also published in October 1991, examined the uses of the JTPA eight percent set-aside for education coordination. Based on findings from this report, the Commission Chairman testified in support of retaining the eight percent set-aside at a hearing before the House Subcommittee on Employment Opportunities.

In further support of State- and local-level coordination efforts, the Commission sponsored the development of a prototype methodology for collecting and analyzing information on job training programs in Massachusetts, as well as an examination of coordination techniques associated with the JOBS program and State-level training policy coordination in Rhode Island.

### **Overseeing Implementation of JTPA**

The Commission continued its research in two areas critical to effective JTPA implementation: (1) evaluating

and managing JTPA programs through the use of unemployment insurance wage records and (2) the effectiveness of local Private Industry Councils.

The Commission's report, *Using Unemployment Insurance Wage-Record Data for JTPA Performance Management* (June 1992), was the culmination of a three-year project that analyzed data from 20 States. Based on this research, the Commission recommended that States be given the option of using UI data for JTPA performance standards and program management. The conference report accompanying the JTPA Amendments of 1992 directed the Secretary of Labor to report to the Congress on the feasibility of establishing a UI database and developing the means to make this information available nationally. The Commission also began a study of the potential for using UI wage record data to assess JTPA, JOBS, and vocational education programs.

Also in PY 1991, the Commission began a large-scale assessment of the postprogram employment and earnings of JTPA participants who had different characteristics and who entered different training activities. This study uses nonexperimental techniques and complements the evaluation of JTPA by the Department of Labor, which uses experimental techniques. The Commission, with the State of Utah, cosponsored a feasibility study, using Employment Service records, to develop comparison groups for purposes of assessing the net impact of participation in JTPA.

The Commission completed its research on PICs. This study examines how private sector representatives are responding to their responsibilities, the relationship between local PICs and State Job Training Coordinating Councils, and how well the PICs are leading local JTPA efforts. Among other things, the study found that while PICs vary considerably in the extent to which they have exercised their responsibilities in the management and oversight of JTPA programs, the private sector's involvement in JTPA has become firmly established, and in most localities private sector oversight has become a routine part of program administration.

As part of this project, the Commission conducted 10 roundtable discussions across the country, meeting with over 200 PIC members, local elected officials, and SDA directors, representing 99 PICs from 45 States.

### **Enhancing the Scope of Employment and Training Programs**

In October 1991, the Commission published *Assisting Dislocated Workers: Alternatives to Layoffs, and the Role of the Employment Service under the Economic Dislocation and Worker Adjustment Assistance Act (EDWAA)*. As backup to this publication, the Commission completed two additional reports on ES during PY 1991: *Improving*

*the Effectiveness of the Employment Service: Defining the Issues* (October 1991), which reviewed all ES roles and responsibilities, its relationship to JTPA, and its funding; and *The Potential Effectiveness of the Employment Service in Serving Dislocated Workers: Evidence from the 1980s* (October 1991).

Two JTPA amendments in 1992 paralleled NCEP findings and recommendations from earlier research on Hispanics and Native Americans. "Receipt of food stamps" as a JTPA eligibility requirement was replaced with "eligibility for food stamps" in response to findings from the Commission's study on Hispanics in JTPA. Also, the development of a single organizational unit with responsibility for all Native American programs authorized under JTPA built on the Commission's recommendation for greater coordination of Native American programs.

In addition to its research agenda, the Commission as a whole met four times during PY 1991, with individual members also participating in Commission-sponsored hearings and site visits.

## **NATIONAL OCCUPATIONAL INFORMATION COORDINATING COMMITTEE**

### **Committee Objectives**

The National Occupational Information Coordinating Committee is an independent Federal interagency committee authorized by JTPA and the Perkins Vocational Education Act. NOICC helps States promote the development, improvement, dissemination, and use of occupational and career information. This information supports employment, training, and vocational program planning at the State and local levels and career exploration by youth and adults.

The Assistant Secretary for Employment and Training and the Department's Commissioner of the Bureau of Labor Statistics are two of the 10 members of the Committee, which includes representatives from four other Federal departments.

### **PY 1991 Highlights**

During the program year, NOICC continued supporting State Occupational Information Coordinating Committees, established a Career Development Training Institute (CDTI) to design career development training programs, helped produce a Career Development Portfolio to guide students through the career development process, developed an Employee Career Development training program, and supported a system to provide information for economic development and business/industry planning.

### **Support for State Occupational Information Coordinating Committees**

In PY 1991, NOICC allocated \$6.9 million to State Occupational Information Coordinating Committees (SOICCs), about the same amount as in PY 1990. This represented over 75 percent of the funds NOICC received from the Departments of Labor and Education. These funds, averaging \$123,000 per State, helped support SOICC staff, State and local occupational and career information systems and career development services, and coordination efforts among the SOICC member agencies to provide these services.

About seven million people used career information systems, which were operated in 19,000 sites in 47 States during the year.

### **Career Development Training Institute**

In PY 1991, NOICC established a Career Development Training Institute to design programs for States to use in training people who help students and adults plan their careers. The Institute will serve as a foundation for a national career development training program and assist States to carry out career training initiatives. Training for JTPA counselors and other employment and training personnel will be a major component of the CDTI effort.

### **Career Development Portfolio**

Working with the American School Counselor Association, NOICC helped initiate the production of a Career Development Portfolio during the year. The portfolio consists of a personalized, sequential career-planning journal that helps students relate their education to career interests by guiding them through the career development process. The portfolio also helps students in the transition from school to work. It was to be pilot-tested in several States.

### **Employee Career Development Program**

During the year, an Employee Career Development (ECD) training program was developed to train counselors, advisers, and human resource professionals who assist adult workers in career transition. The ECD program focuses on the career needs of adults and can support JTPA programs and ES activities.

### **Economic Development and Employer Planning System**

The Economic Development and Employer Planning System (EDEPS), a microcomputer-based system that provides information for economic development and business/industry planning, neared completion in PY 1991. The EDEPS helps users analyze business opportunities.

examine labor supply and demand, identify training resources, and study other factors that play a role in decisions about starting new firms and expanding and relocating existing firms. The system can help link employers to existing employment and training programs in a community and identify the need for new programs to meet business and community needs.

One component of the system, the State Training Inventory (STI) system, was released to all States in PY 1991. STI is a microcomputer-based system that allows States and local users to identify schools and the programs they offer by geographical area. STI can be used by a variety of groups including employment and training personnel who operate local programs for special groups, employers, and individuals, to identify existing career education and training resources. Organizations and individuals can also use STI to obtain information about programs in other States.

In addition to the STI, the Transitional Opportunities System, formerly known as the Civilian Occupation and Labor Market Information System was released to selected sites and modified in PY 1991. This system, funded by the Department's Veterans' Employment and Training Service, helps people in all four branches of the military service who are considering returning to civilian employment by providing profiles of local labor markets and linking military personnel to job service offices in the communities in which they are considering relocating.

Details of these and other NOICC/SOICC network accomplishments in PY 1991 can be found in NOICC Administrative Report No. 18, *Status of the NOICC/SOICC Network: June 30, 1992*, dated December 1992. The report also provides summaries of State activities for the program year.

**CHAPTER 2**

**RESEARCH AND  
EVALUATION FINDINGS**

# RESEARCH AND EVALUATION FINDINGS

## INTRODUCTION

This chapter summarizes the findings of major research and evaluation projects completed in PY 1991, which covers the period July 1991 through June 1992. Full or partial funding for these projects was provided by ETA.

The projects discussed in this chapter focus on specific aspects of a variety of issues of interest to the Department. Because many of these issues are complex, readers are cautioned that no single study can provide a complete picture of any particular subject area. Furthermore, the context in which a study is conducted often has an impact on the applicability of its findings. In addition, these summaries are not intended to represent *all* of the information provided in the full study reports; more information can be found in the reports referenced in the footnotes.

Finally, because organizations undertaking research projects sponsored by the Department are encouraged to state their findings and express their judgments freely, all conclusions described in this section are those of the researchers and evaluators and do not necessarily represent the views of the Department of Labor.

The projects summarized are organized under three headings: (1) strengthening workforce quality, (2) labor market studies of specific groups, and (3) program development and improvement. The annotated bibliography lists all reports covered in this edition of the *Training and Employment Report of the Secretary of Labor*. Information about how to obtain copies of the publications is provided in the introduction to the annotated bibliography which follows this chapter.

## STRENGTHENING WORKFORCE QUALITY

Throughout the program year, the Department sponsored several research studies that investigated a wide variety of labor market issues and concerns. Many of these studies provided important information for policymakers, educators, and program operators to help improve the quality of the workforce.

Two reports published in PY 1991 dealt with the research and conclusions of the Secretary's Commission on Achieving Necessary Skills. These reports describe the need to upgrade the skills of the Nation's young people and workers on the job to better prepare them for the challenges of the modern workplace and define specific skills that should be mastered. (A description of the first SCANS publication, *What Work Requires of Schools: A SCANS Report for America 2000*, was included in the edition of the *Training and Employment Report of the Secretary of Labor* submitted to Congress in July 1994.)

Other studies highlighted in this section include an investigation of why labor shortages occur in certain occupations and how policymakers can respond to some shortages; a review of Federal help for adult education, which identifies and provides details on over 80 federally funded adult education programs; and a publication that provides information about successful school-to-work transition efforts.

## Creating High-Performance Workplaces

To create high-performance workplaces, the United States must reinvent its schools, foster work-based learning, reorganize its workplaces, and restructure its assessment systems, according to the final report of the Secretary's Commission on Achieving Necessary Skills.<sup>1</sup> The Commission was established in February 1990 to advise the Secretary of the level of skills required to succeed in the workplace. This report builds on the Commission's earlier research<sup>2</sup> on "workplace know-how"—the five competencies and the three-part foundation

<sup>1</sup> *Learning A Living: A Blueprint for High Performance. A SCANS Report for America 2000* (Washington, D.C.: U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills, 1992).

<sup>2</sup> *What Work Requires of Schools: A SCANS Report for America 2000* (Washington, D.C.: U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills, 1991).

of skills and personal qualities with which schools must equip students to prepare them for solid job performance. These are summarized in the box entitled "Workplace Know-How."

### Solving the Skills Problem

The Commission's final report highlights four key areas of action required to solve the Nation's skills problem, as follows.

**Reinvent Schools.** According to the Commission, a process of educational reinvention is required to restructure schools around teaching the SCANS foundation skills and competencies so that "learning to do" is integrated with "learning to know." Experience shows that high-performance schooling involves: (1) teaching in context; (2) improving the match between what work requires and what students are taught—and this calls for changing how instruction is delivered and how students learn; (3) a new system of school administration and assessment; and (4) participation of the entire community.

**Redesign Work-Based Learning.** By international standards, most American workers receive very little formal job training. The Commission believed that employer-sponsored training, both public and private, must be upgraded and integrated around the SCANS know-how. Moreover, apprenticeship training, and second-chance efforts for the unemployed and marginally employed, should be reoriented to integrate the SCANS skills into their basic education and job-specific training.

**Reorganize the Workplace.** The old workplace—where the boss is always right, employees do what they are told, and companies have standardized production—is detrimental to America's competitive advantage, according to

the Commission. Workplaces must reorganize to enhance the value of their workforces in terms of quality, flexibility, and customization. In the new high-performance workplace, virtually everyone acts as a decision-maker, according to the Commission. They gather and sift information, organize workflow and team arrangements, manipulate data to solve problems, and on occasion, provide directions to colleagues.

**Restructure Assessment.** The Commission supported the establishment of a nationwide, voluntary assessment system, and believed it should apply to both students and adults, in the classroom and the workplace. Assessment should be tied to learning goals, rather than tests as traditionally understood, and should include locally developed assessment tasks. An education-based system should assess mastery of the SCANS know-how, as well as mastery of traditional academic subjects.

The action steps recommended by the Commission to be taken by the Year 2000 are highlighted in the box on "learning a living."

### The Need for Change

The report points to the widening gap in wages between workers with a college degree and those with only a high school diploma. Based on information collected from SCANS research, the Commission compared the various skills and abilities required in 23 high-wage jobs (e.g., programming technicians) with the skills and abilities required of 23 low-wage jobs (e.g., child care aides). As Chart 11 shows, on average, workers with higher skill levels earned a weekly wage that was 58 percent higher than their counterparts with lower levels of skills. Because

#### Workplace Know-How

The know-how identified by SCANS is made up of five workplace competencies and a three-part foundation of skills and personal qualities that are needed for solid job performance. These are:

**Workplace Competencies.** Effective workers can productively use:

- **Resources.** They know how to allocate time, money, materials, space, and staff.
- **Interpersonal Skills.** They can work on teams, teach others, serve customers, lead, negotiate, and work well with people from culturally diverse backgrounds.
- **Information.** They can acquire and evaluate data, organize and maintain files, interpret and communicate, and use computers to process information.
- **Systems.** They understand social, organizational, and technological systems; they can monitor and correct performance; and they can design or improve systems.
- **Technology.** They can select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment.

**Foundation Skills.** Competent workers in the high-performance workplace need:

- **Basic Skills.** Reading, writing, arithmetic and mathematics, speaking, and listening.
- **Thinking Skills.** The ability to learn, to reason, to think creatively, to make decisions, and to solve problems.
- **Personal Qualities.** Individual responsibility, self-esteem and self-management, sociability, and integrity.

### Recommendations for the "Learning a Living" System

The Commission recommends full implementation of the following actions by the year 2000:

#### Reinventing Schools:

- Workplace know-how (the SCANS foundation and workplace competencies) should be taught along the entire continuum of education, from kindergarten through college.
- Every student should have been introduced to workplace know-how by the time he or she completes middle school (about age 14).
- Every student by about age 16 should attain initial mastery of the SCANS know-how.
- Every student who completes high school should be sufficiently proficient in the SCANS know-how to earn a decent living.
- All federally funded programs for youth and adults, including vocational education programs, should teach the SCANS know-how.

#### Fostering Work-Based Learning:

- Federal, State, and local agencies should incorporate SCANS workplace competencies into their own employee training programs.
- Private-sector work-based training programs should incorporate training in the SCANS workplace competencies.
- Coalitions of businesses, associations, government employers, and labor organizations should teach the SCANS competencies to the current workforce, including employees of small businesses.

#### Reorganizing the Workplace:

- The vast majority of employers should adopt the standards of quality and high performance that now characterize our most competitive companies.
- Firms should develop internal training programs to bring employees to the proficiency in the SCANS competencies needed for high-performance work organizations.

#### Restructuring Assessment:

- A national education-based assessment system should be implemented that will permit educational institutions to certify the levels of the SCANS competencies that their students have achieved.
- Public and private employers should define requirements for higher-level competencies.
- Employment-based assessments should permit diagnoses of individual learning needs.

employers are increasingly turning to college graduates in an effort to obtain workers with the appropriate skills for today's jobs, the market value of a high school diploma has fallen considerably. As Chart 12 shows, the proportion of male high school graduates whose earnings fall below the poverty level for a family of four continues to grow.

The report notes that cities such as Fort Worth, Los Angeles, Pittsburgh, Tampa, and Louisville, and States such as Florida, Indiana, New York, and Oregon have taken steps to put the broad SCANS principles in place in their school systems at the local and State levels. Several corporations are also taking action, and a number of trade organizations in the hospitality field have joined together to introduce the SCANS language into their industry.

### Skills Needed for Jobs

Another report issued by the Secretary's Commission on Achieving Necessary Skills helps educators make high school courses more relevant to the needs of a modern

workforce and helps employers ensure that their employees possess up-to-date skills.<sup>3</sup>

The information is useful for teachers, curriculum developers, and others who are concerned with ensuring that the SCANS "competencies" and "foundations" are taught in their courses. (See the accompanying box for a summary of SCANS competencies and foundations, or workplace know-how.) Job counselors can use the material in the report to better understand the generic skills required in the workplace and see how they are used in a variety of tasks a worker is likely to encounter; training directors will find the information helpful in developing a curriculum or program.

The report carries detailed listings of each of the SCANS competencies and foundation skills followed by a listing of specific tasks for various jobs that illustrate how the SCANS know-how can be put into practice and

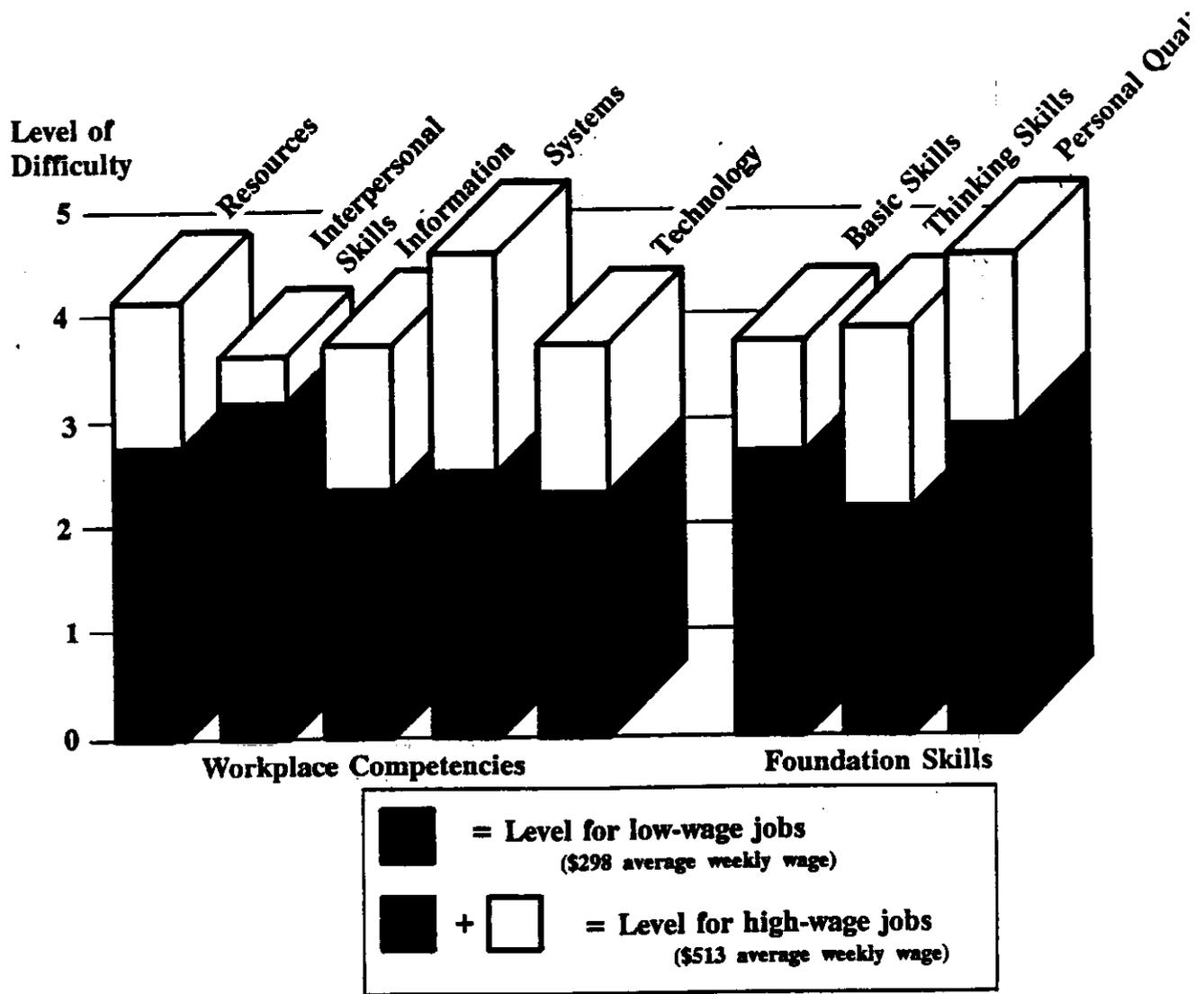
<sup>3</sup> *Skills and Tasks for Jobs: A SCANS Report for America 2000* (Washington, D.C.: U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills, 1992).

observed in a real work setting. The tasks are arranged according to relative level of difficulty.

The report also lists descriptive tasks that exemplify the SCANS competencies and foundation skills for 35 jobs. These jobs are grouped into the broad categories of:

- *Health and Human Services*: child care aide, dental hygienist, dietary manager, licensed practical nurse, medical assistant, medical technologist, and optician.
- *Office, Financial Services, Government*: personnel specialist, graphics designer, computer operator,

**Chart 11. High-Wage Jobs Require Higher Levels of the SCANS Know-How**



Average difference - \$11,200 annually

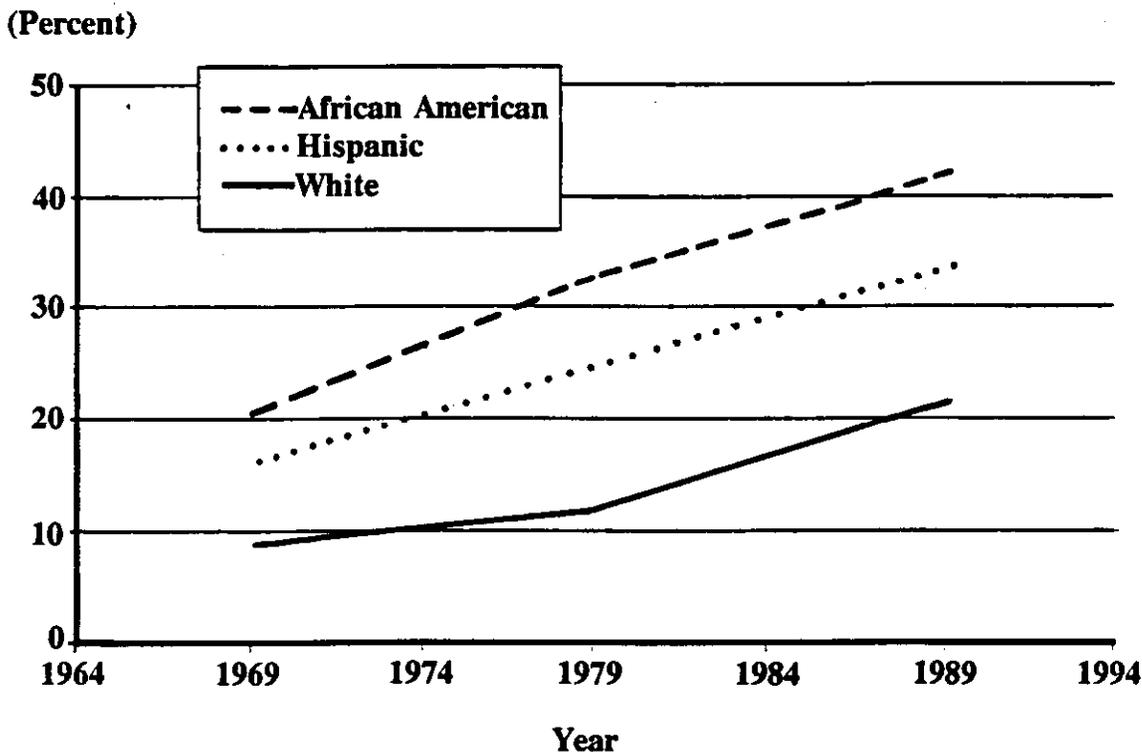
Source: *Learning a Living: A Blueprint for High Performance.*

- programming technician, accounting/financial analyst, law enforcement officer, and quality control inspector.
- *Accommodations and Personal Business*: waitress/waitress, food service manager, industry training specialist, hotel account executive/sales executive, hairstylist/cosmetologist, beauty shop owner, and show operations supervisor.
  - *Manufacturing, Agribusiness, Mining, and Construction*: excavating equipment operator, farmer, carpenter, construction contractor, expeditor/purchasing agent, plastic molding machine operator, and blue-collar worker supervisor.
  - *Trade, Transportation, and Communications*: traffic/shipping and receiving clerk, order filler, outside

equipment technician, truck delivery salesperson/outside sales, telemarketing representative, travel agent, and customer service representative.

Similar information on an additional 15 jobs is provided in an appendix. These jobs are: health and human services jobs (teacher's aide, medical records technician, registered nurse); office, financial services, and government (bank teller, secretary, underwriting assistant); accommodations and personal business (chef, front desk clerk, assistant housekeeper); manufacturing, agribusiness, mining, and construction (electrician, numerical drill operator, offset lithographic press operator); trade, transportation, and communications (inside equipment technician, truck driver, retail salesperson).

**Chart 12. The Proportion of Male High School Graduates Unable to Support a Family\***



\*Males, ages 25-54, with 12 years of education whose own earnings are less than the poverty level for a family of four. Total family income may be higher.

Source: Sheldon Danziger, "The Poor," in David Hornbeck and Lester Salamon, *Human Capital and America's Future*, and unpublished data for 1989, as reported in *Learning a Living: A Blueprint for High Performance*.

## Understanding Labor Shortages

It is not possible to project occupational supply and demand well enough to anticipate labor shortages adequately, according to a study of the factors that contribute to occupation-specific labor shortages.<sup>4</sup> The study investigated four occupations that experienced labor shortages in the late 1980s or previously—special education teachers; home care workers; electrical/electronic engineers; and tool and die makers.

For each of these occupations, the researchers described the training and recruitment of the occupational group, discussed employment and earnings trends, listed factors contributing to a labor shortage, and described adjustments that are made to cope with labor shortages. While the study examined four occupations, the findings and recommendations apply broadly to labor market conditions in other occupations.

The study focused on eight issues:

- Identifying any common denominators across the four occupations that may provide information about why labor shortages tend to recur or persist, as well as ways to recognize and anticipate shortages in other occupations.
- Determining whether there are distinct kinds of labor shortages, with different characteristics, that require different policy initiatives.
- Understanding how responses to a labor supply imbalance in one area may cause an imbalance in another area.
- Determining appropriate responses for addressing labor shortages that can be used by employers, labor unions, training programs, etc.
- Identifying successful public and private policies that have helped avoid or lessen the severity of labor shortages.
- Determining if certain policies may have contributed to causing or increasing labor shortages.
- Finding ways for employers, unions, educational institutions, and government agencies to work together to confront and resolve labor shortage issues.
- Ensuring that policies developed to address labor shortage issues are implemented and working as intended.

The research, conducted in 1990, consisted of an analysis of existing data sources and interviews with individuals knowledgeable about the labor markets of four occupations.

The report provides information about: (1) why labor shortages may develop in particular occupations; (2) ad-

justments that are likely to be made to respond to these shortages; (3) reasons why shortages might persist for extended periods; and (4) the likely consequences of labor shortages. Findings from case studies of the four occupations are used to better illustrate these issues.

The researchers defined a labor shortage as “a market disequilibrium between supply and demand in which the quantity of workers demanded exceeds the supply available and willing to work at a particular wage and working conditions at a particular place and point in time.” They found a clear presence of shortages in the late 1980s in two of the occupations studied—special education teachers and home care workers. Evidence for shortages in the other two—electrical/electronic engineers and tool and die makers—was less certain. The research was conducted in 1990.

## Responding to Labor Shortages

The researchers point out that employers take a number of actions to deal with unfilled positions. These include intensified recruitment efforts, increasing overtime for existing workers, reducing the minimum qualifications for jobs, restructuring work to use existing or new employees in other occupations, substituting machinery and equipment for labor, providing training for workers for hard-to-fill positions, improving working conditions, offering bonuses to new employees, improving wages and fringe benefits, and contracting out work. In cases where a firm has exhausted all reasonable means to fill occupational vacancies, employers can turn down work.

The researchers describe several reasons why labor markets may adjust slowly to labor shortages: (1) employers may be slow to understand the need for more workers for particular occupations; (2) delays in filling vacancies; (3) slow reaction time by workers in other occupations in recognizing new opportunities in certain occupations; (4) slow response by workers in other occupations in obtaining training and preparing for certain occupations; (5) restrictions on occupational entry (i.e., limits in the enrollment capacity of training institutions that supply workers for an occupation); and (6) continuous increases in labor demand.

According to the study, the greatest consequence of a sustained labor shortage is that the economy will operate at less than maximum efficiency. Thus, workers may have to work more hours than they want to, or they may be assigned to jobs they do not want. Existing workers may be used less efficiently as employers attempt to respond to labor shortages. Consumers may be denied the goods and services they want to buy.

The researchers recommend that in order to minimize problems with shortages resulting from government regulations:

<sup>4</sup> John W. Trutko and Burt S. Barnow, *Labor Shortage Case Studies: Final Report* (Arlington and Fairfax, Va.: James Bell Associates and Lewin-ICF, 1992).

- Governments that directly or indirectly regulate wages in an occupation should monitor the services provided to ensure that shortages are not leading to unmet needs (e.g., waiting lists for needed services).
- In periods of rapidly rising wages, governments should make sure that adjustments to wages are made frequently enough to keep them competitive.
- If wage increases are considered undesirable because of the cost implications, government regulators should consider actions to ensure that services are provided equitably. For example, programs can be reduced in scope to reduce demand for the occupations experiencing shortages.

The researchers also recommend that because employers have certain incentives to raise wages, improve recruiting, and take other actions to eliminate labor shortages in some areas, before taking strong action, government policymakers should review projections of occupational supply and demand to determine if the shortage is likely to be corrected by normal functioning of the labor market. Other recommendations include:

- The Department of Labor should consider evaluating the effectiveness of its occupational information programs, including activities of NOICC, with the goal of identifying any shortcomings and improving the flow of information to workers, students, and employers.
- If a shortage is likely to persist, and one of the problems is a lack of adequate education and training programs, government can help eliminate the shortage by increasing support for these programs.
- The liberalizing of immigration policies can be used to eliminate shortages, but care should be taken to ascertain that a shortage exists and that it is expected to persist.

## Federal Help for Adult Education

During the past decade, a growing concern about the levels of adult literacy in the United States prompted the Federal Government, as well as many State and local agencies, to develop initiatives aimed at increasing the Nation's investment in adult education. As these efforts continued to grow, the Federal Government became an increasingly important source of funds for addressing the literacy problem.

From FY 1986 through FY 1988, there were 85 programs in 12 Federal agencies that authorized or supported adult education activities, and in FY 1989 there were 84 such programs<sup>5</sup> in 11 agencies, according to an examination of adult education programs.<sup>6</sup> The study was based on the requirements in the Adult Education Amendments

<sup>5</sup> A Department of Transportation Basic Education Enrichment Program for the Coast Guard was discontinued in FY 1989.

of 1988<sup>7</sup> which mandated that the Secretary of Education, in conjunction with the Secretaries of Labor and Health and Human Services, conduct an interagency study of adult education funding and activities.

## Study Background

A working group, made up of representatives from the three Departments, guided the researchers in study design and data collection methods. The group developed operational definitions for terms used in the study and defined an adult education program as an entity providing direct service, research, training, or technical assistance, or a demonstration or dissemination project in one or more of the following areas: (1) adult literacy/basic skills; (2) English-as-a-second language; (3) adult secondary education; or (4) General Educational Development.

The researchers created three main categories for differentiating Federal programs based on the priority of adult education in the program's authorizing legislation. These categories were:

- *Primary Program.* Adult education is explicitly stated as a priority objective in the program's authorizing legislation.
- *Secondary Program.* Adult education is an approved activity stated in the authorizing legislation and supports the primary objective of the program.
- *Indirect Program.* No explicit legislative mandate for adult education; a policy decision is required to fund adult education activities.

In compiling a list of programs for adult education, the researchers examined several programs identified previously by other research groups and new programs that were authorized since 1986. They developed several categories of data needed and determined the steps necessary for data collection (reviewing existing information about programs from published sources; contacting the directors of Federal programs to obtain names of staff who could provide data; and conducting in-person and telephone interviews with contacts).

## Study Findings

Of the 84 programs identified as supporting adult education services in FY 1989, 27 were categorized as "primary" programs in which adult education was explicitly stated as a priority objective in the program's authorizing legislation. Table 10 shows adult education programs, by agency and type of program, for FY 1989.

<sup>6</sup> Judith A. Alamprese and June S. Sivilli, *Study of Federal Funding Sources and Services for Adult Education: Final Report* (Washington, D.C.: COSMOS Corporation, 1992).

<sup>7</sup> Section 6214 of the Hawkins-Stafford Elementary and Secondary School Improvement Amendments of 1988 (P.L. 100-297).

A key area of the investigation was the total amount of Federal funding available for adult education. The researchers identified problems associated with determining this amount. Because many Federal programs that authorize multiple activities do not require that obligations or expenditures for adult education activities be reported separately, the amount of Federal adult education funding that can be reliably verified is a low-end estimate. The figures that were compiled from a total of 31 programs indicated that slightly over \$247 million was obligated for adult education in FY 1989. Most of the money came from Department of Education programs. Funding levels and the number of programs included in those levels for Fiscal Years 1986 through 1989 are shown in Table 11.

The study further revealed that:

- Basic skills/literacy was the most prevalent adult education activity for all programs—primary, secondary, and indirect. Nearly half of all programs examined in the study specified basic skills/literacy as the main substantive focus.
- States received most of the funds for adult education and distributed the funds to local governments and community agencies.
- For many programs, a requirement for interagency coordination is not clearly stated.

- The most common funding mechanisms to support adult education were project grants, contracts, and cooperative agreements.
- Reporting requirements for data on adult education programs identified in the study were not very substantial.

The report provides a listing of the 85 Federal programs that were examined in the study. Each program is categorized according to Federal agency and office responsible for its operation. The listing also includes a brief discussion of the program and its relation to adult literacy activities; the program's *Catalog of Federal Domestic Assistance* number; a description of program type (primary, secondary, or indirect); an overview of the types of reports required to document program progress and results; a description of eligible recipients; information about the length of time the assistance may be available; overall program budget obligations and adult education program component budget obligation; examples of funded projects; and the Federal contact who can provide additional information about the program.

### School-to-Work Connections

Careful planning, organization, problem-solving, and marketing are some of the essential elements necessary

**Table 10. Adult Education Programs, by Agency and Type of Program, FY 1989**

| Agency   | Type of Program |           |          | Total |
|--|-----------------|-----------|----------|-------|
|  | Primary         | Secondary | Indirect |       |
| ACTION.....                                    | 1               | 2         | 0        | 3     |
| Appalachian Regional Commission.....           | 0               | 1         | 1        | 2     |
| Department of Agriculture.....                 | 0               | 1         | 1        | 2     |
| Department of Defense.....                     | 4               | 0         | 0        | 4     |
| Department of Education.....                   | 16              | 13        | 9        | 38    |
| Department of Health and Human Services.....   | 2               | 4         | 7        | 13    |
| Department of Housing & Urban Development..... | 0               | 0         | 4        | 4     |
| Department of the Interior.....                | 1               | 0         | 0        | 1     |
| Department of Justice.....                     | 2               | 0         | 4        | 6     |
| Department of Labor.....                       | 1               | 3         | 3        | 7     |
| Department of Veterans Affairs.....            | 0               | 2         | 2        | 4     |
| Total.....                                     | 27              | 26        | 31       | 84    |

Source: Data obtained in a review of Federal funding sources for adult education as reported in *Study of Federal Funding Sources and Services for Adult Education: Final Report*.

**Table 11. Adult Education Funds Obligated by Program Type and Number of Programs, Fiscal Years 1986 through 1989**

| Program Type                 | Funds Obligated <sup>a</sup> and Number of Programs |        |               |        |               |        |               |        |         |
|------------------------------|---|--------|---------------|--------|---------------|--------|---------------|--------|---------|
|                              | FY 1986 Funds                                       | Number | FY 1987 Funds | Number | FY 1988 Funds | Number | FY 1989 Funds | Number | Total   |
| Primary.....                 | \$131.6   | 9      | \$147.6       | 12     | \$171.3       | 14     | \$215.0       | 20     | \$665.4 |
| Secondary <sup>b</sup> ..... | 0.3   | 1      | 1.0           | 3      | 0.6           | 1      | 19.4          | 5      | \$21.3  |
| Indirect.....                | 0.6   | 3      | 0.7           | 2      | 6.5           | 3      | 12.7          | 6      | \$20.5  |
| Total .....                  | \$132.4   | 13     | \$149.3       | 17     | \$178.4       | 18     | \$247.1       | 31     | —       |

<sup>a</sup> Funds obligated are in millions.

<sup>b</sup> The monies obligated by the majority of secondary programs for adult education activities are not reported and thus are not listed in the table. However, the overall amount of monies obligated for a number of the secondary programs not listed above is as follows: FY 1986: (17 programs) \$3.8 billion; FY 1987: (17 programs) \$4.8 billion; FY 1988: (21 programs) \$5 billion; FY 1989: (21 programs) \$4.9 billion. It is clear that even if a small percentage of these funds were spent for adult education, the total amount obligated would increase substantially.

Source: *Study of Federal Funding Sources and Services for Adult Education: Final Report.*

to ensure successful school-employer partnerships, according to a report produced by the Department of Labor.<sup>8</sup>

The report presents the findings of a study of several successful school-employer partnerships throughout the country. The programs are characterized by diverse types of participants, training designs, population sizes, and geographic distribution. The publication offers guidelines on how to set up such partnerships based on how these effective programs were planned, organized, operated, promoted, and funded.

### Features of Successful Partnerships

The publication lists eight key factors that are important in establishing and maintaining successful school-employer partnerships, as follows.

- Partners should develop a clear, shared vision of intended outcomes and should be particularly sensitive to one another's individual objectives. When developing these objectives, it is important that the short- and long-term needs of each participating partner be served.
- Educators should adopt a private sector perspective. Evidence indicates that the educational partners in most successful programs tend to develop what may be termed a private sector perspective that empha-

sizes performance. They readily accept their role as the main service-providing player on the partnership team—with responsibility for carrying out learning mandates established by the partnership.

- Partners must recognize that creating strong partnerships inevitably requires a great deal of time. Much of this is *expensive* time because of the significant involvement and commitment required of upper-level managers, especially during the initial implementation phases. Continuous readjustments will be required throughout the life of the partnership in order to keep it operating efficiently.
- Partnerships must foster climates of negotiation and cooperation. Frequently, partnerships create independent oversight entities or seek the assistance of outside organizations to function as brokers. These third-party players can foster a win-win intention and reduce the appearance that any one partner is serving a vested interest.
- Developing the partnership around a single school or school system eases the burden of administration. While partnerships function effectively with an array of employer participants, it is advisable to limit educational participation to a single school district or system so only one educational entity is the point of contact for all partners, which facilitates communication.
- Employers of all sizes and types should be included in school-to-work partnerships. Large employers are usually better able to handle the added supervisory

<sup>8</sup> *School-to-Work Connections: Formulas for Success* (Washington, D.C.: U.S. Department of Labor, Employment and Training Administration, 1992). The study was conducted by CSA, Incorporated, of Washington, D.C.

responsibilities associated with school-to-work programs and generally have more on-the-job training slots to offer. Small businesses, on the other hand, often look to partnerships as a source of part-time workers. While students might not receive as much structured training within small-employer contexts, they generally gain more varied work experience. Smaller businesses also gain from partnership involvements by extending their influence and networks.

- Partnerships must foster open, honest, and frequent communication. The most successful partnerships are characterized by candid communication at all levels, often on a daily basis, regarding all aspects of program activity and policy. New ideas are routinely encouraged.
- Commitment must come from the very top levels of participating organizations. A genuine commitment to the matter of making the school experience more meaningful, more relevant, and more effective for all concerned must originate from the top levels of partner organizations. The commitment must grow both horizontally and vertically within all partner organizations. This may be the most important lesson learned from studying established programs.

### **Building Partnerships**

The report highlights several key steps involved in developing school-employer partnerships.

**Planning.** Partnerships may take two-to-three years to go from the conceptual stage to actual start-up; another two-to-three years for implementation, adjustment, and revision; and two more years before they generate significant outcomes. Planning should deal directly with the realities of existing circumstances and not be too conceptual. The partners should document their plans and ensure that plans include a commitment to accountability.

The report lists several key steps necessary to plan school-employer partnerships.

**Linking Learning with Work.** A guiding rule for successful school-to-work partnerships is that the more teachers can link their lessons and materials to actual work-site experiences, the more likely it is that programs will be successful. The best teaching strategy incorporates actual or highly simulated job-site operations into regular lessons.

Thus, in addition to linking reading, writing, and math to employment situations, teachers should incorporate lessons related to employability and life-coping skills (such as oral communication, taking directions, workplace attitudes, resolving conflict, accepting criticism, dealing with alcohol and drugs, and quality consciousness) and entry-level, job-specific occupational skills.

Four principles are offered which should be included in all school-to-work transition programs. These are the need to: (1) ensure that participants attain the same academic levels required of all high school graduates; (2) motivate youth to stay in school; (3) link classroom curriculum to work-site experience and learning; and (4) enhance participants' prospects for immediate employment after leaving school and opportunities for continued education and career development.

The report describes four conceptual models that have proven useful in structuring successful partnerships: (1) the Tech Prep Plus Model, which links the final two years of high school with a two-year community college program; (2) the Academy Model, which provides a special school-within-a-school at a regular four-year high school to ensure that all lessons are structured around an occupational theme; (3) the Work-Site Model, which moves students into a specialized industry-based school located at a work site; and (4) the Integrated Model, which incorporates aspects of each of the other three models and allows all students to take high-level, competency-based classes that link academic studies with structured work-site learning and experience.

The report also presents several ideas for incorporating job-related elements into school work.

**Solving Problems.** Problems should be confronted openly, fairly, and creatively. The most frequently encountered problems are:

- **Size Inefficiencies.** In many cases, partnerships are too small to maintain effective programs. Forming regional partner associations has proven to be a successful strategy in overcoming size problems.
- **Personality.** In order to ensure that partnership does not depend on the personality of a single individual, decision-making should be spread among many people.
- **Turf Conflicts.** Within individual partner organizations, disagreements can arise over issues such as the use of equipment or facilities. Between organizations that are partners, difficulties may be encountered when introducing the program to new organizations. The report offers a variety of ways to address many of the conflicts that may arise.
- **Demographic and Economic Changes.** Changes such as the varying number of students in grade levels from year-to-year, the growth of non-English-speaking populations, and shifts in the local economy from manufacturing to service-based industries need to be viewed by the partners as opportunities for improving and revitalizing the partnership.

**Funding and Promoting Programs.** Successful school-to-work programs combine resources from both public and private sources. All members of the partnership should

share the responsibility for finding and allocating resources, the report says, and it provides valuable information about how to develop a resource base.

In addition to securing funding, marketing successful programs is an important way to keep a partnership intact. Generating interest for programs and validating their benefits for clients, partners, and the community is the best way to demonstrate that these programs represent a wise investment by all involved. The report offers helpful guidance on how to do this and lists several of the specific benefits to be promoted for students, employers, schools, and other groups.

**Sources.** The report closes with a listing of publications that describe various aspects of school-business partnerships and brief descriptions of several successful business-school partnership programs. These programs are: (1) high school-level programs—Los Angeles Adult Regional Occupational and Skills Center, Calif.; Louisville Education and Employment Partnership, Ky.; Philadelphia High School Academies, Pa.; The Portland Investment, Ore.; Cooperative Federation for Educational Experiences, Oxford, Mass.; St. Louis Off-Campus Work/Study Program, Mo.; and Student Apprenticeship Linkage Program in Vocational Education, Huntsville, Ala.; and (2) post-high school level programs—Joint Urban Manpower Program, Inc., New York, N.Y.; Southeast Institute of Culinary Arts, St. Augustine, Fla.; and Apprenticeship and Nontraditional Employment for Women, Renton, W. Va.

## LABOR MARKET STUDIES OF SPECIFIC GROUPS

The Employment and Training Administration continued to sponsor research throughout the reporting period which provided insight into the labor market experiences of various groups.

During the program year, the Department released two reports that describe research efforts in the area of youth. The first study summarizes findings on the implementation of the JOBSTART demonstration project, which was designed to improve the educational attainment and employment of young people. The second study, summarized in a two-volume report, describes 10 youth programs, identifying the types of programs, services, and techniques that best prepare young people for jobs.

In addition to these youth studies, the Department published the results of other targeted studies during the year. These were an examination of the decisions of employers to train low-wage workers and a report that describes the efforts of 10 State teams of human resource policymakers to improve the well-being of children and families at risk.

## Youth

### Help for Dropouts

More than ever, high school dropouts with poor skills are unable to move from adolescence to employment and self-sufficiency. In fact, in 1990, only about one-half of all 16- to 24-year-olds who had not completed high school and were not enrolled in some type of education program were working.

An interim study of the implementation of JOBSTART, a demonstration that tested a combination of basic education, occupational skills training, support services, and job placement assistance for young school dropouts who read below the eighth grade level, indicated that young people who participated in the program were twice as likely to receive a high school diploma or GED when compared to a control group.<sup>9</sup>

The report, the third of four analyzing the JOBSTART demonstration, summarizes findings on the implementation of the program and presents information (based on two years of followup) on the difference that the program made in educational attainment, employment, welfare receipt, and other outcomes of participants. The final report, based on four years of followup, will present a more complete picture of program impacts.

### The JOBSTART Demonstration

JOBSTART began between 1985 and 1988 in 13 sites<sup>10</sup>, with operating funds provided primarily through State and local JTPA resources. JOBSTART offered services similar to the Job Corps, but in a nonresidential environment.<sup>11</sup> The program targeted youth ages 17 to 21 who were economically disadvantaged school dropouts reading below the eighth grade level and were eligible for JTPA Title II-A programs or the Job Corps. The four major program components are:

<sup>9</sup> George Cave and Fred Doolittle, *Assessing JOBSTART: Interim Impacts of a Program for School Dropouts* (New York, N.Y.: Manpower Demonstration Research Corporation, 1991).

<sup>10</sup> The 13 sites were: Allentown Youth Services Consortium (later named The Clarkson Center, Inc.), Buffalo, N.Y.; Atlanta Job Corps, Ga.; Basic Skills Academy, New York, N.Y.; Capitol Region Education Council, Hartford, Conn.; Center for Employment Training, San Jose, Calif.; Chicago Commons Association's Industrial and Business Training Programs, Ill.; Connelley Skill Learning Center, Pittsburgh, Pa.; East Los Angeles Skills Center, Monterey Park, Calif.; El Centro Community College Job Training Center (later named The Edmund J. Kahn Job Training Center), Dallas, Tex.; Emily Griffith Opportunity School, Denver, Colo.; Los Angeles Job Corps, Calif.; Phoenix Job Corps, Ariz.; and SER/Jobs for Progress, Corpus Christi, Tex.

<sup>11</sup> For more information about services offered to Job Corps participants, see the section on the Job Corps in Chapter 1 of this publication.

- Instruction in basic academic skills based on individualized curricula chosen by the local JOBSTART programs to allow participants to proceed at their own pace toward competency goals in reading, communication, and basic computational skills.
- Occupational skills training, generally provided in a classroom setting, which combines theory and hands-on experience to prepare participants for jobs in high-demand occupations.
- Training-related support services, including transportation and child care assistance, counseling, and, where possible, additional support, such as work-readiness and life-skills training, as well as needs-based or incentive payments tied to program performance.
- Job placement assistance designed to help participants find training-related jobs.

JOBSTART sites were required to offer at least 200 hours of basic education and at least 500 hours of occupational training.

Based on a research sample of 1,839 youths, the researchers focused on four areas. These were participant recruitment, implementation, participation, and the impact of the program on participants.

### Recruitment

Several aspects of JOBSTART recruitment practices were investigated: (1) the recruitment of the intended target group; (2) the differences between participants in JOBSTART and in other programs; and (3) observable education, employment, or other differences that appear in subgroups of youths (i.e., men, women living with their children, other women) who participated in JOBSTART and that would explain differences in their participation.

The study found that with considerable effort, the sites recruited the poorly skilled, economically disadvantaged young people that made up the intended target group for the demonstration. Further, among JOBSTART youth, women living with their own children had noticeably weaker ties to employment than did other women or men.

### Implementation

In looking at JOBSTART implementation, the researchers found that:

- Most sites were able to put the JOBSTART program model in place, although sites varied considerably in the intensity of their services and the way the services were offered.
- Sites successfully implemented the JOBSTART basic education component, although they varied in educational emphasis.
- Despite great variation in course offerings among the sites, JOBSTART participants generally studied occupations with skill requirements comparable to those for adults served within JTPA nationwide.

- All sites provided transportation and child care assistance, but the availability of other training-related support services varied greatly.
- The job placement component of the program was the least developed in many sites. Participants leaving JOBSTART before completing the curriculum received relatively little aid in finding a job.

### Program Participation

An important aspect of the investigation of JOBSTART included the attempt to determine if young people would invest their time and effort by actively participating in the program. The researchers found that:

- Young people in the experimental group attended an average of more than 400 hours of group activities. This was high compared to the experience of many other JTPA-funded programs. However, a large number of JOBSTART participants did not acquire the skills needed to pass the GED examination and did not participate long enough to complete an occupational training course.
- Differences in participation were associated with choices made at the site level to offer concurrent versus sequential education and training, and to house all services on-site rather than refer youth elsewhere for training.
- Participation was similar among key demographic groups.

Table 12 shows the participation rates, hours of participation, and length of stay for JOBSTART participants.

### Program Impacts

Young people in the JOBSTART evaluation sample could have improved their skills by participating in JOBSTART (experimentals), or participating in other education and training programs or learning on the job (controls). Program impacts are measured by comparing the experiences of the experimental and control groups over a period of time. Researchers found that:

- Program participants were nearly twice as likely as those in the control group to have participated in some type of education or training. However, nearly one-half of all controls also received some education or training.
- JOBSTART led to a doubling of the rate of GED certification or receipt of a high school diploma, from 16.5 percent of the control group to 33.1 percent of the experimental group.
- The large educational attainment impacts for participants were present for many different subgroups in the sample.
- More young people in the control group than in the experimental group worked during the first year of

**Table 12. Participation Rates, Hours of Participation, and Length of Stay for JOBSTART Participants**

| Activity Measure  | Experimentals |
|---|---------------|
| Percent participating in:                                   |               |
| Any activity .....  | 88.7          |
| Education .....   | 85.9          |
| Training .....  | 66.6          |
| Education and training .....                                | 64.4          |
| Other activities .....                                      | 40.0          |
| Average hours in:   |               |
| Education .....   | 128.1         |
| Training .....  | 248.9         |
| Education and training .....                                | 377.0         |
| Other activities .....                                      | 37.3          |
| All activities .....  | 414.8         |
| Percentage distribution of hours in education and training: |               |
| None .....  | 11.9          |
| Up to 200 .....   | 33.2          |
| 201 to 500 .....  | 22.4          |
| 501 to 700 .....  | 15.5          |
| 701 or more .....   | 17.0          |
| Total .....   | 100.0         |
| Percentage distribution of hours in all activities:         |               |
| None .....  | 11.3          |
| Up to 200 .....   | 28.6          |
| 201 to 500 .....  | 25.5          |
| 501 to 700 .....  | 15.2          |
| 701 or more .....   | 19.5          |
| Total .....   | 100.1         |
| Length of stay (months):                                    |               |
| Average .....   | 6.8           |
| Median .....  | 6.0           |
| Percent still participating in month:                       |               |
| 3 .....   | 78.0          |
| 6 .....   | 53.6          |
| 9 .....   | 30.6          |
| 12 .....  | 16.4          |
| 15 .....  | 9.6           |
| 18 .....  | 4.8           |
| 19 or later .....   | 3.7           |

Note: Calculations for this table used data for all experimentals for whom there were 24 months of followup survey data, including those with values of zero for outcomes and those who were assigned to JOBSTART but did not participate. Distributions may not total 100 percent because of rounding.

Source: Manpower Demonstration Research Corporation as reported in *Assessing JOBSTART: Interim Impacts of a Program for School Dropouts*.

followup. In the second year of followup, the proportions were not significantly different.

- Young people in the experimental group earned significantly less than those in the control group in the first year of followup. In the second year, the gap between experimentals and controls narrowed and was no longer statistically significant.
- There were early differences among key subgroups of program participants. For men, earnings impacts were negative throughout the two-year followup period, while for women there were signs of a favorable trend in earnings.
- The employment experience of the controls in the three subgroups studied (men, women living with their own child or children, and women not living with their own child or children) provided much of the explanation for the pattern of impacts among the groups. One likely explanation for better employment results for women was that it is easier to improve the employment and earnings of those who do not spend much time in the labor force (for example, young mothers) than of those already in the labor force who fail to find and keep steady, well-paying jobs.
- The occupational distribution of training for men and women in JOBSTART may have also contributed to differences in program impacts. The researchers suggested that it may be more difficult to place men in jobs that reward a GED.
- During the first 24 months of followup, JOBSTART had no statistically significant impacts on a variety of other outcomes, including receipt of most public benefits, childbearing, fathering of children, provision of child support (by noncustodial parents), and criminal arrests.
- There was no clear pattern of program impacts among the 13 sites that would support conclusions about the effect of the varying program characteristics on program impacts.

### **Connecting Youth to the Labor Market**

A two-volume report which presents findings of 10 studies of youth programs provides insight into: (1) the type of programs, services, and techniques that best prepare young people for jobs and careers; (2) strategies of governance and management that offer the greatest opportunity for effective delivery of training and employment services for young people; and (3) factors regarding youth, their environment, and the labor market that must be addressed in providing these services.<sup>12</sup>

<sup>12</sup> *Dilemmas in Youth Employment Programming: Findings from the Youth Research and Technical Assistance Project - Volume I and Volume II* (Philadelphia, Pa.: Public/Private Ventures, and Waltham, Mass.: Brandeis University, 1992).

The report was prepared in response to the Department's effort to gather information about what is known in the field of youth employment and training programs, to view current knowledge clearly and realistically, and to use it to develop better policies for the future. The researchers, working with an advisory group of research experts and program practitioners in the youth employment field, identified for study the three broad areas listed above. Within these broad areas, specific topics were selected for investigation. Each of the 10 research papers responded to one of the following topics.

#### ***Programs, Services, and Techniques***

1. Effectiveness of youth employment training strategies
2. Supportive services in youth employment programs
3. Program length and sequence
4. Educational skills
5. The school-to-work transition

#### ***Governance and Management***

6. Program coordination and collaboration
7. Performance measures and standards
8. National laws and local programs

#### ***Youth, Their Environment, and the Labor Market***

9. Youth in the nineties
10. Youth and the labor market

Volume I contains the five papers that deal with issues related to program services and techniques. Volume II contains the three papers on program governance and management, and the two papers on youth and the labor market. Both volumes include a bibliography of the literature reviewed by the researchers during the course of the project.

Most of the papers were prepared using similar guidelines and formats in which the general topic was identified and elaborated on and then analyzed. Evidence and research from allied fields were incorporated and conclusions and recommendations presented. The following is a summary of the major findings of the papers.

#### **The Current State of Knowledge**

The point most consistently raised in the papers concerns the limitations of current knowledge in the area of youth training and employment. Eight of the 10 papers reported a scarcity of data and reliable research on which to base conclusions about the best directions for future policies and programs. Many of the researchers noted that, in part, the limitations in knowledge stem from limitations inherent in evaluation methodology. Because net impact evaluation is expensive and deals with relatively few issues in depth, few programs benefit from such evaluations. Several papers also noted that information about disadvantaged youth populations was scarce.

### **Program Effectiveness**

The existing research on the training strategies, program structures, and supportive services attempted in the past may support the conclusion that many programs for youth may not result in a long-term impact on participants.

### **Reasons for Limited Program Effectiveness**

Several papers pointed out that limited program effectiveness may be the result of the seriousness of the problems faced by youth who participate in the programs. Some authors concluded that the multiple problems of poverty, inadequate housing, dysfunctional families, and poor education have very negative effects on young people who are drawn to employment and training programs. Limitations in knowledge about which programs work, and for whom, make it difficult to determine how programs might better respond to the needs of young people who face multiple problems.

### **Strengthening Program Effectiveness**

Although many authors argued that programs that combined a range of strategies and services probably offered the best prospect for providing effective services for youth, they were not able to offer firm recommendations about what particular combinations of services should be provided because of the limited information on combining training strategies and support services. Three papers explored issues related to multiple-strategy interventions and how they might be tested.

Because cost may be one possible obstacle to the multiple-service approach, one approach to more effective services may be an increase in the coordination of service agencies, particularly, closer linkages with programs sponsored by the Department of Education.

### **Potential of Work Experience, Funding Needs**

The researchers point out that the U.S. approach to employment and training has mainly centered on skills training and instruction on how to fill out resumes, seek jobs, and behave properly in the workplace. Work experience has a reputation that is, at best, mixed, and often negative. This clouded reputation has extended to work experience programs for youth.

Some evidence regarding the benefits of work experience from youth employment program evaluations has been negative, although some researchers during the last decade have suggested the need to examine the quality, quantity, and developmental potential of work experience programs more carefully. Some researchers suggest that work experience can be an important tool for building more capable workers when viewed in the context of school-to-work transition efforts.

Although none of the papers address the issue of funding needs and availability directly, a number touch on the issue of whether the level of funding is sufficient to meet the needs of youth—especially the need for multicomponent approaches to youth employment and training.

### **Highlights of Volume I Papers**

Paper No. 1, "Effectiveness of Federally Funded Employment Training Strategies for Youth," examines the findings from several program evaluations: a review of 28 Youth Employment and Demonstration Projects Act research projects, an analysis of the Continuous Longitudinal Manpower Survey, and research on the California Conservation Corps, JOBSTART, and the Summer Training and Education Program (STEP). The authors conclude that the knowledge of program effectiveness produced from these research and demonstration projects is of limited value to either the policy or the practice of youth employment training.

Paper No. 2, "Supportive Services for Youth," discusses the purposes of, need for, and possible impact of supportive services on youth in employment and training programs. Fourteen employment and training programs or projects are reviewed. It also compares the objectives and content of supportive services found in employment and training programs with those in nonemployment and training programs (i.e., juvenile justice and delinquency programs, homeless and runaway youth programs, and adolescent pregnancy programs). The paper concludes that the role of supportive services in employment and training programs has been supplementary; nonemployment and training programs are more likely to view supportive services as essential. Interagency dialogue is advocated to address the multiple supportive service needs of disadvantaged youth.

Paper No. 3, "Structure and Sequence: Motivational Aspects of Programmatic Structure in Employment and Training Interventions for Disadvantaged Youth," investigates the problem of attrition from youth employment and training programs by examining the structural variation of such programs. Findings from 15 sites in four employment and training demonstrations (Minority Female Single Parent, Supported Work, JOBSTART, and STEP) and two independent programs (the California Conservation Corps and the New York City Volunteer Corps) were surveyed. The researcher suggests broadening the range of professional disciplines involved in program planning and concludes that knowledge from academic psychology should be considered in designing second-chance programs because of its potential to reduce attrition rates for youth facing multiple problems.

Paper No. 4, "Critical Skills for Labor Market Success: What Are They and How Can At-Risk Youth Acquire

Them?" reviews literature about skills required to enter productive employment (core academic skills and a broader range of competencies). It concludes that policy efforts should be directed toward a preventive rather than a remedial approach (i.e., the focus should be on school retention now, rather than remediation later). The paper suggests that when remediation is needed, more effective strategies for providing it should be identified.

Paper No. 5, "School-to-Work Transition: Failings, Dilemmas and Policy Options," presents an in-depth historical analysis of the past three decades of school-to-work transition as a policy issue. It suggests that an effective school-to-work transition system requires transitional assistance, increased employer involvement, and an expanded system of post-high school training opportunities for noncollege youth. The paper outlines three major approaches for improving the school-to-work transition—reform of basic education; reform of vocational education; and the development of employment and training programs for youth.

### Highlights of Volume II Papers

Paper No. 6, "Coordination, Collaboration and Linkages," reviews the literature about the dynamics and outcomes of service coordination, and provides an analytic framework to organize what is known about the dynamics and outcomes of the coordination process. The paper suggests that Federal, State, and local agencies seeking to coordinate services must gain an understanding of: (1) the technical and nontechnical barriers that retard entry into collaborative relations; (2) the strategies employed to overcome these barriers; and (3) the extent to which efforts to promote coordination succeed in changing organizational relationships and lead to improved quality, accessibility, and/or cost-effectiveness of services to young people.

Paper No. 7, "Performance Standards and Performance Management," provides an overview of the history of the JTPA performance standards system, outlines its key elements, and discusses the shift in the role of standards from accountability to performance management. The paper discusses the effectiveness of the system as an accountability tool and concludes that performance standards have unintentional effects (i.e., they may encourage less-intensive services as well as reduced services to the hard-to-serve population). It also provides a brief examination and assessment of recent changes to performance management systems in the business, health care, and education fields.

Paper No. 8, "The Mission and Structure of National Human Resource Policy for Disadvantaged Youth: A Synthesis with Recommendations," presents an historical overview of U.S. youth training and employment policy. It uses a political science framework to elaborate on the

way in which choices of scope, distribution, policy instruments, restraint, and innovation affect training and employment systems. It also provides information about youth training and employment systems in other industrial nations.

Paper No. 9, "Youth in the Nineties: Recent Trends and Expected Patterns," examines the social and demographic characteristics of the youth population and the implications of these characteristics for future policy. It reviews evidence regarding the merits of part-time work for in-school youth, suggesting that there are benefits for those who work a maximum of 20 hours a week and that school-to-work linkages be built into second-chance programs, although in order to be effective, such programs must address the multitude of family and other environmental influences that affect youth at an early age.

Paper No. 10, "Youth and the Labor Market in the Nineties," examines the changes in supply and demand that have occurred in the labor market over the past two decades and evaluates the effects of these changes on the employment prospects of young people. The paper suggests that a mismatch might have evolved between the skills and experiences of many youth and the requirements of the current job market. It presents information about wage inequality among young workers and offers possible explanations for the sharp deterioration in income and labor force activity for high school dropouts and black youth. Because apprenticeship and on-the-job training opportunities are limited, the paper says reducing the high school dropout rate must be a priority.

### Other Targeted Studies

#### Training Low-Wage Workers

Economic forecasts suggest that an increase in the complexity of many jobs will require that workers in the low-wage labor market obtain greater skills. As a result, many employers may need to train unskilled or low-skilled workers in the years ahead.

A study used theoretical models to help understand employer decisions to train low-wage workers. It confirmed that because many low-wage employers do not expect their workers to remain with their firms for a long time, they often provide only short-term, job-specific training.<sup>13</sup>

The highly technical report presented findings from literature that investigated various aspects of employer decisions regarding the amount and length of training for their workers.

A model was also developed which expanded on the previously developed Basic Human Capital Model. The

<sup>13</sup> James L. McIntire, *The Employer's Decision to Train Low-Wage Workers* (Seattle, Wash.: University of Washington, 1992).

new model took into account several additional factors that affected a firm's decision to train workers. These factors included a variety of firm-specific characteristics and the nature of the external labor market.

Because few sources of firm-specific data on training practices existed, the study included an analysis of data from various unemployment insurance tax records and a random sample of over 500 low-wage employers in Washington State. Study findings include:

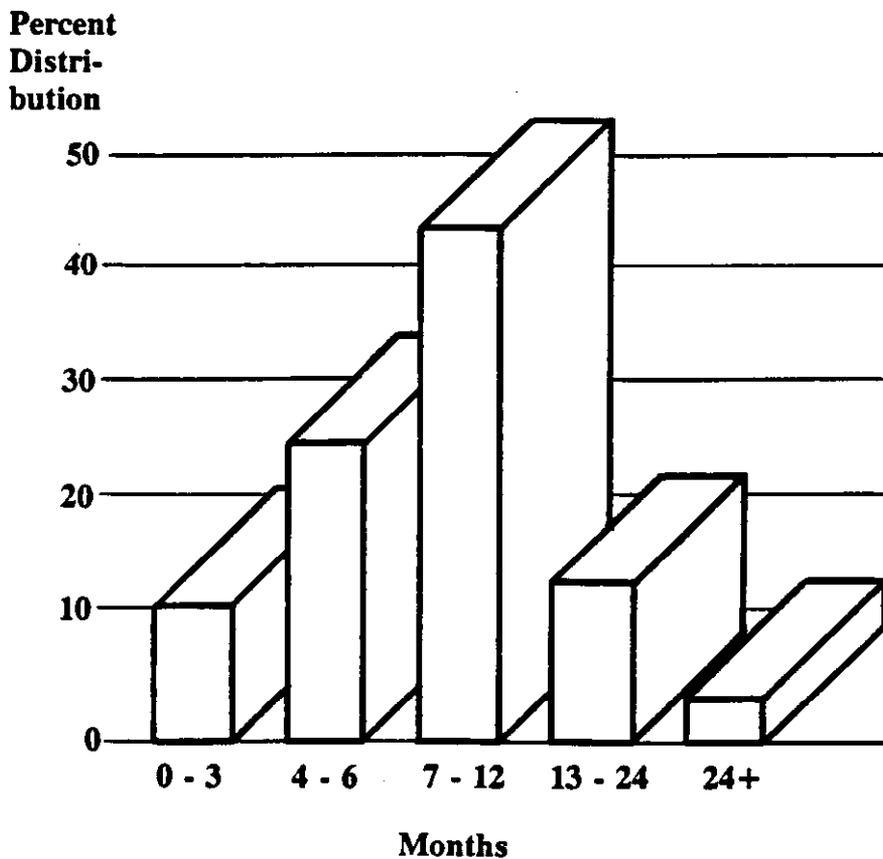
- Low-wage employers often have limited expectations for the length of time their low-wage workers will remain with their firms. Thus, they often provide relatively short-term, firm- or job-specific training. Chart

13 shows the expected number of months of tenure for low-wage workers. As the chart indicates, over 80 percent of the employers of low-wage workers expect their new hires to work no more than 12 months.

- The socially optimal level of training is often not provided because of high turnover of low-wage workers.
- Increases in minimum wage levels are found to diminish the level of employer-provided training, but not as much as previously expected.
- Because employers often provide limited training for low-wage workers, emphasis on the role of schooling and vocational training is especially important.

**Chart 13. Expected Months of Tenure With the Firm**

**Percent Distribution of Firms, 1990**



Source: Institute for Public Policy Management, as reported in *The Employer's Decision to Train Low-Wage Workers*.

- Demographic trends can be expected to raise pressures for employer-provided training in the future, and employers might use training cooperatives to achieve a more efficient level of training with little public investment.
- Basic employment skills training programs should focus more attention on job search skills, emphasizing the value of gaining access to employer-provided training over the level of starting wages.

## Supporting Families

Experience with JTPA and welfare reform indicates that State and local programs and policies should be developed and coordinated to increase self-sufficiency for disadvantaged families. In 1989, the Council of Governors' Policy Advisors (CGPA) began conducting a special project to support State governments in their attempts to improve family well-being.<sup>14</sup>

A report on the activities of the CGPA's Policy Academy on Families and Children At Risk: (1) describes the Family Academy and its purpose; (2) reviews the results of the efforts of Family Academy teams established in 10 States; (3) discusses several challenges associated with collaborative, strategic policy development, and how States met these challenges; and (4) provides guidance to Governors who are considering creating a task force, council, or commission to design policies to help improve outcomes for people in health, education, training and employment, self-sufficiency, and family functioning.<sup>15</sup>

### Policy Academy Goals and Structure

The Policy Academy on Families and Children At Risk was designed to bring together national experts on child and family policy, poverty issues, strategic planning, and public accountability to work with teams of decision-makers from 10 States.<sup>16</sup> The goal of the Academy was for the individual State teams to develop a set of integrated, statewide, outcome-oriented policies that would

<sup>14</sup> In 1989, CGPA, in collaboration with the National Governors' Association, the American Public Welfare Association, and the Council of Chief State School Officers, received funding for its Policy Academy on Families and Children At Risk from the U.S. Departments of Labor and Health and Human Services, the ARCO Foundation, the Ford Foundation, the Foundation for Child Development, the Charles Stewart Mott Foundation, the AT&T Foundation, the Irving Harris Trust, and United Way of Maryland. The Department was the largest single contributor to the Academy.

<sup>15</sup> Judith K. Chynoweth, *Report on Policy Academy on Families and Children At Risk* (Washington, D.C.: Council of Governors' Policy Advisors, 1992).

<sup>16</sup> The States were Arkansas, Colorado, Illinois, Iowa, Maryland, New York, North Dakota, Oregon, Texas, and Washington. The States were selected competitively.

guide public and private efforts in their States to help at-risk families.

Each State team included representatives from the Office of the Governor as well as senior-level administrators from State agencies of employment and training, human services, community development, and health. Experts on family policy and related topics consulted with the teams in four-day work sessions held in December 1989, March 1990, and June 1990 and in State visits that implemented policies developed in the work sessions. In these sessions, each team:

- Envisioned a specific future for the families and children in its State;
- Assessed problems and opportunities for families;
- Agreed on outcome-oriented goals and objectives;
- Assessed alternative approaches for achieving results;
- Developed a multiyear implementation plan;
- Constructed components of an accountability system that specified outcomes and indicators; and
- Developed strategies for broad-based support.

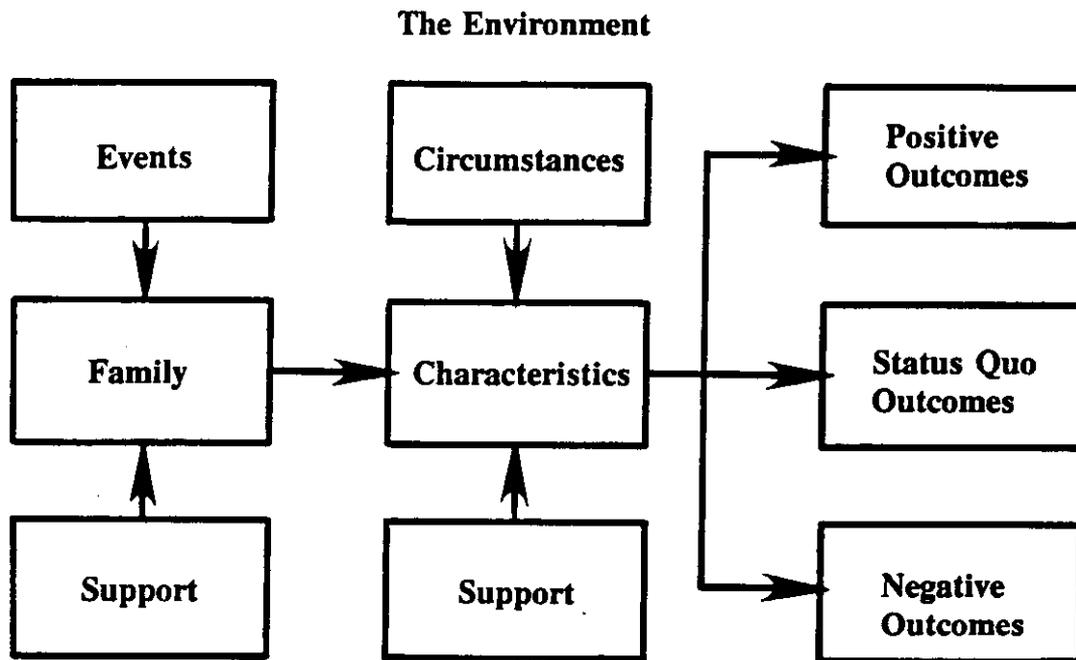
The CGPA and its faculty provided the State teams with a framework for thinking about troubled families that helped the teams: (1) better understand the nature and causes of family problems; (2) gather and analyze family data from new sources; and (3) design statewide system-changing strategies to improve family well-being. An important part of this framework consisted of establishing a definition of a family and an analysis of how the balance of negative and positive factors for a family and its members change over time, as do family environments (see Chart 14).

### Results of the Policy Academy

As a result of the Family Policy Academy's activities, 10 different statewide experiments were initiated to test policies for improving family well-being. These policies had several similar characteristics, including an emphasis on family problems as opposed to individual problems, a focus on the community as the center of effective action, and presupposition of a State commitment to make fundamental changes in the major systems governing family services. Five major strategies emerged from these experiments:

- Improve State-level coordination and use State resources to promote innovation and information exchange;
- Through legislation, budgeting, and program practices, promote changes in State and local service delivery systems;
- Promote fundamental changes in the relationship between State and local governments and/or local service providers—notably by permitting greater local flexibility of program management;

Chart 14. The Family Over Time



Source: Family Academy Advisory Committee, as reported in *Report on Policy Academy On Families and Children at Risk*.

- Develop outcome-oriented accountability systems—an equitable tradeoff for the greater program flexibility permitted; and
- Ensure that families have ready access to an integrated array of services rather than to loosely coordinated categorical programming.

#### Identifying Challenges and Guidelines for Results

As part of its design, the policy academy process identified five factors that had an impact on how effective a State team would be in collaborative, strategic policy development and implementation. These factors are the policy development process, team composition, team dynamics, State political conditions, and State fiscal conditions.

In addition to identifying factors for success, the CGPA (based on eight years of experience with policy academies on such subjects as school dropout prevention and adult literacy) offered several questions to be considered by Governors, their staffs, and other State policymakers who

were thinking about the creation of policy-development bodies. These were:

- What are the major problems?
- Where does the Governor get information for decision-making?
- Who should plan and develop policies, and when?
- How is collaborative, strategic policy developed and implemented?
- How do policy efforts grow and change?
- When is the process completed?

The report includes an appendix listing State team participants, as well as individuals who served on the Advisory Committee for the Family Policy Academy.

#### PROGRAM DEVELOPMENT AND IMPROVEMENT

During the *Report* period, the Department released three publications that provide insight into various aspects of

JTPA programs. One report, *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months*, provides interim estimates of the impact of Title II-A on the employment and earnings of adults and out-of-school youth in 16 local JTPA Service Delivery Areas during the first 18 months after their acceptance into the program.

Another JTPA report released during the *Report* period covers the first phase of a three-year study of the implementation of the Economic Dislocation and Worker Adjustment Assistance program, which replaced the original Title III of JTPA in July 1989.

The Department also released five reports from various studies of the Nation's unemployment insurance system. These were a study of whether self-employment efforts can help UI recipients, an investigation of the effectiveness of reemployment bonuses for UI claimants, a study of the influence of UI on employer layoffs, a review of different work-search policies for UI recipients, and an overview of several demonstrations that use expert system software for processing UI claims.

## **Job Training Partnership Act**

### **Title II-A Impacts**

For almost three decades, the Federal Government has sponsored job training programs for unemployed and economically disadvantaged people. The largest component of the largest current program, Title II-A of JTPA, is designed to serve the employment and training needs of economically disadvantaged adults and youth ages 16 to 21.

According to an interim report of the National JTPA Study, programs authorized under Title II-A had a positive impact on the earnings and employment of adults; however, except in the area of educational attainment, the findings regarding the impact of the program on out-of-school youth were not encouraging.<sup>17</sup>

The study was initiated by the Department in 1986 to measure the impacts, costs, and benefits of selected Title II-A employment and training programs. In 1992, the study provided estimates of program impact on the earnings and employment of adults and out-of-school youth in 16 local JTPA Service Delivery Areas during the first 18 months after their acceptance into the program.<sup>18</sup>

<sup>17</sup> Howard S. Bloom, et al., *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months* (Bethesda, Md.: Abt Associates, Inc., 1992).

<sup>18</sup> Estimates of longer-term program impacts on earnings, employment, and welfare benefits, and an analysis of program costs and benefits, will appear in the final report of the study. A companion report on the implementation of the study describes the JTPA programs operated in the study sites and the types of JTPA-funded services provided to members of the study sample.

## **Study Methodology**

Because of its rigorous design, the National JTPA Study provided the first reliable estimates of the impact on program participants of the Nation's largest federally funded training and employment program. Based largely on the recommendations of a Job Training Longitudinal Survey Advisory Panel—a group of nationally recognized experts in employment and training research formed to advise the Department on the evaluation of JTPA—the study examined program applicants who were randomly assigned either to a treatment group (which was allowed to access JTPA programs) or to a control group (which had no access to JTPA programs).

In the study, 20,601 JTPA Title II-A applicants in 16 Service Delivery Areas across the country<sup>19</sup> were randomly assigned to one of these two groups over the period November 1987 through September 1989. The study compared the subsequent earnings, employment, and welfare receipt of these two groups to obtain estimates of the impact of the programs. SDAs were recruited for the study based on their diversity, willingness to participate, ability to implement the experimental design, size of the experimental sample they could provide, and likely composition of the experimental sample. The location of the study sites is shown in Chart 15.

## **Groups Studied**

The study focused on several different groups within the sample.

The first set comprised four main target groups of Title II-A: (1) economically disadvantaged adult women; (2) economically disadvantaged adult men; (3) female out-of-school youth; and (4) male out-of-school youth. The second set was made up of various groups defined by clusters of specific program services (or particular service strategies) that were recommended for them by SDA intake staff. These services included classroom training, on-the-job training/job search assistance (JSA), and other services. Finally, the study examined the impact of Title II-A programs on key subgroups which were identified by characteristics such as ethnicity and particular barriers to employment, such as welfare receipt, limited education, and limited work experience. The following are some highlights of the study's findings.

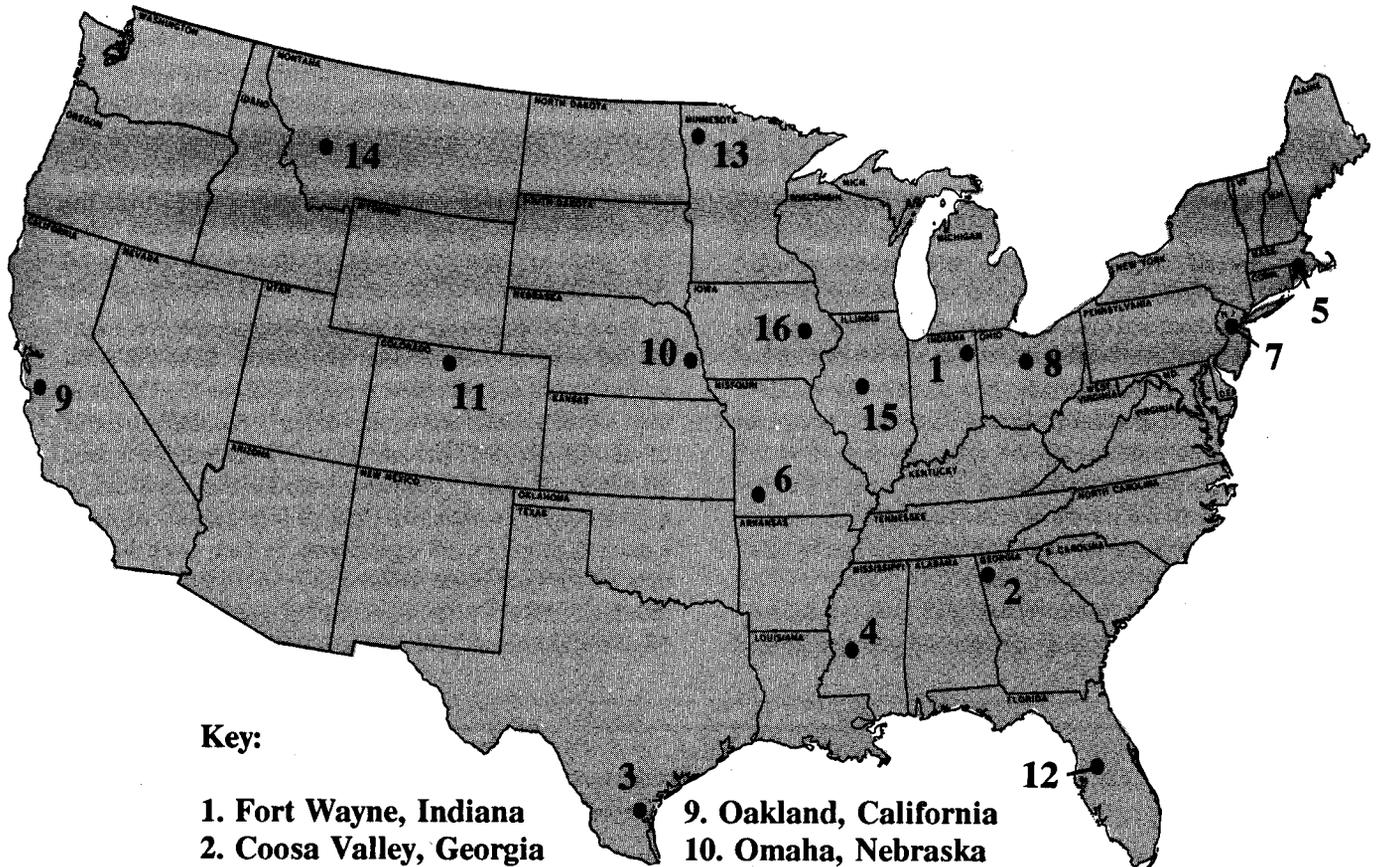
### **Adult Women**

The 6,607 adult women in the study sample were 22 years old or older when they were randomly assigned to

<sup>19</sup> The study sites were not representative of the Nation in a statistical sense, but they did reflect the diversity of local programs and local environments in JTPA. Specifically, the performance of the sites during the study period, as measured by JTPA performance indicators, was not noticeably different from that of all SDAs nationally.

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**Chart 15. Location of the 16 Study Sites**



**Key:**

- |                             |                              |
|-----------------------------|------------------------------|
| 1. Fort Wayne, Indiana      | 9. Oakland, California       |
| 2. Coosa Valley, Georgia    | 10. Omaha, Nebraska          |
| 3. Corpus Christi, Texas    | 11. Larimer County, Colorado |
| 4. Jackson, Mississippi     | 12. Heartland, Florida       |
| 5. Providence, Rhode Island | 13. Northwest Minnesota      |
| 6. Springfield, Missouri    | 14. Butte, Montana           |
| 7. Jersey City, New Jersey  | 15. Decatur, Illinois        |
| 8. Marion, Ohio             | 16. Cedar Rapids, Iowa       |

*Source: The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months.*

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either the control or the treatment group, with an average age of 33. Over half were white, 31 percent were black, and 11 percent were Hispanic. Over two-thirds had a high school credential upon application to JTPA, and 86 percent had worked before (although few were employed when they applied to the program). Forty-four percent

were recommended by JTPA intake staff to receive classroom training, 35 percent were recommended for OJT/JSA, and 21 percent were recommended to receive other services.

**Earnings.** The study found that the treatment group—those women in the sample who had access to JTPA—

consistently had higher average monthly earnings than the control group. For the group of women who received JTPA services, average monthly earnings ranged from \$268 in the first followup month to \$521 in the eighteenth month. For the control group, average monthly earnings ranged from \$261 in the first followup month to \$478 in the eighteenth month. Over the entire 18-month period, earnings of adult women who received JTPA Title II-A services were estimated to average \$539 more than the control group. Table 13 shows the mean earnings of both the treatment and control groups over the 18-month period (by quarter), the difference in earnings between the two groups in dollars, and the percentage difference.

**Employment.** The study investigated three measures of the impact of Title II-A on the employment of adult women—the percentage employed, the average number of weeks worked, and the average number of hours worked during each followup quarter and for the 18-month period as a whole. The study found that participation in JTPA Title II-A also increased the percentage of women employed at some time during the followup period by 2.1 percentage points. The research indicated that Title II-A participation did not have a statistically significant effect on the average number of weeks or hours worked by adult women.

**Impact by Type of Services Received.** By investigating the average monthly earnings of adult women categorized

by three subgroups of services received—classroom training; OJT/JSA; and other services—the study revealed that the earnings of adult women assigned to OJT/JSA were significantly greater than those in the other two groups, although this might reflect the fact that program staff assigned the more employable applicants to this category. Earnings of adult women in all three categories who received JTPA services were greater than those in the control group at the end of the 18-month period.

**Ethnic Groups.** Among white, black, and Hispanic women, whites were the only group to experience a statistically significant impact on earnings as a result of program participation—with an estimate of \$723 over the 18-month followup period.

#### Adult Men

The 5,626 men in the 18-month study sample were ages 22 and older at their random assignment. Like the adult women in the sample, their average age was 33. The adult men also resembled the adult women in the study in terms of ethnicity, with 57 percent white, 29 percent black, and 10 percent Hispanic. However, the men had, on average, higher wages in their most recent job, as well as more extensive employment experience. In fact, over 90 percent of the men in the study had held a job in the past, although only 13 percent were employed when they applied for JTPA services.

**Table 13. Mean Earnings of Adult Women in Treatment and Control Groups, by Quarter**

| Quarter     | Mean Earnings          |                      | Impact on Treatment Group Earnings |                                       |
|-------------|------------------------|----------------------|------------------------------------|---------------------------------------|
|             | Treatment Group<br>(1) | Control Group<br>(2) | In Dollars<br>(3)                  | As Percent of (2) <sup>a</sup><br>(4) |
| 1 .....     | \$942                  | \$916                | \$26                               | 2.9                                   |
| 2 .....     | 1,205                  | 1,145                | 60*                                | 5.2                                   |
| 3 .....     | 1,353                  | 1,236                | 118***                             | 9.5                                   |
| 4 .....     | 1,442                  | 1,363                | 78**                               | 5.8                                   |
| 5 .....     | 1,529                  | 1,413                | 116***                             | 8.2                                   |
| 6 .....     | 1,555                  | 1,414                | 141***                             | 9.9                                   |
| Total ..... | 8,027                  | 7,488                | 539***                             | 7.2                                   |

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level (two-tailed test).

<sup>a</sup>Significance levels for this column are identical to those in column three.

Notes: Sample size, assignees = 4,376; control group = 2,098. Estimates are regression-adjusted to control for differences in baseline characteristics between the treatment group and control group.

Source: Estimates are based on first followup survey responses and earnings data from State UI agencies as reported in *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months*.

Like the women, over two-thirds of the men had a high school credential. Of a treatment sample size of 3,759 adult men, 24.6 percent were recommended by JTPA intake staff to receive classroom training, 48.7 percent were recommended for OJT/JSA, and 26.7 percent were recommended to receive other services.

**Earnings.** Average monthly earnings for adult men in the treatment group and control group were virtually the same during the first three of the 18 followup months. However, after that point, treatment group members, on average, consistently earned more than their control group counterparts.

For the adult men who received JTPA services, the average monthly income was \$493 in the first followup month and \$801 in the eighteenth month. For those who did not receive JTPA services, the average monthly income was \$501 in the first followup month and \$774 in the eighteenth month. For the entire 18-month period, earnings of adult men who participated in JTPA Title II-A programs averaged \$550 more than earnings of adult men who did not participate. Table 14 shows the impacts on earnings, by quarter, of those adult men in the study assigned to JTPA programs and of the control group of adult men.

Not all of the treatment group members actually enrolled in the program. Thus separate estimates of the impacts per JTPA enrollee were calculated by adjusting the

estimated impact per assignee, to account for the facts that 38.7 percent of all adult males who were assigned to the treatment group did not become enrolled in JTPA and 2.2 percent of adult male control group members enrolled in JTPA Title II-A programs (even though the experiment embargoed their enrollment). These estimates are shown in the last column in the table.

**Employment.** As with the adult women, the study investigated three measures of the impact of employment on adult men—the percentage employed, the average number of weeks worked, and the average number of hours worked for each followup quarter and for the 18-month period as a whole. The study found that participation of adult men in JTPA Title II-A programs increased their employment compared with the control group by 2.8 percentage points for assignees and by an estimated 4.8 percentage points for enrollees.

**Impact by Type of Services Received.** By investigating the average monthly earnings of adult men categorized by three subgroups of services received—classroom training; OJT/JSA; and other services—the study revealed that the largest and most consistent treatment-control group difference in earnings was in the OJT/JSA subgroup. Although the difference was negligible for the first several months of the 18-month period, after these first few months the treatment group earned consistently and substantially more, on average, than did the control group.

**Table 14. Impacts on Earnings of Adult Men in JTPA Title II-A Programs**

| Quarter     | Control Group Mean (1) | Impact per Adult Men in Treatment Group |                                   |  |
|-------------|------------------------|---|-----------------------------------|--|
|             |                        | In Dollars (2)                          | As a Percent of Control Group (3) | Inferred Impact per Enrollee in Mean Dollars (4) |
| 1 .....     | \$1,659                | \$17                                    | 1.1%                              | \$30   |
| 2 .....     | 1,925                  | 121*                                    | 6.3                               | 205  |
| 3 .....     | 2,073                  | 138**                                   | 6.7                               | 235  |
| 4 .....     | 2,196                  | 68                                      | 3.1                               | 115  |
| 5 .....     | 2,212                  | 103                                     | 4.7                               | 175  |
| 6 .....     | 2,242                  | 102                                     | 4.6                               | 174  |
| Total ..... | 12,306                 | 550                                     | 4.5                               | 935  |

\*Statistically significant at the .10 level; \*\*at the .05 level.

Note: Significance levels for column three are identical to those in column two. Tests of statistical significance were not performed for column four. Sample size, assignees = 2,980; control group = 1,439. Estimates are regression-adjusted to control for differences in baseline characteristics between the treatment group and control group.

Source: Estimates based on first followup survey responses as reported in *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months*.

**Ethnic Groups.** The study results did not indicate a consistent or statistically significant relationship between ethnic background and program impacts.

**Out-of-School Youth**

The study investigated the impact of Title II-A programs on out-of-school youth. The 4,793 out-of-school youth in the 18-month study sample were 16 to 21 years old when they were randomly assigned to either the treatment or control group. The average age of the youth sample was 19. Over 50 percent were white, 32 percent were black, and 15 percent were Hispanic.

While programs for adults emphasized employment as the positive outcome, programs for youth emphasized a broader range of outcomes which included not only job placements but participation in further training and attainment of specific job competencies.

Service strategy recommendations differed between female and male youth. Female youth were more likely than male youth to be recommended for classroom training (44 percent versus 30 percent, respectively) and less likely than male youth to be recommended for OJT/JSA (23 percent versus 33 percent).

**Impact on Educational Attainment.** An important aspect of Title II-A services for out-of-school youth is the effect of programs on educational attainment. The researchers point out that it is important to note that differ-

ences in the services received by youth in the treatment and control groups produced differences in the rate at which high school dropouts in these groups attained a high school diploma or GED certificate. Since half of the female youths in the study sample and three-fifths of the male youths were high school dropouts, impacts on their educational attainment are a significant result of Title II-A programs.

The study revealed that participation in Title II-A programs had a statistically significant impact on these youths' educational credentials. Among the treatment group members, 29 percent of the female youths and 24 percent of the male youths subsequently attained a training-related high school credential. Among corresponding control group members who were dropouts, 17 percent of the female youths and 14 percent of the male youths both enrolled in a school or training service and received a high school diploma or GED certificate at some time during the 18-month followup period.

Title II-A program participation also had a significant impact for male youth in all three service strategy subgroups (classroom training, OJT/JSA, and other services) and for female youth in the classroom training and other services subgroups—the two service strategy subgroups that focused most on basic education. The impact was particularly striking for female youth in the classroom training subgroup. Table 15 shows the impacts of Title II-A

**Table 15. Impacts on Attainment of a Training-Related High School Diploma or GED Certificate: Out-of-School Youth JTPA Assignees Who Were High School Dropouts, by Gender**

| Service Strategy Subgroup    | Female Youth             |          |                             | Male Youth               |          |                             |
|------------------------------|--------------------------|----------|-----------------------------|--------------------------|----------|-----------------------------|
|                              | Percent Attaining HS/GED |          | Impact in Percentage Points | Percent Attaining HS/GED |          | Impact In Percentage Points |
|                              | Assignees                | Controls |                             | Assignees                | Controls |                             |
| Classroom Training . . . . . | 32.9%                    | 16.6%    | 16.4***                     | 27.3%                    | 18.3%    | 9.0*                        |
| OJT/JSA . . . . .            | 9.8                      | 6.0      | 3.8                         | 14.9                     | 4.9      | 10.1***                     |
| Other Services . . . . .     | 31.7                     | 21.0     | 10.7**                      | 26.1                     | 16.9     | 9.1**                       |
| All Subgroups . . . . .      | 28.6                     | 16.6     | 11.9***                     | 23.9                     | 14.0     | 9.9***                      |

\*Statistically significant at the .10 level; \*\*at the .05 level; \*\*\*at the .01 level (two-tailed test).

Source: Study data as reported in *The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months*.

participation on the attainment of a training-related high school diploma or GED certificate for out-of-school youth, by gender.

**Earnings.** For the out-of-school youth studied, earnings differed from those for adults. For female youth, the estimated impact of Title II-A programs was negligible. The impact on male youth overall was substantially negative, although this was largely concentrated among those male youth who reported having been arrested between their eighteenth birthday and their random assignment to either the control or treatment groups.

**Impact by Type of Services Received.** For out-of-school female youth enrolled in Title II-A classroom training activities, impacts on earnings were negative during the first three followup quarters. The researchers point out that these initial losses in earnings probably reflected the earnings foregone by Title II-A program participants when they were attending classes. However, female youth in classroom training did not experience any significant increases in earnings later in the followup period. Hence, the earnings that female youth lost while participating in classroom training were not offset by a payback period—at least not by the end of the 18-month followup.

Female youth in the OJT/JSA subgroup experienced moderately positive impacts on their earnings initially (which may have reflected an initial boost in employment produced by on-the-job training, job search assistance, or both), but these short-run gains were not sustained over time. Program impacts on the earnings of female youth in the other services subgroup were negligible in all six followup quarters.

For out-of-school male youth in the classroom training subgroup, the results were essentially the same as those for their female youth counterparts—negative impacts in the first followup quarter (perhaps reflecting the costs of being in class instead of employed) and no earning increases large enough later to offset the initial earnings loss.

Participation in Title II-A programs had a negative impact on the earnings of male out-of-school youth in the OJT/JSA subgroup in all six followup quarters compared with the control group. The loss reflected mainly an estimated -8.5 percent program-induced reduction in the average number of hours worked by male youth—average hourly earnings among those who worked were largely unaffected by program participation.

Male out-of-school youth in the other-services subgroup also experienced a loss in earnings compared with the control group.

**Ethnic Groups.** The estimated program impacts on earnings for out-of-school youth did not vary systematically with the ethnic backgrounds of sample members or with the barriers to employment they faced when they applied to JTPA.

## Help for Dislocated Workers

Title III of JTPA authorizes employment-related services for people who lose their jobs because of plant closings or economic cutbacks.<sup>20</sup> These services are provided through the Economic Dislocation and Worker Adjustment Assistance program. The EDWAA program replaced the original Title III of JTPA and began operation in July 1989.

A report on the first phase of a three-year study of the implementation of the EDWAA legislation<sup>21</sup> provides information on the strengths and weaknesses of the new program. The study found that during the first year of EDWAA, considerable progress was made in furthering the objectives of the legislation. Specifically, services were available statewide in all States, most States responded to the objective of encouraging labor-management cooperation in appropriate and creative ways, and the emphasis on training resulted in the provision of retraining opportunities.

### EDWAA Background

The EDWAA legislation was built on a number of years of JTPA Title III program experience and addressed several issues which were of concern to Departmental policymakers. These included:

- An underexpenditure of available funds;
- An emphasis on short-term training rather than on longer-term retraining;
- The lack of capacity to provide rapid response to specific dislocations in many States; and
- The fact that the requirement for matching funds for federal training dollars did not result in additional services for dislocated workers.

In response to these concerns, a Secretarial Task Force on Economic Adjustment and Worker Dislocation in 1986 examined various dislocated worker issues and investigated approaches used by other countries to serve dislocated workers.

The Task Force proposed replacing JTPA Title III with a new federally supported and guided structure that would provide for State-administered training and reemployment assistance to meet the needs of all dislocated workers. Key features of the Task Force's proposal were incorporated in the EDWAA legislation which reflected seven themes comprising new federal goals for designing and operating dislocated worker services. These are:

<sup>20</sup> For additional information about dislocated workers, see *Displaced Workers: 1987-91* (Washington, D.C.: U.S. Department of Labor, Bureau of Labor Statistics, Bulletin 2427, 1993).

<sup>21</sup> Katherine P. Dickinson, Deborah J. Kogan, Kevin J. Rogers, and Mary Visher, *Study of the Implementation of the Economic Dislocation and Worker Adjustment Assistance Act* (Menlo Park, Calif.: SRI International, 1992).

- Building the capacity of substate entities to plan and administer dislocated worker services;
- Improving resource management practices and program accountability for services and outcomes;
- Ensuring a capacity for rapid response to notifications of impending plant closures and large-scale layoffs;
- Promoting labor-management cooperation in designing and implementing services to dislocated workers;
- Ensuring coordination between EDWAA resources and other Federal, State, and local funding sources that can provide services to dislocated workers;
- Offering program coverage to various segments of the eligible dislocated worker population; and
- Encouraging States and substate areas to take a long-term view of worker readjustment, including offering opportunities for meaningful retraining and implementing long-term reemployment plans, where appropriate.

### Study Design

The first phase of the EDWAA implementation study assessed the Act's progress in furthering these themes. To this end, the study examined the State- and substate-level design and operations of the EDWAA program in PY 1989, the year the legislation was implemented.

Detailed case studies were conducted in 15 States and 30 substate areas. Case studies were based on six- to eight-day site visits to each State. Field researchers conducted discussions with a variety of State and substate EDWAA policymakers and administrators, rapid response staff, and substate staff or service providers involved in designing and delivering EDWAA services to dislocated workers.

Researchers also contacted local labor or business organizations, economic development agencies, and Unemployment Insurance or Employment Service representatives involved in coordinated efforts with the EDWAA service system.

### Study Findings

The study findings relate to the seven themes noted above.

**Building a Substate Delivery System.** The study States created statewide service delivery systems for PY 1989 and allocated 60 percent of their allotments to substate areas. States generally designated substate areas that used the same jurisdictional boundaries as Title II-A Service Delivery Areas and designated the local PICs and SDA grantees responsible for Title II-A operations as the substate grantees responsible for EDWAA.

The decision to use the existing Title II-A substate administrative capacity for EDWAA eased the EDWAA transition in the study States. However, because the State role

in Title II-A is less extensive than in EDWAA, choosing Title II-A SDAs as EDWAA substate areas made it difficult to achieve balanced State and substate roles in designing and implementing EDWAA programs in some States.

States generally took the lead in planning and coordinating rapid response activities under EDWAA, although substate areas usually participated in on-site orientation meetings and provided most basic readjustment and retraining services to workers affected by both large-scale and smaller layoffs and plant closures. States were generally reluctant to assume a strong leadership role in establishing client priorities or in promoting specific program designs, particularly for services financed through substate formula allocations.

Although a few States exerted strong control over substate program operations under EDWAA, most States deferred to substate discretion in designing and operating substate-funded programs. In contrast, several States retained control over the design and operation of 40 percent-funded projects. Several study States demonstrated that they could provide policy leadership to substate areas while leaving the details of program operations up to these areas and their designated service providers.

**Improving Program Accountability.** Most of the study States implemented only a single performance standard for substate areas under EDWAA—the required entered-employment rate. Several States implemented supplementary performance goals. Although several States were considering offering incentive awards for good performance on the standards in subsequent years, none of the study States implemented performance incentive awards for PY 1989.

States generally permitted considerable substate area discretion in selecting target populations and client services. A few States developed detailed criteria for reviewing and approving substate EDWAA plans, and most approved substate plans with few, if any, changes. State technical assistance to and monitoring of substate area operations focused more on program compliance and procedural issues rather than on the effectiveness of the available services for the targeted dislocated worker population.

All study States emphasized fiscal accountability in PY 1989 to help ensure that federally mandated 80 percent expenditure levels were achieved by the end of the program year. The study found that substate expenditure rates varied. In some States, substate areas that were underspending their formula funds voluntarily deobligated some funds; in other States, substate areas were reluctant to release EDWAA funds even if they were slow in spending them. At least 12 of the 15 study States had met the 80 percent expenditure requirement by the end of PY 1989.

**Implementing Rapid Response.** For the most part, States made conscientious efforts to implement the

legislative requirements for providing rapid response to layoffs. Staff in most States designed procedures to receive Worker Adjustment and Retraining Notification (WARN) notices expeditiously and felt that the WARN legislation increased both their knowledge of dislocations and their ability to respond rapidly. Several States and substate areas also took steps to increase employers' awareness about the provisions of the WARN legislation or to establish additional sources of information about layoffs, including linkages with ES, UI, economic development agencies, unions, business organizations, and the media.

After learning of layoffs, States generally contacted employers by telephone within 48 hours, although on-site meetings usually occurred later—typically one to two weeks after receipt of a WARN notice.

All States and substate areas indicated that the 60-day notice required by WARN did not have the effect of preventing layoffs.

The main focus of rapid response activities was on providing dislocated workers with information about EDWAA and related programs through on-site orientation meetings.

**Encouraging Labor-Management Cooperation.** The level of State and substate interest in promoting formal labor-management committees varied significantly. In some States, these committees were viewed as an essential element of rapid response, while in other States, they were encouraged and supported only when company representatives were receptive to the concept. Some States encouraged labor-management committees merely to satisfy the Federal policy initiative without understanding why they were being encouraged to support them or what other mechanisms might further the same objectives.

The role of the committees varied widely, ranging from formal organizations responsible for designing prelayoff services or overseeing the operation of a plant-specific project to informal advisory committees that assisted in outreach and recruitment during rapid response efforts.

A variety of other mechanisms were also used to promote active employer and worker involvement in EDWAA planning and service delivery. These included:

- Forming general labor-management councils at the State and local level;
- Creating broader community task forces for large-scale layoffs;
- Encouraging employer contributions to support readjustment and retraining, even if a labor-management committee was not formed; and
- Actively involving labor organizations and former dislocated workers in designing and delivering services to dislocated workers.

**Promoting Coordination of Funds and Services.** Because most substate areas were also Title II-A SDAs, co-

ordination between EDWAA and Title II-A was very common. Only six of the 30 substate areas studied operated entirely distinct EDWAA and Title II-A programs. In the remaining 24 areas, the two programs were at least partially integrated, and in 11 areas, programs were highly integrated.

The study findings raised the issue of whether the specific needs of dislocated workers were being adequately addressed, or whether the needs of economically disadvantaged individuals dominated program priorities. In most cases, retraining options available to dislocated workers were highly diverse because participants were referred to many local programs or participated in on-the-job training. In a few cases, dislocated workers received training in only a limited number of occupations that appeared to be more appropriate for Title II-A participants looking for entry-level jobs. Further, in most cases, dislocated workers received either the same basic readjustment services as Title II-A clients or no basic readjustment services at all because they were viewed as more job ready.

The study also found strong coordination between the EDWAA program and the Employment Service and Unemployment Insurance systems. The chief contribution of these systems was information. Labor market information and UI claimant information were used in planning EDWAA services and in allocating funds to substate areas. ES and UI also played an important role in identifying plant closures and layoffs, particularly in States where employer compliance with WARN was low.

In a few substate areas, however, poor relationships between EDWAA and the ES/UI systems hampered coordination. Often this situation arose where the ES/UI systems had played a larger role in dislocated worker programs under the previous JTPA Title III.

Coordination with Trade Adjustment Assistance was less developed, in part because of confusion arising from the complexity of the TAA program, and in part because of the lack of clear policies about how to provide services to workers eligible for both programs.

Several States coordinated activities with economic development agencies in an attempt to prevent layoffs. The most successful were linkages between EDWAA and economic development training programs and economic development efforts to attract new businesses. In some cases, coordination did not benefit EDWAA participants because the economic development agency's goal of serving employers took precedence over EDWAA's goal of improving dislocated workers' employability.

Coordination with education agencies occurred primarily when substate areas purchased training services from vocational schools, community colleges, and other educational agencies.

Coordination with human services agencies was decentralized and largely informal.

***Serving a Range of Dislocated Workers.*** Among the 15 States studied, four reported their formula allocation funds prevented them from serving a broad range of dislocated workers. These States generally had high levels of worker dislocation, although some had relatively low unemployment rates.

About one-third of the substate areas studied reported that their resources did not meet the needs of their dislocated worker populations. These areas either experienced very high levels of dislocation or received small grants (\$50,000 or less). On the other hand, about one-third of the substate areas had more funding than they could easily spend.

In investigating the types of dislocated workers targeted by States and substate areas, the study found that substate areas were generally serving the type of dislocated worker prevalent in their communities. However, five substate areas that experienced at least moderate levels of recent dislocations targeted long-term unemployed individuals with characteristics similar to Title II-A clients.

Some substate areas were confused about what types of workers should receive priority for EDWAA services, largely arising from ambiguities surrounding eligibility and targeting in the statute. Several were uncertain whether to target individuals most in need or whether to serve relatively well-off dislocated workers. Confusion also arose because some States and substate areas interpreted EDWAA eligibility requirements using WARN definitions and requirements.

***Promoting Long-Term Training.*** The requirement that 50 percent of substate funds be spent on retraining was enthusiastically received in most States. Meeting this requirement was not a problem for about two-thirds of the substate areas studied. However, about one-third of the substate areas reported that the retraining requirement restricted their budget and program design flexibility.

Although most of the States and substate areas studied supported providing long-term training options for dislocated workers, a number of respondents emphasized that the focus should be on services that increase access to stable, high-quality employment, rather than on long-term training. Only two of the study States designated incentives for providing long-term training. Several States implemented or were planning to create incentives for achieving high-quality reemployment outcomes rather than the delivery of long-term training.

In delegating the design of support services and needs-related payments to substate areas, States gave both explicit and implied messages of low priority to these elements of EDWAA. As a result, substate areas usually budgeted less than 10 percent of available funds for support services (rather than the 25 percent permitted by the legislation) and actually spent an even lower percentage of their funds for these services.

The study also found that the absence of needs-related payments created a particular problem in serving unskilled displaced workers with limited English skills or substantial basic skills deficits. A number of substate respondents indicated that short-term intensive training tailored specifically to dislocated workers' needs for skills upgrading made more sense than long-term training.

## **Recommendations**

The report offers recommendations for State and local policymakers:

- Pay greater attention to the objectives of EDWAA. The researchers point out that formal EDWAA mechanisms (i.e., rapid response teams, procedures for responding to WARN notifications, labor-management committees, and linkages with employment and social service programs) worked best when they were developed to accomplish clear, functional objectives.
- Work to develop a coordinated State and substate area dislocated worker program. Because the study found that many States and substate areas carved out their own areas of authority under EDWAA rather than working together to produce a coherent statewide system, the researchers suggest that greater coordination of State and substate activities would improve the overall effectiveness of dislocated workers services.
- Develop clear strategies for targeting dislocated workers and disseminate effective service designs. The researchers suggest that greater efforts are needed to determine the needs of dislocated workers and to develop or adopt services that meet those needs. Because both States and substate areas appeared to develop program options in isolation, greater attention to designing appropriate and effective services for dislocated workers and providing technical assistance in program planning and disseminating effective practices was recommended.

## ***Unemployment Insurance***

### **Supporting Self-Employment**

One possible way to move the UI system beyond its current income maintenance function is to offer incentives and assistance to help unemployed people become self-employed. To this end, the Department initiated two demonstration projects to test the feasibility of implementing self-employment programs for unemployed workers in the United States.<sup>22</sup> Self-employment may be an

<sup>22</sup> The UI Self-Employment demonstration began in September 1987 with the selection of Washington State as the site of a self-employment demonstration project. Section 9152 of the

appropriate option for a small percentage (under five percent) of the Nation's UI claimants, according to a report that presents an overview of the self-employment option for unemployed workers, reviews two self-employment demonstrations, and analyzes various policies related to self-employment.<sup>23</sup>

### The Self-Employment Option

Although starting a business is often considered an appealing employment option for many Americans, it has traditionally not received much consideration in the development of policies to help unemployed workers. However, because self-employment, or "microenterprise," has become a growing source of jobs in the economy, policymakers have begun to look at the experiences of self-employment policies and programs in other countries to see if similar programs might be effective in the United States.

A paper prepared by the Department (the first of four papers contained in the report summarized here)<sup>24</sup> presents an overview of self-employment programs in Western Europe; discusses various aspects of self-employment options in the United States; provides information about the role of the Federal Government in promoting self-employment; identifies the various populations who might benefit from self-employment programs; briefly reviews two self-employment demonstration projects; and presents information about future prospects for investigating the self-employment option for unemployed workers.

**Self-Employment in Western Europe.** Over the past decade, many Western European nations<sup>25</sup> experimented with a variety of self-employment initiatives as a way to help unemployed workers become reemployed.<sup>26</sup> Most of these programs provided unemployed workers with some combination of financial assistance and supportive services designed to help them plan, establish, and operate their own businesses.

<sup>22</sup> (continued) Omnibus Budget Reconciliation Act of 1987 authorized the Department to proceed with UI self-employment demonstration projects in additional States. The following year, the Department initiated a second self-employment project in the Commonwealth of Massachusetts.

<sup>23</sup> Stephen A. Wandner, et al., *Self Employment Programs for Unemployed Workers*, Unemployment Insurance Occasional Paper 92-2 (Washington, D.C.: U.S. Department of Labor, 1992).

<sup>24</sup> Steven A. Wandner and Jon C. Messenger, "From Unemployed to Self-Employed: Self-Employment as a Reemployment Option in the United States," prepared for the Association of Public Policy Analysis and Management's 13th Annual Research Conference, October 1991.

<sup>25</sup> These countries are Belgium, Denmark, Finland, France, Great Britain, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, and Sweden.

<sup>26</sup> Self-employment programs have also been implemented in Australia and Canada.

European programs offered two types of financial assistance. The first was lump-sum payments which provided participants with a specific amount, equal to all or part of the funds remaining in their UI benefit entitlement. This method helped provide participants with funds for the initial capitalization of their microbusinesses. The second type of assistance was periodic payments, which were made weekly or biweekly, typically in lieu of regular unemployment benefits. The payments provided participants with a continuing income stream while they were in the early stages of planning and operating their businesses. In some cases, these payments lasted up to one year.

Most of the European programs also provided certain support services that helped UI claimants to start and develop their businesses. These services included business counseling, entrepreneurial training, technical assistance, exemptions from certain business taxes and legal requirements (e.g., an exemption from social security contributions in France), and preferential access to business loans and grants from sources outside the program.

The authors compare program models in Great Britain and France (the two largest European self-employment programs) and point out that both programs enrolled large numbers of participants. Key differences between the programs were in the method of payment to participants, with the French program providing a single lump-sum payment and the British program providing a weekly self-employment allowance in place of regular unemployment benefits. Both programs provided some limited supportive services.

**Self-Employment in the United States.** Because of the generally healthy U.S. economy which followed the 1982-83 recession, self-employment increased significantly throughout most of the 1980s, from just under six million in 1981 to almost 6.5 million in 1985.

The authors point out that small businesses have contributed greatly to the American economy, both in terms of the generation of wealth and the creation of new jobs. According to the Small Business Administration, almost one-half of all the nonagricultural gross product originating in the United States comes from small businesses. Nonfarm sole proprietorship earnings doubled from \$160.2 billion in 1980 to \$324 billion in 1988.

**Government Role in Promoting Self-Employment.** The authors suggest that because of the importance of small businesses in economic growth and job creation, Federal, State, and local governments have made substantial efforts to encourage the formation and growth of small business ventures. This support includes establishing the Small Business Administration and its network of State Small Business Development Centers and support for the Service Corps of Retired Executives, a national volunteer organization that links small businessowners with retired businesspersons.

Government interest in small business increased throughout the past decade, partly in response to the publication of a major study which found that more than three-quarters of the net new jobs in the United States were created by firms with less than 20 employees.<sup>27</sup> In addition, it was found that the startup capital required for a microbusiness venture was far less than previously considered necessary for a traditional small business. This recognition of the contribution of microbusinesses to job creation, combined with the relatively modest financial requirements, generated increased interest among U.S. policymakers for using self-employment as a tool for assisting unemployed workers to return to productive employment.

The authors note that, based in part on the European experience with self-employment programs, policymakers have increasingly recognized the benefit of self-employment programs for dislocated workers. According to one study by the Bureau of Labor Statistics in 1988, about seven percent of dislocated workers surveyed who had become reemployed were self-employed on a full-time basis.

The authors identify a wide range of other groups that may benefit from self-employment programs in the United States. These are UI recipients, older workers, AFDC recipients, and at-risk youth.

### Self-Employment Demonstrations

The increased interest in self-employment programs prompted the Department to initiate two important demonstration projects designed to test the self-employment option for unemployed workers. A demonstration project in Washington State tested the cost-effectiveness of providing self-employment assistance to UI recipients interested in starting their own microbusinesses. The project was modeled somewhat after the French approach, which provided one-time lump-sum payments for business startup.

A second self-employment demonstration, in Massachusetts, was modeled after the British program, which provided biweekly payments for permanently separated UI recipients working full-time to start their own microbusinesses.

The Corporation for Enterprise Development also began a demonstration project, called the Self-Employment Investment Demonstration, which tested self-employment for recipients of AFDC support payments.

The second and third papers included in the *Self-Employment Programs* report summarize the Washington and Massachusetts projects respectively.<sup>28</sup> Highlights from these papers follow.

<sup>27</sup> David L. Birch, *The Job Generation Process* (New York, N.Y.: The Free Press, 1984).

<sup>28</sup> For more information about the Washington State demonstration, see Terry R. Johnson and Janice J. Leonard, *Washington State Self-Employment and Enterprise Development*

*Washington State Self-Employment and Enterprise Development Demonstration (SEED)*. The SEED program was the first federally sponsored self-employment demonstration program for unemployed workers in the United States. SEED provided a combination of business assistance services and self-employment allowances to UI recipients early in their unemployment spell. The business support services included 20 hours of business training, counseling, and peer support services. Financial services included a waiver of UI work search requirements during the business planning period and a lump-sum payment equal to the remaining entitlement for those who achieved all project milestone requirements.

The demonstration was implemented on a pilot basis in one site in September 1989 and was subsequently implemented in five additional sites in February 1990. The sites included both urban and rural areas of Washington State.

A total of 42,350 UI claimants without immediate job prospects were invited to attend an orientation meeting to obtain information about SEED; 755 eligible applicants were randomly assigned to the project's treatment group, and 752 were assigned to a control group (which received only regular UI benefits and services). A total of 450 participants received lump-sum payments, averaging about \$4,225.

Key findings from the implementation and process analysis of the project include:

- The SEED recruitment and intake processes were implemented as planned and met the goal of early intervention. Treatment group members received business training services, on average, within about 5.5 weeks after their effective date of claim.
- About four percent of UI recipients without immediate job prospects applied to SEED. They were generally older, more educated, and more likely to be in professional, managerial, or technical occupations and had higher UI entitlements than other eligible individuals.
- The interest in self-employment was greater in urban areas with low unemployment rates than in rural areas with relatively high unemployment rates.
- The business support services were generally provided as planned, although participants received relatively little business support services other than what was provided by their business development specialists.

<sup>28</sup> (continued) *(SEED) Demonstration, Interim Report: Implementation and Process Analysis*, (Seattle, Wash.: Battelle Human Affairs Research Centers, 1991). Information about the Massachusetts demonstration can be found in Jacob M. Benus, et al., *Massachusetts UI Self-Employment Demonstration: Interim Report to Congress*, (Bethesda, Md.: Abt Associates, Inc., 1991).

- There were some differences in the criteria used to determine the adequacy of the business plan in the various sites, resulting in an earlier lump-sum payment schedule for some sites. The average time to receipt of the lump-sum payment was 7.8 weeks.
- Over half (53.5 percent) of the businesses established through SEED were in the services sector, although a substantial number of businesses were in manufacturing, construction, and retail trade.<sup>29</sup>

**The Massachusetts UI Self-Employment Demonstration.** The Massachusetts UI Self-Employment Demonstration, also known as the Massachusetts Enterprise Project, was a three-year demonstration. It incorporated an experimental evaluation design with half the eligible UI claimants receiving self-employment services (the treatment group) and the other half receiving regular UI services (the control group). The project began operating in seven sites in May 1990 with a total of 300 treatment and 300 control group members initially projected to participate in the project.<sup>30</sup>

UI claimants in the treatment group received business development services which included an initial eight-hour training session to introduce them to a variety of business development issues; individual counseling sessions targeted to their unique needs; regular workshops to provide additional training and peer support; and referrals to other sources of business training and technical assistance (i.e., consultants, private organizations, and free legal or accounting assistance).

They received financial assistance, which included the payment of self-employment allowances in lieu of unemployment benefits, as well as a waiver of the regular UI work search requirement. Participants in the Massachusetts project also were potentially eligible for business loans through a project-specific program designed by the Massachusetts Department of Employment and Training and a local bank.

An early preliminary evaluation of the first year of the three-year project revealed that:

- The self-employment option interests a relatively small subset of likely UI exhaustees. In the Massachusetts project, only 4.3 percent of those invited to attend an information session about the program attended.
- Individuals laid off from professional, managerial, and technical occupations were more interested in self-employment than individuals in other occupational groups. Those with higher levels of education also appeared to be more interested.
- Overall, unemployed men appeared to be substantially more interested in self-employment than unemployed women, and individuals between 36 and 55 years old more so than younger or older groups. (See Footnote 29.)

### Programs in Western Industrial Countries

The final paper in the publication summarized several self-employment programs in Europe, North America, and Australia. The paper was based primarily on work performed by an expert panel set up by the Organization for Economic Cooperation and Development to review various government programs promoting self-employment, and on an analysis of some of these programs prepared for the United Nations International Labor Organization's 1990 Annual Conference. Most of the program information was obtained from administrative files for the various programs studied, or from surveys of program participants.

The programs were reviewed in the context of six policy issues. These were: (1) the importance of government assistance in business startup; (2) an analysis of the extent to which the business ventures would have occurred without government aid; (3) a comparison of the success rates of those business ventures undertaken through the government-sponsored programs versus those started without government assistance; (4) targeting methodology intended to provide services to a specified subgroup of the eligible population; (5) longitudinal tracking to estimate average business lifetimes; and (6) the cost-effectiveness of government subsidies.

The paper presents an overview of several key program operations and describes a program theory used to construct a theoretical model to describe program characteristics and to explain how a specific program is intended to function.

The descriptions of programs are based on reports produced by sponsoring agencies or program analysts. Programs reviewed are in France, Luxembourg, Norway, Portugal, Spain, Sweden, Great Britain, Greece, Ireland, Italy, the Netherlands, and Germany, as well as Washington and Massachusetts.

The paper also provides an evaluation theory that can be used to determine the relative success of the various programs.

<sup>29</sup> A comparative analysis of the Washington and Massachusetts UI Self-Employment Demonstration Programs, conducted an average of 18 to 21 months after random assignment and issued in June 1994, clearly indicates that self-employment is a viable reemployment option for some unemployed workers. The potential target population for a self-employment assistance program for unemployed persons is relatively small: between two and four percent of UI recipients are interested in pursuing self-employment. However, of those individuals who are interested, a large number—about half—actually do start a business. Results of evaluations of the two demonstration programs, conducted three years after assignment, will be issued in 1995.

<sup>30</sup> The planned number of participants was subsequently raised to 500 treatment and 500 control group members.

## UI Reemployment Bonus

Over the years, the UI program has used work-search requirements and referrals to the Job Service to promote a more rapid reentry into the workforce of individuals receiving unemployment insurance. In recent years, some policymakers have expressed an interest in determining if reemployment bonuses—a lump-sum cash payment to those who become reemployed or self-employed quickly—can encourage unemployed workers to make a faster transition to new jobs.

A report<sup>31</sup> based on evaluations of two demonstrations in Pennsylvania and Washington State<sup>32</sup> showed that although reemployment bonuses reduced, for the most part, the total amount of benefits paid to UI claimants, the amount of the bonus payments—combined with the administrative costs necessary to offer them—exceeded the savings for the UI system.

The study was based on an analysis of a merged sample of 27,616 claimants who were eligible for the two demonstrations. It provides background information about the demonstrations, including the findings that were presented in the reports for both demonstrations; examines the rate at which claimants passed through each stage of the bonus claim process and how bonus receipt rates varied between the demonstrations; examines the combined sample of claimants from both demonstrations to determine if reemployment bonuses reduced UI receipt; estimates the impacts of the bonuses on UI receipt among subgroups of claimants; and reviews the impacts of reemployment bonuses on the employment and earnings of participants.

### The Pennsylvania and Washington State Demonstrations

The report summarizes the most important characteristics of the two demonstrations and reviews the impacts

<sup>31</sup> Paul T. Decker and Christopher J. O'Leary, *An Analysis of Pooled Evidence from the Pennsylvania and Washington Reemployment Bonus Demonstrations*, Unemployment Insurance Occasional Paper 92-7 (Princeton, N.J.: Mathematica Policy Research, Inc., and Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, 1992).

<sup>32</sup> The findings for the Pennsylvania demonstration are presented in detail in Walter Corson et al., *Pennsylvania Reemployment Bonus Demonstration Final Report*, Unemployment Insurance Occasional Paper 92-1 (Princeton, N.J.: Mathematica Policy Research, Inc., 1991). The findings for the Washington demonstration are presented in detail in Robert G. Spiegelman, Christopher J. O'Leary, and Kenneth J. Kline, *The Washington Reemployment Bonus Experiment Final Report*, Unemployment Insurance Occasional Paper 92-6 (Kalamazoo, Mich.: W.E. Upjohn Institute for Employment Research, 1992). For a discussion of the two self-employment demonstration projects summarized in this Report, see Stephen Wandner, et al., *Self Employment Programs for Unemployed Workers*, Unemployment Insurance Occasional Paper 92-2 (Washington, D.C.: U.S. Department of Labor, 1992).

on participants of each demonstration as presented in their evaluation reports. (See Footnote 28.) The researchers also discuss how the two data sets were merged and describe the characteristics of the two samples and the sites from which they were drawn.

Both the Pennsylvania and Washington demonstrations tested several alternative bonus offers for UI claimants, which differed according to the amount of the bonus offer and the period for which an individual qualified for the bonus. In both demonstrations, eligible claimants were assigned randomly to either a treatment group that received one of the bonus offers or to a control group that was not offered a reemployment bonus. Both demonstrations used similar claims processes in which claimants filed for the bonus payment once they fulfilled the eligibility requirements.

In reviewing the major features of the demonstrations, the researchers focused on three factors: (1) the parameters of the bonus offers; (2) the populations of UI claimants who received bonus offers in the two demonstrations; and (3) the additional requirements for receiving the bonuses.

Both demonstrations tested several alternative bonus offers that differed according to the amount of the bonus and the duration of the bonus qualification period. As shown in Chart 16, the Pennsylvania demonstration tested four different bonus offers based on two alternative bonus amounts (a low amount which was three times the claimant's weekly benefit amount [WBA] and a high amount of six times the WBA) and two alternative qualification periods (a short period of six weeks and a long period of 12 weeks, beginning on the bonus offer date).<sup>33</sup>

The Washington demonstration tested six different bonus offers based on three alternative bonus amounts (two times the claimant's WBA, four times the WBA, and six times the WBA) and two qualification periods which were tied to the claimant's potential UI duration, measured in weeks (20 percent of the claimant's potential duration plus one week, or 40 percent of the claimant's potential UI duration plus one week). Average bonus amounts in dollars and average bonus durations for each treatment are shown in the lower portion of the chart.

<sup>33</sup> The Pennsylvania demonstration also included two additional treatments. One was a bonus offer that declined gradually from the high amount over a 12-week qualification period, thus giving claimants an incentive to become reemployed as quickly as possible within the 12-week period. Since the offer was dissimilar to any other Pennsylvania or Washington bonus offer, it was excluded from the analysis of the combined participant group. The other treatment was identical to Treatment Four noted in the chart, except it excluded the offer of a job-search workshop that accompanied all of the other treatments. Because so few claimants participated in the workshop, there was no difference between the two groups. Thus, the groups were combined into a new group (see PT4 group in the chart).

A comparison of the two demonstrations revealed that the Washington State demonstration offered bonuses to a broader group of UI claimants than the Pennsylvania demonstration (the Pennsylvania program excluded unemployed workers who had a specific recall date from their employers within 60 days after their UI application and claimants who accepted employment exclusively through a union). The timing of the bonus offer also differed slightly between the two demonstrations, with claimants in the Pennsylvania demonstration assigned to either the treatment group or control group between their application for UI benefits and the filing for those benefits. In the Washington demonstration, claimants were randomly assigned to either the treatment group or control group at their initial UI application interview.<sup>34</sup>

Both demonstrations required that claimants who received their reemployment bonuses had to work in their new jobs for several months, to be employed full-time, and to meet standard UI eligibility criteria.

The evaluations of both the Pennsylvania and Washington demonstrations found that the availability of a bonus offer can accelerate the reemployment of unemployed workers, thus reducing the amount of time spent on UI and total benefit payments. Specific findings included:

- Between seven percent and 22 percent of the total number of claimants in the combined analysis who were assigned to one of the combined 10 treatment groups (the four Pennsylvania demonstration treatment groups and the six Washington demonstration treatment groups) received some form of reemployment bonus payment. The receipt rates were highest for the most generous bonus offers. Bonus receipt rates also were higher in the Washington demonstration than in the Pennsylvania demonstration.
- Both demonstrations generally reduced UI receipt, with the greatest reductions occurring in response to the most generous bonus offers. In Pennsylvania, the most generous offer reduced average UI receipt by about 0.8 weeks (or \$130 per claimant). In the Washington demonstration, the most generous offer reduced UI receipt by 0.75 weeks (\$140 per claimant).
- In both demonstrations, the bonus offers generally yielded net benefits to claimants and to society as a whole; some treatments also provided net benefits to the government. However, the costs of administering and paying reemployment bonuses in the demonstrations generally exceeded the bonus-induced reduction in UI receipt.

<sup>34</sup> This difference in timing of the bonus offers made the Washington demonstration somewhat more inclusive, since some of the claimants who received bonus offers in the Washington demonstration would not have received an offer according to the Pennsylvania design.

The researchers also reviewed the process used to merge the two data sets, which resulted in an analysis sample of 27,616 claimants—12,082 from the Pennsylvania demonstration and 15,534 from the Washington program. Included in the sample were 3,354 claimants assigned to the Pennsylvania control group and 3,082 assigned to the Washington control group. Relatively few differences in characteristics were noted between control group members in the two demonstrations. In addition, the researchers noted that the distribution of employment by industry was similar in the two States.

### **Claiming the Bonus**

The researchers examined the rate at which claimants passed through each stage of the bonus claim process in the two demonstrations and investigated how the bonus receipt rates varied between the demonstrations. Overall, about 13 percent of the claimants who were assigned to a treatment group received a reemployment bonus.

A regression analysis revealed that both the amount and the duration of the bonus offer had a significant impact on whether an individual received the reemployment bonus.

In looking at the various characteristics of UI claimants who received the bonus, the researchers found that:

- The gender of a claimant had no impact on the probability of receiving a bonus.
- Blacks, Hispanics, and other nonwhite claimants were much less likely to receive a bonus.
- Older claimants were significantly less likely than younger claimants to receive a bonus.
- Claimants who were on recall standby or were full-referral union members were much less likely than other claimants to receive a bonus.
- Claimants who were previously employed in a manufacturing industry were less likely to receive a bonus.

### **Impact on UI Receipt and Employment/Earnings**

Findings from the demonstration evaluations indicate that the bonus offers in the two demonstrations generally reduced UI receipt among claimants who received a bonus offer. The average impact of the bonus offers was a reduction in UI receipt of half a week, or \$85. The largest impacts occurred in response to the most generous bonus offers with the longest qualification periods, which reduced average UI receipt by about 0.8 weeks (or \$140) in the two demonstrations.

From investigating the impacts of the reemployment bonuses on employment and earnings of UI claimants, the researchers found only weak evidence that any of the reemployment bonus offers increased the postapplication employment and earnings of claimants who were assigned to the treatment groups. On average, the bonus offers did

## Chart 16. The Characteristics of the Reemployment Bonus Demonstrations

### Pennsylvania Demonstration

The four primary bonus offers took the following form:

| Bonus Amount | Qualification Period |                   |
|--------------|----------------------|-------------------|
|              | Six Weeks            | Twelve Weeks      |
| 3 X WBA      | Treatment 1 (PT1)    | Treatment 2 (PT2) |
| 6 X WBA      | Treatment 3 (PT3)    | Treatment 4 (PT4) |

Average bonus parameters:

| Treatment | Average Bonus Amount | Average Qualification Period |
|-----------|----------------------|------------------------------|
| PT1       | \$500                | 6 weeks                      |
| PT2       | \$498                | 12 weeks                     |
| PT3       | \$1,003              | 6 weeks                      |
| PT4       | \$989                | 12 weeks                     |

## Washington Demonstration

Six bonus offers were tested:

| Bonus Amount | Qualification Period                  |                                       |
|--------------|---------------------------------------|---------------------------------------|
|              | (.2 X Potential UI Duration) + 1 Week | (.4 X Potential UI Duration) + 1 Week |
| 2 X WBA      | Treatment 1 (WT1)                     | Treatment 4 (WT4)                     |
| 4 X WBA      | Treatment 2 (WT2)                     | Treatment 5 (WT5)                     |
| 6 X WBA      | Treatment 3 (WT3)                     | Treatment 6 (WT6)                     |

Average bonus parameters:

| Treatment | Average Bonus Amount | Average Qualification Period |
|-----------|----------------------|------------------------------|
| WT1       | \$302                | 5.7 weeks                    |
| WT2       | \$610                | 5.8 weeks                    |
| WT3       | \$917                | 5.7 weeks                    |
| WT4       | \$303                | 11.0 weeks                   |
| WT5       | \$612                | 11.0 weeks                   |
| WT6       | \$924                | 11.1 weeks                   |

Source: *An Analysis of Pooled Evidence from the Pennsylvania and Washington Reemployment Bonus Demonstrations.*

not increase either employment or earnings significantly over the long term.

## The Influence of Unemployment Insurance on Employer Layoffs

The unemployment insurance system finances benefits to unemployed workers by taxing employer payrolls in all States.<sup>35</sup> A unique feature of the UI system that helps determine the amount of UI taxes employers pay is known as “experience rating,” in which firms with higher numbers of layoffs in proportion to their number of employees pay a greater percentage of UI tax.<sup>36</sup> To some extent, this financing mechanism affects the decisions of some firms regarding layoffs. Although the impact of experience rating has been analyzed in prior studies, a major limitation of these analyses of firm behavior is their reliance on either data for individual workers or aggregated data for state-industry categories.

A study of the first micro data set which uses detailed information from matched firm-worker records allowed a unique examination of several issues related to the behavior of firms regarding decisions to lay off workers.<sup>37</sup>

### Constructing the Data Set

The most important aspect of the study is the construction of a set of data which matched the records of firms and workers. After sample weights were applied, the 611 firms studied became representative of the Illinois population from which they were drawn in terms of tax rates, industries, and firm size. The sampling procedures used reduced the number of matched firm-worker records from about 1.5 million to a more manageable number of 84,000. The Illinois Department of Employment Security then used a computerized search process to identify all UI-reported layoff activity for these 84,000 workers during the period of the analysis (from UI-covered employers who filed 1987 UI wage reports with the State of Illinois).

The unique data set made it possible to define several types of firm layoff measures which had not been previously analyzed. These included identification of seasonal influences on firm layoff behavior as well as layoff rates for workers experiencing multiple separations, the average duration per UI-paid layoff, the total layoff weeks

<sup>35</sup> In a few States, employee earnings are also taxed.

<sup>36</sup> The employer-charging provisions used by most States assign layoff costs to an employer depending on the “base-period” wages paid by the firm to the worker prior to layoff. A worker’s base period is typically defined as the first four of the last five completed calendar quarters prior to the start of the worker’s “benefit year.”

<sup>37</sup> Paul L. Burgess and Stuart A. Low, *Unemployment Insurance and Employer Layoffs*, Unemployment Insurance Occasional Paper 93-1 (Tempe, Ariz.: Arizona State University, 1992).

per employed worker, and whether the first UI-paid layoffs for particular workers were chargeable to the layoff firm.

### Study Findings

Because of the complexity and variety of issues in the study, selected findings were highlighted, as follows.

- There is substantial variability in the UI tax rates of firms in the same industry and same firm-size categories. The mean or median tax rate for any particular category conceals substantial variability in the tax rates of firms in that category.
- Seventeen percent of all firms studied were at the maximum UI tax rate. But the percentage of firms at the maximum tax rate varied from only seven percent of the finance/insurance/real estate firms to 37 percent of those in construction and 35 percent of those in the category of transportation, communication, and public utilities.
- Thirty-eight percent of all firms studied were at the minimum tax rate, but this percentage varied from only one percent of the largest firms to 51 percent of the smallest firms and 68 percent of finance/insurance/real estate firms.
- One difference in the UI tax distributions for employment and firms was that only 13 percent of all employment but 38 percent of all firms were in the lowest tax rate category. Two particularly large differences in these percentages in the lower tax category were for construction (only three percent of employment but 20 percent of firms) and finance/insurance/real estate (only 13 percent of employment but 68 percent of firms).
- Large differences in the percentages of employment and firms at the maximum tax rate were found in construction (64 percent of employment but only 37 percent of firms) and transportation/communication/public utilities (16 percent of employment but 35 percent of firms).
- Several types of firm layoff measures never before analyzed were defined, such as a firm-worker “window” for each employee and layoff risks.
- The propensity of firms to make any UI layoffs during the period varied substantially around the mean of 32 percent for all firms, from only 15–17 percent of the smallest and minimum-tax firms to 62 percent of manufacturing firms and 95 percent of the largest employers.
- The overall UI layoff rate was defined as the total UI layoffs a group of firms made over the period, divided by the total 1987 employment for that group of firms. This overall firm layoff rate was estimated at seven percent, but it varied substantially for different types of firms.

- The total paid layoff rates for firms in the seven major industry groups varied from as little as two percent for retail trade firms and three percent for finance/insurance/real estate firms to as much as 29 percent for construction firms.
- The total UI layoff rate varied from two-to-three percent for firms in the three lowest tax categories to up to 20 percent for firms in the maximum tax category.
- The “layoff subsidy” emphasized in the study was the result of the way States charge employers for UI benefits that a worker received during a benefit year.
- The early layoff subsidy created by the use of a “lag quarter” tended to destabilize employment by increasing layoff probabilities for workers during their first few months with a new firm.
- There had not previously been any estimate of the quantitative importance of the early layoffs that occur before firms incur any layoff liability. The researchers estimated that “free layoffs” (resulting in no increase in UI tax rates based on experience rating) frequently were used and that their use varied substantially among different types of firms.
- The researchers estimated that 27 percent of all (UI chargeable) layoffs for a four-five quarter period were “free layoffs” to the firms initiating the layoffs.
- The findings on free layoffs raise a policy issue related to the need of States to reconsider base-period definitions that include a lag quarter.
- Empirical estimates revealed that UI activity was distributed much differently than employment among types of firms. For example, the researchers found that one out of every two UI-paid layoffs and three of every five “free layoffs” during the four-five quarter period were made by maximum-tax firms, even though they employed fewer than one of every five workers in Illinois.
- Particular types of firms accounted for different shares of UI activity and employment. Construction accounted for 29 percent of total layoffs, 42 percent of the “free layoffs,” and 20 percent of the total weeks of UI benefits paid, even though construction firms accounted for only seven percent of all UI-reported employment. In contrast, retail trade accounted for less than one-tenth of total and free layoffs and only one-ninth of total weeks of benefits paid, compared to nearly one-fourth of total employment.

### Alternative UI Work Search Policies

State Employment Security Agencies implement work search policies for all UI recipients as part of their responsibility for administering State UI programs and paying benefits. These policies may include the monitoring of work search efforts, as well as the provision of job search assistance services.

The traditional work search policy followed in most States requires that individuals receiving UI benefits contact at least three new employers each week in search of full-time work in their customary occupation.<sup>38</sup> This type of policy treats each claimant in a similar manner and is relatively easy to administer, but does not take into account the unique circumstances of certain claimant groups or the differences in customary local hiring practices or in labor market conditions. Nor does it provide reemployment assistance for claimants on permanent layoff or include a provision for increased work search requirements as the period of unemployment lengthens.

Because of the limitations of this traditional approach to work search, the Washington State Employment Security Department (ESD) developed a new policy in the mid-1980s that tailored the work search requirements of UI claimants to the characteristics of specific claimant groups. Based on this policy, the Washington Alternative Work Search Experiment was conducted in Tacoma, Wash., to provide reliable information on the cost-effectiveness of various work search policies for UI claimants. The experiment tested four work search approaches that ranged in philosophy from an approach with no specific work search directives or monitoring to an approach that involved intensive reemployment assistance early in the unemployment spell.

Early identification plus more intensive reemployment services reduce UI payments on average by about \$70 per claimant, according to an experimental evaluation of the effectiveness of four different work search policies.

### Experiment Design

The evaluation of the Washington Alternative Work Search Experiment was designed as a classic experiment in which claimants were randomly assigned to one of four different treatment groups, each representing a different work search policy.<sup>39</sup> The services were delivered to UI claimants in each of the treatment groups by local ES and UI staff. The experiment was implemented in the Tacoma Job Service Center in July 1986, and over 10,000 new UI claimants were assigned to one of the treatment groups during the one-year enrollment period. The four treatments are as follows.

**Exception Reporting.** Based on an honor system, UI payments were automatically sent to claimants in an amount equal to their weekly benefit amount, unless the

<sup>38</sup> Claimants who are employer-attached or who are union members and obtain jobs through a union hiring hall are typically excluded from such a work-search requirement.

<sup>39</sup> Terry R. Johnson and Daniel H. Klepinger, *Evaluation of the Impacts of the Washington Alternative Work Search Experiment*, Unemployment Insurance Occasional Paper 91-4 (Seattle, Wash.: Battelle Human Affairs Research Centers, 1991).

claimant called the Tacoma Job Service Center to report changes in circumstances (i.e., earnings or return to work) that affected the benefit amount. Although claimants were initially instructed to make an active search for work, no work search services were provided for this group and they were not required to report work search contacts.

**Standard Work Search.** Traditionally used in most States, this method requires all claimants, regardless of their job prospects and experience, to make at least three employer contacts per week. This method is preferred by States because it is easier to monitor and administer. Eligibility Review Interviews were conducted about 13 to 15 weeks after filing a claim. Because this is the traditional work search method in most States, claimants assigned to it were referred to as the control group.

**New Work Search Policy.** This approach was developed by the ESD. It recognized that different individuals needed different types of assistance. It tailored the work search requirements of UI claimants to their individual circumstances and the conditions of the local labor market. The approach was designed to give claimants a reasonable time to find work and then to systematically increase work search requirements and provide services to assist them to return to work. Different work search requirements were tailored for certain claimant groups, including targeted claimants, union members, claimants on temporary layoff, partially unemployed workers, permanent part-time workers, and seasonal workers during the off-season. Individuals in these groups who were still unemployed after a specific number of weeks were instructed to come to the local office for a group Eligibility Review Interview that focused on employability development planning rather than UI eligibility issues.

**Intensive Services.** This approach integrated work search assistance early in the unemployment spell with the employability development focus of the new work search policy treatment. All claimants (except union members and those who were employer-attached) who were still unemployed after four weeks were directed to attend a two-day job search workshop which included training on skills assessment, interview and marketing techniques, telephone canvassing, completing applications, and preparing resumes. About 10 hours of followup "phone room" activity was also provided for claimants to contact prospective employers to set up job interviews. Individuals in this group who were still unemployed after 12 weeks were instructed to attend a group Eligibility Review Interview and an individual followup session that emphasized employability development planning.

An overview of the activities or services for each treatment group is shown in Table 16.

The Tacoma Job Service Center was selected to operate the experiment because it had a sufficiently large

enough number of claims to provide the necessary sample of individuals for the experiment within approximately a one-year enrollment period. (A one-year period was chosen to ensure that the results would not be affected by seasonal differences in the characteristics of claimants or the hiring practices of employers in different industries.) The site was also selected because of the diversity of its labor market and the characteristics of individuals served. The racial/ethnic composition of the population in Pierce County (served by the Tacoma Job Service Center) was reasonably representative of Washington, although blacks were somewhat overrepresented.

All individuals who filed a valid new initial Washington UI claim at the Tacoma Job Service Center during July 1986 to August 1987 were randomly assigned to one of the four treatment groups based on the last digit of their Social Security number.

Three ESD databases provided the primary data on participants for the experiment: (1) the Benefits Automated System provided demographic data, UI eligibility information, information about UI benefits received in the prior year, work-search requirements and services, and detailed information on experiences with the UI system during the benefit year of the experiment; (2) the Tax Information System provided quarterly information on the total wages and hours worked in covered employment and Standard Industrial Classification codes for employers, as well as information about whether claimants returned to work for the same employer after the demonstration; and (3) the Employment Security Automated Reporting System provided information on employment services offered by local Job Service Centers to ES/UI applicants.

A survey was also attached to the packet of materials that claimants were given at application to gather additional information about the reason for job separation, and about marital status, employment status of spouse, presence of children under the age of six, number of children/dependents, and whether the claimant was a homeowner.

### Experiment Findings

The experiment indicated that relative to the control group, which represented the standard work search policy followed by many States, the treatment offering more intensive reemployment services resulted in reducing UI payments on average by about one-half of a week or about \$70 per claimant. This finding was particularly strong for women without children, for white-collar workers, and for claimants who reported they had been permanently laid off. There was no evidence that the relatively rapid reemployment of claimants in this group occurred at the cost of lower earnings or hourly wage rates.

The exception-reporting treatment resulted in a significant increase in UI outlays of approximately 3.3 weeks

**Table 16. Overview of Activities/Services by Treatment Group**

| Activity/<br>Service              | Treatment Group         |   |  |   |
|-----------------------------------|-------------------------|---|--|---|
|                                   | Exception Reporting     | Standard Work Search  | New Work Search Policy   | Intensive Services  |
| Presentation of Benefits Rights   | Special group interview | Regular group interview   | Regular group interview  | Regular group interview   |
| Continued-Claims Process          | By phone, as necessary  | Submit forms biweekly   | Submit forms biweekly  | Submit forms biweekly   |
| Initial Work Search Directive     | Active search for work  | Active search for work  | Active search for work   | Active search for work  |
| Subsequent Work Search Directives | None                    | Three contacts per week; later to report for eligibility review interview | Directed to report for eligibility review interview  | Directed to attend job search workshop after about four weeks; later to report for eligibility review interview |
| Eligibility Review Interview      | None                    | 13–15 weeks after filing claim; focus on UI eligibility                   | Individualized timing of eligibility review with possible increase in work search requirements | 13–15 weeks after filing claim; focus on employability development  |

Source: Comparison of treatment group information as reported in *Evaluation of the Impacts of the Washington Alternative Work Search Experiment*, Unemployment Insurance Occasional Paper 91–4.

and \$265 per claimant relative to the standard work search approach. There was some evidence that the claimants in the exception-reporting treatment group had higher hourly wage rates than the controls over the short-term, which may be due to their being more likely to return to their previous employer.

No evidence of significant differences in UI or employment and earnings outcomes was noted between the standard work search group and the group assigned to the new individualized work search policy.

### **Innovative Technology**

In recent years, individuals involved at all levels of the UI system have found that increasingly sophisticated technology is an indispensable part of the UI system. Voice response units, telephone customer services, and automated teller machine payment systems are examples of

how technology has enabled the UI system to become more responsive to the needs of claimants.

Beginning in 1983, the Unemployment Insurance Service began investigating the use of a form of artificial intelligence called “expert systems” as a possible way to further enhance UI local office decision-making. Expert system software can augment a UI automated benefits distribution process by assisting claims staff who need advice in several complex areas before making a decision regarding UI benefits.

The use of expert systems may change the organizational culture of some UI local offices as the presence of such software may appear to conflict with the human element in the decision-making processes of some UI claims staff. As a consequence, claims staff may need to understand how expert systems can help them better serve unemployed workers. They may also need to obtain more knowledge about how to operate specific expert systems.

### **Expert System Demonstration**

Since 1987, the Department has funded five State Employment Security Agency expert system research demonstration projects. The first project, the Kansas Nonmonetary Expert System Prototype, was completed in March 1990. The remaining demonstration projects are Maine's Nonmonetary Expert System Prototype, Missouri's Advisor in Determining Employment Expert System, Texas' Claims Examiners Assistant, and Texas' Disaster Unemployment Assistance Determiner's Assistant. The Department also provided UI automation support account funds to Oregon to develop two expert system prototypes (the Expert System Nonmonetary Separation Training Tool and the Expert System Initial Claim Options for Filing).

### **Expert System Colloquium**

In June 1991, the Department and the Texas Employment Commission sponsored a Colloquium in Austin to further the efforts of UI managers and policymakers to exchange ideas and concerns about expert systems. The Colloquium was designed specifically to enable participants to:

- Conduct in-depth reviews of each State agency's expert system demonstration project;

- Exchange ideas on the technical aspects of developing expert systems in the UI environment; and
- Discuss prototype development issues and problems with peers and experts who have knowledge and experience of private industry applications of expert systems as well as other governmental agencies' expert system applications and programs.

Approximately 50 Employment Security officials from 26 SESAs attended the Colloquium.

The Department produced a publication which provides an overview of the colloquium and points out some of the key issues and concerns discussed during the event.<sup>40</sup> It also includes the text of the keynote address and the papers presented describing the five expert system demonstration projects. The papers briefly outline the history of each project, review the approach taken in designing the expert systems, and present some of the findings.

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<sup>40</sup> Wayne D. Zajac and David E. Balducci, *Papers and Materials Presented at the Unemployment Insurance Expert System Colloquium, June 1991*, Unemployment Insurance Occasional Paper 92-5 (Washington, D.C.: U.S. Department of Labor, Unemployment Insurance Service, 1992).

**ANNOTATED BIBLIOGRAPHY  
OF RESEARCH AND  
EVALUATION REPORTS  
COMPLETED DURING  
PROGRAM YEAR 1991**

# ANNOTATED BIBLIOGRAPHY

The following is a bibliography of research and evaluation reports completed or reviewed by ETA during PY 1991. Each report is listed by title, contractor/grantee, and contract/grant number (as appropriate).

Many of the reports are available free from ETA's Office of Policy and Research, Room N-5637, 200 Constitution Avenue, N.W., Washington, D.C. 20210. Most are also available in paper or microfiche through the National Technical Information Service (NTIS), Operations Division, Springfield, Va. 22151, (703) 487-4650.

***An Analysis of Pooled Evidence from the Pennsylvania and Washington Reemployment Bonus Demonstrations*** (Unemployment Insurance Occasional Paper 92-7) — Mathematica Policy Research, Inc., 1992. Analyzes the experience of a merged sample of unemployment insurance claimants in two demonstrations that tested reemployment bonuses for unemployed workers.  
Contract Number: 99-7-0805-04-137-01  
NTIS Number: PB 93-160703

***Assessing JOBSTART Interim Impacts of a Program for School Dropouts*** — Manpower Demonstration Research Corporation, 1991. Summarizes findings on the implementation of the JOBSTART demonstration and presents information (based on two years of followup) on the difference that the program made in the educational attainment, employment, welfare receipt, and other outcomes of participants.  
Grant Number: 99-6-3356-75-003-02

***A Comparison of the Effectiveness of JTPA Training Programs Administered under Tuition vs. Performance-Based Contracts in the City of Pittsburgh and Allegheny County*** — University of Pittsburgh and Allegheny County Commission for Workforce Excellence, 1991. Summarizes the findings of a study that examined the effectiveness of administering public training programs under tu-

ition versus performance-based contracts.  
Contract Number: 99-0-1500-98-003-04

***Dilemmas in Youth Employment Programming: Findings from the Youth Research and Technical Assistance Project - Volume I and Volume II*** — Public/Private Ventures and Brandeis University, 1992. Two-volume report presents findings of 10 studies of youth programs. Provides insight into the type of programs, services, and techniques that best prepare young people for jobs and careers; discusses strategies of governance and management that offer the greatest opportunity for effective delivery of training and employment services for young people; and lists factors regarding youth, their environment, and the labor market that must be addressed in providing services to youth.

Contract Number: 99-0-1879-75-053-01  
NTIS Number: PB 93-167633 (Volume I);  
PB 93-167641 (Volume II)

***The Employer's Decision to Train Low-Wage Workers*** — University of Washington, 1992. Uses survey data and tax records for 544 employers in Washington State to examine the decisions of employers to train low-wage workers.  
Grant Number: 99-0-1897-75-104-02

***Evaluation of the Impacts of the Washington Alternative Work Search Experiment*** (Unemployment Insurance Occasional Paper 91-4)—Battelle Human Affairs Research Centers, 1991. Analyzed four work search approaches for unemployment insurance claimants developed by the Washington Alternative Work Search Experiment.

Contract Number: 91-PS-067 and 86-PS-29  
NTIS Number: PB 91-198127-AS

***Labor Shortage Case Studies: Final Report*** — James Bell Associates and Lewin-ICF, 1992. Provides information about why labor shortages may develop in particular

occupations; discusses adjustments that employers and workers make in response to shortages; describes symptoms of labor shortages; explains why shortages may persist for extended periods; and discusses the likely consequences of labor shortages.

Contract Number: 99-9-4710-75-077-01

NTIS Number: PB 94-144334

***Learning A Living: A Blueprint for High Performance. A SCANS Report for America 2000*** — U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills, 1992. Based on SCANS research, discusses the need for schools to better prepare young people for the workforce and for employers to upgrade the skills of their employees. Identifies three areas that must change, and lists several recommendations to bring about this change.

Government Printing Office Stock Number: 029-000-00440-4

NTIS Number: PB 93-107449

***The National JTPA Study: Title II-A Impacts on Earnings and Employment at 18 Months*** — Abt Associates, Inc., 1992. Provides interim estimates of program impact on the employment and earnings of adults and out-of-school youth during the first 18 months after their acceptance into the program.

Contract Number: 99-6-0803-77-068-01

NTIS Number: PB 94-142122

***Papers and Materials Presented at the Unemployment Insurance Expert System Colloquium***, June 1991 (Unemployment Insurance Occasional Paper 92-5) — U.S. Department of Labor, Unemployment Insurance Service, 1992. Presents papers prepared for the Unemployment Insurance Expert System Colloquium in June 1991 which describe demonstration efforts to test and evaluate expert system software to enhance UI services.

NTIS Number: PB 93-202695

***Pennsylvania Reemployment Bonus Demonstration Final Report*** (Unemployment Insurance Occasional Paper 92-1) — Mathematica Policy Research, Inc., 1991. Analyzes various aspects of the Pennsylvania Reemployment Bonus Demonstration which tested the effect of alternative reemployment bonuses on the reemployment and unemployment receipt of UI claimants.

Contract Number: 99-7-0805-04-137-01

NTIS Number: PB 93-152684

***Report on Policy Academy on Families and Children At Risk*** — Council of Governors' Policy Advisors, 1992. Describes the Family Academy and its purpose, reviews the results of the efforts of Family Academy teams estab-

lished in 10 States, discusses challenges associated with collaborative, strategic policy development and how States meet these challenges, and provides guidance to Governors in designing policies to improve outcomes for people in health, education, training and employment, self-sufficiency, and family functioning.

Contract Number: 99-9-3415-98-022-01

NTIS Number: PB 92-226364

***School-to-Work Connections: Formulas For Success*** — U.S. Department of Labor, Employment and Training Administration, Office of Work-Based Learning, 1992. Offers guidelines on how to go about setting up school-employer partnerships based on how others have planned, organized, operated, promoted, and funded their programs.

NTIS Number: PB 92-199231

***Self Employment Programs for Unemployed Workers*** (Unemployment Insurance Occasional Paper 92-2) — U.S. Department of Labor, 1992. Provides an overview of the self-employment option for unemployed workers who receive unemployment insurance payments, reviews two self-employment demonstrations, and analyzes policies related to self-employment.

NTIS Number: PB92-191626/AS

***Skills and Tasks for Jobs: A SCANS Report for America 2000*** — U.S. Department of Labor, Secretary's Commission on Achieving Necessary Skills, 1992. Serves as a resource for educators and employers to use in developing curriculum to teach the SCANS competencies and foundation skills and to understand how SCANS know-how is used in specific jobs.

NTIS Number: PB 92-181379

***Study of Federal Funding Sources and Services for Adult Education: Final Report*** — COSMOS Corporation, 1992. Synthesizes information about adult education programs within the Federal Government that support literacy, basic skills, ESL, or adult secondary education. Provides recommendations regarding Federal, State, and local level program coordination.

Contract Number: LC 89-058001 (Department of Education)

***Study of the Implementation of the Economic Dislocation and Worker Adjustment Assistance Act*** — SRI International, 1992. Examines the design and operations of the EDWAA program at the State and substate levels during PY 1989, the year in which the EDWAA legislation was implemented. Provides program information and recommendations to help program operators run more effective programs.

Contract Number: 99-9-3104-98-084

NTIS Number: PB 92-224856

***Unemployment Insurance and Employer Layoffs*** (Unemployment Insurance Occasional Paper 93-1) — Arizona State University, 1992. Presents findings of the first micro data set which used detailed information from matched firm-worker records to analyze the behavior of firms regarding decisions to lay off workers.

NTIS Number: PB 93-205573

***The Washington Reemployment Bonus Experiment Final Report*** (Unemployment Insurance Occasional Paper 92-6) — W.E. Upjohn Institute for Employment Research, 1992. Analyzes various aspects of the Washington Reemployment Bonus Experiment, which tested the effect of alternative reemployment bonuses on the reemployment and unemployment receipt of UI claimants.

NTIS Number: PB 93-159499

# STATISTICAL APPENDIX

# Statistical Appendix Contents

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## EXPLANATORY NOTES AND HISTORICAL COMPARABILITY OF DATA

This narrative provides explanatory notes for the A, B, C, and D tables of the statistical appendix and explains factors affecting the historical comparability of data.

### Introduction

Statistics in the A, B, and C tables of this statistical appendix are compiled from two major sources: (1) household interviews and (2) reports from employers.

Data in the A tables are based on household interviews which are obtained from a sample survey of the population 16 years of age and over. The survey is conducted each month by the Bureau of the Census for the U.S. Department of Labor's Bureau of Labor Statistics (BLS) and provides comprehensive data on the labor force, the employed, and the unemployed, including such characteristics as age, sex, race, family relationship, marital status, occupation, and industry attachment. The survey also provides data on the characteristics and past work experience of those not in the labor force. The information is collected by trained interviewers from a sample of about 60,000 households, representing 729 areas in 1,973 counties and independent cities, with coverage in 50 States and the District of Columbia. The data collected are based on the activity or status reported for the calendar week including the 12th of the month.

These data do not reflect changes in the survey design and methodology that were introduced in January 1994.

Data in the B and C tables are based on establishment records which are compiled each month by the BLS, in cooperation with State agencies. The establishment survey is designed to provide industry information on non-farm wage and salary employment and average weekly earnings for the Nation, States, and metropolitan areas. The employment, hours, and earnings series are currently based on payroll reports from a sample of over 390,000 establishments employing over 47 million nonfarm wage and salary workers. The data relate to all workers, full- or part-time, who receive pay during the payroll period which includes the 12th day of the month.

Data in the D tables present projections of the U.S. labor force for the period 1992-2005. The Bureau of Labor Statistics offers three possible labor force outlooks, based on low-, moderate-, and high-growth assumptions. Although several tables presented in this publication focus on the middle of the three alternatives, which assumes moderate growth, this should not be interpreted as suggesting any greater expectation that the moderate-growth scenario is more likely.

### Relation Between the Household and Establishment Series

The household and establishment data supplement one another, each providing significant types of information that the other cannot suitably supply. Population characteristics, for example, are readily obtained only from the household survey whereas detailed industrial classifications can be reliably derived only from establishment reports.

Data from these two sources differ from each other because of differences in definitions and coverage, sources of information, methods of collection, and estimating procedures. Sampling variability and response errors are additional reasons for discrepancies. The major factors which have a differential effect on the levels and trends of the two series are employment, hours of work, and earnings. These are described below.

#### Employment

A number of factors must be taken into consideration when reviewing statistics on employment: coverage, multiple jobholding, and unpaid absences from jobs.

**Coverage.** The household survey definition of employment comprises wage and salary workers (including domestics and other private household workers), self-employed persons, and unpaid workers who worked 15 hours or more during the survey week in family-operated enterprises. Employment in both agricultural and nonagricultural industries is included. The payroll survey covers only wage and salary employees on the payrolls of non-farm establishments.

**Multiple jobholding.** The household survey provides information on the work status of the population without duplication, since each person is classified as employed, unemployed, or not in the labor force. Employed persons holding more than one job are counted only once and are classified according to the job at which they worked the greatest number of hours during the survey week. In the figures based on establishment reports, persons who worked in more than one establishment during the reporting period are counted each time their names appear on payrolls.

**Unpaid absences from jobs.** The household survey includes among the employed all civilians who had jobs but were not at work during the survey week—that is, were not working but had jobs from which they were temporarily absent because of illness, bad weather, vacation, or labor-management disputes, or because they were taking time off for various other reasons, even if they were not paid by their employers for the time off. In the figures based on payroll reports, persons on leave paid for by the company are included, but not those on leave without pay for the entire payroll period.

For a comprehensive discussion of the differences between household and establishment survey employment data, see Gloria P. Green's article, "Comparing Employment Estimates from Household and Payroll Surveys," *Monthly Labor Review*, December 1969.

### **Hours of Work**

The household survey measures hours actually worked whereas the payroll survey measures hours paid for by employers. In the household survey data, all persons with a job but not at work are excluded from the hours distributions and the computations of average hours. In the payroll survey, production or nonsupervisory employees on paid vacation, paid holiday, or paid sick leave are included and assigned the number of hours for which they were paid during the reporting period.

### **Earnings**

The household survey measures median earnings of wage and salary workers in all occupations and industries in both the private and public sectors. Data refer to the usual earnings received from the worker's sole or primary job. Data from the establishment survey generally refer to average earnings of production and related workers in mining and manufacturing, construction workers in construction, and nonsupervisory employees in the private service-producing industries. For a comprehensive discussion of the household survey earnings series, see *Technical Description of the Quarterly Data on Weekly Earnings From the Current Population Survey*, BLS Bulletin 2113.

### **Historical Comparability**

This section describes factors that affect the historical comparability of data.

#### **Change in Lower Age Limit**

The lower age limit for official statistics on the labor force, employment, and unemployment was raised from 14 to 16 years of age in January 1967. Insofar as possible, historical series have been revised to provide consistent information based on the population 16 years and over. For a detailed discussion of this and other definitional changes introduced at that time, including estimates of their effect on the various series, see "New Definitions for Employment and Unemployment," *Employment and Earnings and Monthly Report on the Labor Force*, February 1967.

#### **Noncomparability of Labor Force Levels**

In addition to the changes introduced in 1967, several other periods of noncomparability occurred in the labor

force data. Major periods since 1960 are as follows:

(1) Beginning in 1960, the inclusion of Alaska and Hawaii resulted in an increase of about 500,000 in the population and about 300,000 in the labor force. Four-fifths of this increase was in nonagricultural employment; other labor force categories were not appreciably affected. (2) Beginning in 1962, the introduction of data from the 1960 census reduced the population by about 50,000 and labor force and employment by about 200,000; unemployment totals were virtually unchanged. (3) Beginning in 1972, information from the 1970 census was introduced into the estimation procedures, increasing the population by about 800,000; labor force and employment totals were raised by a little more than 300,000 and unemployment levels and rates were essentially unchanged. (4) A subsequent population adjustment based on the 1970 census was introduced in March 1973. This adjustment added 60,000 to the labor force and employment totals; unemployment levels and rates were not significantly affected.

Beginning in January 1978, the introduction of an expansion in the sample and revisions in the estimation procedures resulted in an increase of about 250,000 in the civilian labor force and employment totals; unemployment levels and rates were essentially unchanged.

Beginning in January 1982, the second-stage ratio adjustment methodology was changed in the Current Population Survey estimation procedure. In addition, current population estimates used in the second-stage estimation procedure are derived from information obtained from the 1980 census, rather than the 1970 census. This change caused substantial increases in total population and estimates of persons in all labor force categories. Rates for labor force characteristics, however, remained virtually unchanged. Some 30,000 labor force series were adjusted back to 1970 to avoid major breaks in series.

Beginning in January 1986, the introduction of revised population controls added 400,000 to the population and labor force estimates and 350,000 to the employment total. Unemployment levels and rates were not significantly affected.

### **Labor Force Projections**

The D tables in this publication present projections of the U.S. labor force for the period 1992-2005. BLS offers three possible labor force outlooks, based on low-, moderate-, and high-growth assumptions. Although several tables presented in this publication focus on the middle of the three alternatives, which assumes moderate growth, this should not be interpreted as suggesting any greater expectation that the moderate-growth scenario is more likely. Past evaluations have shown that some elements of the projections will follow one growth path, while other

variables will follow another. Some assumptions will certainly fall outside the range shown in the tables. It is impossible to know which of the three outcomes is more likely, either completely or for any particular element in the projections.

Users of the BLS projections should keep in mind that economic and employment projections are filled with uncertainty. Many assumptions must be made regarding the probable behavior of a broad range of variables that will affect the future course of the U.S. economy. We may be reasonably certain about some of these assumptions, such as the size of the youth population cohort. Other as-

sumptions, such as net annual immigration which has a significant effect on population estimates, are subject to a considerable amount of uncertainty. BLS alternative projections for net immigration range from 880,000 persons to 1,370,000 persons annually over the 1992-2005 period. The projection of women's labor force participation rates—which has been a major source of error in previous projections—assumes a range of 61.4 percent to 65.0 percent in the current alternative scenarios.

What effects do these alternative assumptions have on the projection results? The range in the size of the labor force in 2005 between the low and high projections is nine million.

**Table A-1. Employment status of the civilian noninstitutional population  
16 years and over, 1960-93 annual averages  
(Numbers in thousands)**

| Year              | Civilian noninstitutional population | Civilian labor force |                       |          |             |                            |            |                        | Not in labor force |
|-------------------|--------------------------------------|----------------------|-----------------------|----------|-------------|----------------------------|------------|------------------------|--------------------|
|                   |                                      | Total                | Percent of population | Employed |             |                            | Unemployed |                        |                    |
|                   |                                      |                      |                       | Total    | Agriculture | Nonagricultural industries | Number     | Percent of labor force |                    |
| 1960              | 117,245                              | 69,628               | 59.4                  | 65,778   | 5,458       | 60,318                     | 3,852      | 5.5                    | 47,617             |
| 1961              | 118,771                              | 70,459               | 59.3                  | 65,746   | 5,200       | 60,546                     | 4,714      | 6.7                    | 48,312             |
| 1962 <sup>a</sup> | 120,153                              | 70,614               | 58.8                  | 66,702   | 4,944       | 61,759                     | 3,911      | 5.5                    | 49,539             |
| 1963              | 122,416                              | 71,833               | 58.7                  | 67,762   | 4,687       | 63,076                     | 4,070      | 5.7                    | 50,583             |
| 1964              | 124,485                              | 73,091               | 58.7                  | 69,305   | 4,523       | 64,782                     | 3,786      | 5.2                    | 51,394             |
| 1965              | 126,513                              | 74,455               | 58.9                  | 71,088   | 4,361       | 66,726                     | 3,366      | 4.5                    | 52,058             |
| 1966              | 128,058                              | 75,770               | 59.2                  | 72,895   | 3,979       | 68,915                     | 2,875      | 3.8                    | 52,288             |
| 1967              | 129,874                              | 77,347               | 59.6                  | 74,372   | 3,844       | 70,527                     | 2,975      | 3.8                    | 52,527             |
| 1968              | 132,028                              | 78,737               | 59.6                  | 75,920   | 3,817       | 72,103                     | 2,817      | 3.6                    | 53,291             |
| 1969              | 134,335                              | 80,734               | 60.1                  | 77,902   | 3,606       | 74,296                     | 2,832      | 3.5                    | 53,602             |
| 1970              | 137,085                              | 82,771               | 60.4                  | 78,678   | 3,463       | 75,215                     | 4,093      | 4.9                    | 54,315             |
| 1971              | 140,216                              | 84,382               | 60.2                  | 79,367   | 3,394       | 75,972                     | 5,016      | 5.9                    | 55,834             |
| 1972 <sup>a</sup> | 144,126                              | 87,034               | 60.4                  | 82,153   | 3,484       | 78,669                     | 4,882      | 5.6                    | 57,091             |
| 1973 <sup>a</sup> | 147,096                              | 89,429               | 60.8                  | 85,064   | 3,470       | 81,594                     | 4,365      | 4.9                    | 57,667             |
| 1974              | 150,120                              | 91,949               | 61.3                  | 86,794   | 3,515       | 83,279                     | 5,156      | 5.6                    | 58,171             |
| 1975              | 153,153                              | 93,775               | 61.2                  | 85,846   | 3,408       | 82,438                     | 7,929      | 8.5                    | 59,377             |
| 1976              | 156,150                              | 96,158               | 61.6                  | 88,752   | 3,331       | 85,421                     | 7,406      | 7.7                    | 59,991             |
| 1977              | 159,033                              | 99,009               | 62.3                  | 92,017   | 3,283       | 88,734                     | 6,991      | 7.1                    | 60,025             |
| 1978 <sup>a</sup> | 161,910                              | 102,251              | 63.2                  | 96,048   | 3,387       | 92,661                     | 6,202      | 6.1                    | 59,659             |
| 1979              | 164,863                              | 104,962              | 63.7                  | 98,824   | 3,347       | 95,477                     | 6,137      | 5.8                    | 59,900             |
| 1980              | 167,745                              | 106,940              | 63.8                  | 99,303   | 3,364       | 95,938                     | 7,637      | 7.1                    | 60,806             |
| 1981              | 170,130                              | 108,670              | 63.9                  | 100,397  | 3,368       | 97,030                     | 8,273      | 7.6                    | 61,460             |
| 1982              | 172,271                              | 110,204              | 64.0                  | 99,526   | 3,401       | 96,125                     | 10,678     | 9.7                    | 62,067             |
| 1983              | 174,215                              | 111,550              | 64.0                  | 100,834  | 3,383       | 97,450                     | 10,717     | 9.6                    | 62,665             |
| 1984              | 176,383                              | 113,544              | 64.4                  | 105,005  | 3,321       | 101,685                    | 8,539      | 7.5                    | 62,839             |
| 1985              | 178,206                              | 115,461              | 64.8                  | 107,150  | 3,179       | 103,971                    | 8,312      | 7.2                    | 62,744             |
| 1986 <sup>a</sup> | 180,587                              | 117,834              | 65.3                  | 109,597  | 3,163       | 106,434                    | 8,237      | 7.0                    | 62,752             |
| 1987              | 182,753                              | 119,865              | 65.6                  | 112,440  | 3,208       | 109,232                    | 7,425      | 6.2                    | 62,888             |
| 1988              | 184,613                              | 121,669              | 65.9                  | 114,968  | 3,169       | 111,800                    | 6,701      | 5.5                    | 62,944             |
| 1989              | 186,393                              | 123,869              | 66.5                  | 117,342  | 3,199       | 114,142                    | 6,528      | 5.3                    | 62,523             |
| 1990              | 188,049                              | 124,787              | 66.4                  | 117,914  | 3,186       | 114,728                    | 6,874      | 5.5                    | 63,262             |
| 1991              | 189,765                              | 125,303              | 66.0                  | 116,877  | 3,233       | 113,644                    | 8,426      | 6.7                    | 64,462             |
| 1992              | 191,576                              | 126,982              | 66.3                  | 117,598  | 3,207       | 114,391                    | 9,384      | 7.4                    | 64,593             |
| 1993              | 193,550                              | 128,040              | 66.2                  | 119,306  | 3,074       | 116,232                    | 8,734      | 6.8                    | 65,509             |

<sup>a</sup> Not strictly comparable with prior years. For an explanation, see "Note on Historical Comparability" at the beginning of this Appendix.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table A-2. Employment status of the civilian noninstitutional population  
16 years and over by sex, 1981-93 annual averages  
(Numbers in thousands)**

| Year                    | Civilian noninstitutional population | Civilian labor force |                       |          |             |                            |            |                        | Not in labor force |
|-------------------------|--------------------------------------|----------------------|-----------------------|----------|-------------|----------------------------|------------|------------------------|--------------------|
|                         |                                      | Total                | Percent of population | Employed |             |                            | Unemployed |                        |                    |
|                         |                                      |                      |                       | Total    | Agriculture | Nonagricultural industries | Number     | Percent of labor force |                    |
| <b>Men</b>              |                                      |                      |                       |          |             |                            |            |                        |                    |
| 1981 .....              | 80,511                               | 61,974               | 77.0                  | 57,397   | 2,700       | 54,697                     | 4,577      | 7.4                    | 18,537             |
| 1982 .....              | 81,523                               | 62,450               | 76.6                  | 56,271   | 2,736       | 53,534                     | 6,179      | 9.9                    | 19,073             |
| 1983 .....              | 82,531                               | 63,047               | 76.4                  | 56,787   | 2,704       | 54,083                     | 6,260      | 9.9                    | 19,484             |
| 1984 .....              | 83,605                               | 63,835               | 76.4                  | 59,091   | 2,668       | 56,423                     | 4,744      | 7.4                    | 19,771             |
| 1985 .....              | 84,469                               | 64,411               | 76.3                  | 59,891   | 2,535       | 57,356                     | 4,521      | 7.0                    | 20,058             |
| 1986 <sup>a</sup> ..... | 85,798                               | 65,422               | 76.3                  | 60,892   | 2,511       | 58,381                     | 4,530      | 6.9                    | 20,376             |
| 1987 .....              | 86,899                               | 66,207               | 76.2                  | 62,107   | 2,543       | 59,564                     | 4,101      | 6.2                    | 20,692             |
| 1988 .....              | 87,857                               | 66,927               | 76.2                  | 63,273   | 2,493       | 60,780                     | 3,655      | 5.5                    | 20,930             |
| 1989 .....              | 88,762                               | 67,840               | 76.4                  | 64,315   | 2,513       | 61,802                     | 3,525      | 5.2                    | 20,923             |
| 1990 .....              | 89,650                               | 68,234               | 76.1                  | 64,435   | 2,507       | 61,928                     | 3,799      | 5.6                    | 21,417             |
| 1991 .....              | 90,552                               | 68,411               | 75.5                  | 63,593   | 2,552       | 61,041                     | 4,817      | 7.0                    | 22,141             |
| 1992 .....              | 91,541                               | 69,184               | 75.6                  | 63,805   | 2,534       | 61,270                     | 5,380      | 7.8                    | 22,356             |
| 1993 .....              | 92,620                               | 69,633               | 75.2                  | 64,700   | 2,438       | 62,263                     | 4,932      | 7.1                    | 22,987             |
| <b>Women</b>            |                                      |                      |                       |          |             |                            |            |                        |                    |
| 1981 .....              | 89,618                               | 46,696               | 52.1                  | 43,000   | 667         | 42,333                     | 3,696      | 7.9                    | 42,922             |
| 1982 .....              | 90,748                               | 47,755               | 52.6                  | 43,256   | 665         | 42,591                     | 4,499      | 9.4                    | 42,993             |
| 1983 .....              | 91,684                               | 48,503               | 52.9                  | 44,047   | 680         | 43,367                     | 4,457      | 9.2                    | 43,181             |
| 1984 .....              | 92,778                               | 49,709               | 53.6                  | 45,915   | 653         | 45,262                     | 3,794      | 7.6                    | 43,068             |
| 1985 .....              | 93,736                               | 51,050               | 54.5                  | 47,259   | 644         | 46,615                     | 3,791      | 7.4                    | 42,686             |
| 1986 <sup>a</sup> ..... | 94,789                               | 52,413               | 55.3                  | 48,706   | 652         | 48,054                     | 3,707      | 7.1                    | 42,376             |
| 1987 .....              | 95,853                               | 53,658               | 56.0                  | 50,334   | 666         | 49,668                     | 3,324      | 6.2                    | 42,195             |
| 1988 .....              | 96,756                               | 54,742               | 56.6                  | 51,696   | 676         | 51,020                     | 3,046      | 5.6                    | 42,014             |
| 1989 .....              | 97,630                               | 56,030               | 57.4                  | 53,027   | 687         | 52,341                     | 3,003      | 5.4                    | 41,601             |
| 1990 .....              | 98,399                               | 56,554               | 57.5                  | 53,479   | 679         | 52,800                     | 3,075      | 5.4                    | 41,845             |
| 1991 .....              | 99,214                               | 56,893               | 57.3                  | 53,284   | 682         | 52,602                     | 3,609      | 6.3                    | 42,321             |
| 1992 .....              | 100,035                              | 57,798               | 57.8                  | 53,793   | 673         | 53,121                     | 4,005      | 6.9                    | 42,237             |
| 1993 .....              | 100,930                              | 58,407               | 57.9                  | 54,606   | 636         | 53,970                     | 3,801      | 6.5                    | 42,522             |

<sup>a</sup> Not strictly comparable with prior years. For an explanation, see "Note on Historical Comparability" at the beginning of this Appendix.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table A-3. Unemployed men by marital status, race, and age,  
1992 and 1993 annual averages**

| Marital status, race, and age             | Thousands of persons |       | Unemployment rates |      |
|---|----------------------|-------|--------------------|------|
|   | 1992                 | 1993  | 1992               | 1993 |
| Total, 16 years and over . . . . .        | 5,380                | 4,932 | 7.8                | 7.1  |
| Married, spouse present . . . . .         | 2,124                | 1,878 | 5.0                | 4.4  |
| Widowed, divorced, or separated . . . . . | 756                  | 707   | 9.8                | 9.0  |
| Single (never married) . . . . .          | 2,499                | 2,347 | 13.1               | 12.3 |
| White, 16 years and over . . . . .        | 4,121                | 3,753 | 6.9                | 6.2  |
| Married, spouse present . . . . .         | 1,775                | 1,549 | 4.7                | 4.1  |
| Widowed, divorced, or separated . . . . . | 580                  | 542   | 9.1                | 8.3  |
| Single (never married) . . . . .          | 1,766                | 1,662 | 11.3               | 10.7 |
| Black, 16 years and over . . . . .        | 1,046                | 954   | 15.2               | 13.8 |
| Married, spouse present . . . . .         | 260                  | 229   | 8.3                | 7.2  |
| Widowed, divorced, or separated . . . . . | 150                  | 135   | 13.7               | 12.8 |
| Single (never married) . . . . .          | 636                  | 590   | 24.0               | 21.9 |
| Total, 25 years and over . . . . .        | 3,734                | 3,396 | 6.4                | 5.8  |
| Married, spouse present . . . . .         | 2,003                | 1,769 | 4.9                | 4.3  |
| Widowed, divorced, or separated . . . . . | 726                  | 678   | 9.6                | 8.9  |
| Single (never married) . . . . .          | 1,006                | 949   | 10.2               | 9.5  |
| White, 25 years and over . . . . .        | 2,932                | 2,644 | 5.8                | 5.2  |
| Married, spouse present . . . . .         | 1,669                | 1,463 | 4.6                | 4.0  |
| Widowed, divorced, or separated . . . . . | 554                  | 519   | 8.9                | 8.2  |
| Single (never married) . . . . .          | 709                  | 663   | 8.9                | 8.3  |
| Black, 25 years and over . . . . .        | 655                  | 592   | 11.7               | 10.5 |
| Married, spouse present . . . . .         | 247                  | 211   | 8.1                | 6.9  |
| Widowed, divorced, or separated . . . . . | 147                  | 130   | 13.6               | 12.5 |
| Single (never married) . . . . .          | 262                  | 252   | 17.7               | 16.3 |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table A-4. Unemployed women by marital status, race, and age,  
1992 and 1993 annual averages**

| Marital status, race, and age         | Thousands of persons |       | Unemployment rates |      |
|---------------------------------------|----------------------|-------|--------------------|------|
|                                       | 1992                 | 1993  | 1992               | 1993 |
| Total, 16 years and over .....        | 4,005                | 3,801 | 6.9                | 6.5  |
| Married, spouse present .....         | 1,584                | 1,465 | 5.0                | 4.6  |
| Widowed, divorced, or separated ..... | 876                  | 850   | 7.5                | 7.2  |
| Single (never married) .....          | 1,545                | 1,487 | 10.7               | 10.2 |
| White, 16 years and over .....        | 2,926                | 2,793 | 6.0                | 5.7  |
| Married, spouse present .....         | 1,324                | 1,225 | 4.7                | 4.3  |
| Widowed, divorced, or separated ..... | 655                  | 619   | 7.1                | 6.6  |
| Single (never married) .....          | 947                  | 950   | 8.4                | 8.3  |
| Black, 16 years and over .....        | 912                  | 842   | 13.0               | 12.0 |
| Married, spouse present .....         | 187                  | 165   | 7.8                | 7.0  |
| Widowed, divorced, or separated ..... | 193                  | 195   | 9.8                | 9.8  |
| Single (never married) .....          | 532                  | 482   | 20.2               | 18.0 |
| Total, 25 years and over .....        | 2,751                | 2,621 | 5.7                | 5.4  |
| Married, spouse present .....         | 1,406                | 1,302 | 4.7                | 4.3  |
| Widowed, divorced, or separated ..... | 815                  | 784   | 7.3                | 6.9  |
| Single (never married) .....          | 531                  | 534   | 7.6                | 7.5  |
| White, 25 years and over .....        | 2,048                | 1,968 | 5.1                | 4.8  |
| Married, spouse present .....         | 1,173                | 1,093 | 4.4                | 4.1  |
| Widowed, divorced, or separated ..... | 607                  | 572   | 6.8                | 6.3  |
| Single (never married) .....          | 268                  | 303   | 5.2                | 5.9  |
| Black, 25 years and over .....        | 588                  | 531   | 10.1               | 9.1  |
| Married, spouse present .....         | 166                  | 141   | 7.3                | 6.3  |
| Widowed, divorced, or separated ..... | 182                  | 178   | 9.5                | 9.2  |
| Single (never married) .....          | 240                  | 212   | 14.8               | 12.9 |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table A-5. Unemployed persons by reason for unemployment, sex,  
and race, 1992 and 1993 annual averages  
(Numbers in thousands)**

| Reason for unemployment  | Total unemployment |       | Men, 20 years and over |       | Women, 20 years and over |       |
|--|--------------------|-------|------------------------|-------|--------------------------|-------|
|  | 1992               | 1993  | 1992                   | 1993  | 1992                     | 1993  |
| <b>NUMBER OF UNEMPLOYED</b>  |                    |       |                        |       |                          |       |
| Total unemployed . . . . .   | 9,384              | 8,734 | 4,619                  | 4,204 | 3,413                    | 3,234 |
| Job losers . . . . .   | 5,291              | 4,769 | 3,357                  | 2,947 | 1,691                    | 1,601 |
| On layoff . . . . .  | 1,246              | 1,104 | 846                    | 712   | 353                      | 349   |
| Other job losers . . . . .   | 4,045              | 3,664 | 2,511                  | 2,235 | 1,338                    | 1,252 |
| Job leavers . . . . .  | 975                | 946   | 409                    | 417   | 425                      | 387   |
| Reentrants . . . . .   | 2,228              | 2,145 | 749                    | 732   | 1,123                    | 1,078 |
| New entrants . . . . .   | 890                | 874   | 104                    | 108   | 175                      | 168   |
| <b>PERCENT DISTRIBUTION</b>  |                    |       |                        |       |                          |       |
| Total unemployed . . . . .   | 100.0              | 100.0 | 100.0                  | 100.0 | 100.0                    | 100.0 |
| Job losers . . . . .   | 56.4               | 54.6  | 72.7                   | 70.1  | 49.5                     | 49.5  |
| On layoff . . . . .  | 13.3               | 12.6  | 18.3                   | 16.9  | 10.3                     | 10.8  |
| Other job losers . . . . .   | 43.1               | 42.0  | 54.4                   | 53.2  | 39.2                     | 38.7  |
| Job leavers . . . . .  | 10.4               | 10.8  | 8.8                    | 9.9   | 12.5                     | 12.0  |
| Reentrants . . . . .   | 23.7               | 24.6  | 16.2                   | 17.4  | 32.9                     | 33.3  |
| New entrants . . . . .   | 9.5                | 10.0  | 2.3                    | 2.6   | 5.1                      | 5.2   |
| <b>UNEMPLOYED AS A<br/>PERCENT OF THE CIVILIAN<br/>LABOR FORCE</b> |                    |       |                        |       |                          |       |
| Job losers . . . . .   | 4.2                | 3.7   | 5.1                    | 4.5   | 3.1                      | 2.9   |
| Job leavers . . . . .  | .8                 | .7    | .6                     | .6    | .8                       | .7    |
| Reentrants . . . . .   | 1.8                | 1.7   | 1.1                    | 1.1   | 2.1                      | 2.0   |
| New entrants . . . . .   | .7                 | .7    | .2                     | .2    | .3                       | .3    |

**Table A-5. Unemployed persons by reason for unemployment, sex,  
and race, 1992 and 1993 annual averages  
(Numbers in thousands) (continued)**

| Reason for unemployment  | Both sexes<br>16 to 19 years |       | White |       | Black |       |
|--|------------------------------|-------|-------|-------|-------|-------|
|  | 1992                         | 1993  | 1992  | 1993  | 1992  | 1993  |
| <b>NUMBER OF UNEMPLOYED</b>  |                              |       |       |       |       |       |
| Total unemployed . . . . .   | 1,352                        | 1,296 | 7,047 | 6,547 | 1,958 | 1,796 |
| Job losers . . . . .   | 243                          | 220   | 4,117 | 3,684 | 985   | 896   |
| On layoff . . . . .  | 47                           | 43    | 1,054 | 932   | 160   | 146   |
| Other job losers . . . . .   | 196                          | 177   | 3,064 | 2,751 | 825   | 751   |
| Job leavers . . . . .  | 141                          | 143   | 759   | 740   | 176   | 166   |
| Reentrants . . . . .   | 357                          | 335   | 1,596 | 1,541 | 545   | 501   |
| New entrants . . . . .   | 611                          | 599   | 574   | 582   | 252   | 233   |
| <b>PERCENT DISTRIBUTION</b>  |                              |       |       |       |       |       |
| Total unemployed . . . . .   | 100.0                        | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Job losers . . . . .   | 18.0                         | 17.0  | 58.4  | 56.3  | 50.3  | 49.9  |
| On layoff . . . . .  | 3.5                          | 3.3   | 15.0  | 14.2  | 8.2   | 8.1   |
| Other job losers . . . . .   | 14.5                         | 13.7  | 43.5  | 42.0  | 42.2  | 41.8  |
| Job leavers . . . . .  | 10.4                         | 11.0  | 10.8  | 11.3  | 9.0   | 9.2   |
| Reentrants . . . . .   | 26.4                         | 25.8  | 22.6  | 23.5  | 27.8  | 27.9  |
| New entrants . . . . .   | 45.2                         | 46.2  | 8.1   | 8.9   | 12.9  | 13.0  |
| <b>UNEMPLOYED AS A<br/>PERCENT OF THE CIVILIAN<br/>LABOR FORCE</b> |                              |       |       |       |       |       |
| Job losers . . . . .   | 3.6                          | 3.2   | 3.8   | 3.4   | 7.1   | 6.4   |
| Job leavers . . . . .  | 2.1                          | 2.1   | .7    | .7    | 1.3   | 1.2   |
| Reentrants . . . . .   | 5.3                          | 4.9   | 1.5   | 1.4   | 3.9   | 3.6   |
| New entrants . . . . .   | 9.1                          | 8.8   | .5    | .5    | 1.8   | 1.7   |

Note: "Job losers" are individuals who have lost their jobs for a variety of reasons, including being laid off. "Job leavers" are individuals who voluntarily leave their jobs. "Reentrants" are individuals who have left the labor market for a period of time and have returned to the labor market. "New entrants" are individuals who are entering the labor market for the first time.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table A-6. Unemployed persons by duration  
of unemployment, 1992 and 1993 annual averages**

| Duration of unemployment                | Thousands of persons |       | Percent distribution |       |
|---|----------------------|-------|----------------------|-------|
|   | 1992                 | 1993  | 1992                 | 1993  |
| <b>TOTAL, ALL WORKERS</b>               |                      |       |                      |       |
| Total, 16 years and over .....          | 9,384                | 8,734 | 100.0                | 100.0 |
| Less than 5 weeks .....                 | 3,270                | 3,160 | 34.9                 | 36.2  |
| 5 to 14 weeks .....                     | 2,760                | 2,522 | 29.4                 | 28.9  |
| 5 to 10 weeks .....                     | 1,960                | 1,798 | 20.9                 | 20.6  |
| 11 to 14 weeks .....                    | 799                  | 723   | 8.5                  | 8.3   |
| 15 weeks and over .....                 | 3,354                | 3,052 | 35.7                 | 34.9  |
| 15 to 26 weeks .....                    | 1,424                | 1,274 | 15.2                 | 14.6  |
| 27 weeks and over .....                 | 1,930                | 1,778 | 20.6                 | 20.4  |
| 27 to 51 weeks .....                    | 879                  | 761   | 9.4                  | 8.7   |
| 52 weeks and over .....                 | 1,051                | 1,018 | 11.2                 | 11.7  |
| Average (mean) duration, in weeks ..... | 17.9                 | 18.1  | —                    | —     |
| Median duration, in weeks .....         | 8.8                  | 8.4   | —                    | —     |
| <b>FULL-TIME WORKERS</b>                |                      |       |                      |       |
| Total, 16 years and over .....          | 7,746                | 7,146 | 100.0                | 100.0 |
| Less than 5 weeks .....                 | 2,377                | 2,285 | 30.7                 | 32.0  |
| 5 to 14 weeks .....                     | 2,295                | 2,082 | 29.6                 | 29.1  |
| 5 to 10 weeks .....                     | 1,610                | 1,459 | 20.8                 | 20.4  |
| 11 to 14 weeks .....                    | 686                  | 623   | 8.8                  | 8.7   |
| 15 weeks and over .....                 | 3,073                | 2,780 | 39.7                 | 38.9  |
| 15 to 26 weeks .....                    | 1,280                | 1,142 | 16.5                 | 16.0  |
| 27 weeks and over .....                 | 1,793                | 1,638 | 23.2                 | 22.9  |
| 27 to 51 weeks .....                    | 820                  | 697   | 10.6                 | 9.8   |
| 52 weeks and over .....                 | 973                  | 940   | 12.6                 | 13.2  |
| Average (mean) duration, in weeks ..... | 19.5                 | 19.9  | —                    | —     |
| Median duration, in weeks .....         | 10.1                 | 9.8   | —                    | —     |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table B-1. Employees on nonfarm payrolls, total and goods-producing industries, 1960-93 annual averages  
(In thousands)**

| Year | Total   | Total private | Goods-producing |        |              |               |
|------|---------|---------------|-----------------|--------|--------------|---------------|
|      |         |               | Total           | Mining | Construction | Manufacturing |
| 1960 | 54,189  | 45,836        | 20,434          | 712    | 2,926        | 16,796        |
| 1961 | 53,999  | 45,404        | 19,857          | 672    | 2,859        | 16,326        |
| 1962 | 55,549  | 46,660        | 20,451          | 650    | 2,948        | 16,853        |
| 1963 | 56,653  | 47,429        | 20,640          | 635    | 3,010        | 16,995        |
| 1964 | 58,283  | 48,686        | 21,005          | 634    | 3,097        | 17,274        |
| 1965 | 60,763  | 50,689        | 21,926          | 632    | 3,232        | 18,062        |
| 1966 | 63,901  | 53,116        | 23,158          | 627    | 3,317        | 19,214        |
| 1967 | 65,803  | 54,413        | 23,308          | 613    | 3,248        | 19,447        |
| 1968 | 67,897  | 56,058        | 23,737          | 606    | 3,350        | 19,781        |
| 1969 | 70,384  | 58,189        | 24,361          | 619    | 3,575        | 20,167        |
| 1970 | 70,880  | 58,325        | 23,578          | 623    | 3,588        | 19,367        |
| 1971 | 71,211  | 58,331        | 22,935          | 609    | 3,704        | 18,623        |
| 1972 | 73,675  | 60,341        | 23,668          | 628    | 3,889        | 19,151        |
| 1973 | 76,790  | 63,058        | 24,893          | 642    | 4,097        | 20,154        |
| 1974 | 78,265  | 64,095        | 24,794          | 697    | 4,020        | 20,077        |
| 1975 | 76,945  | 62,259        | 22,600          | 752    | 3,525        | 18,323        |
| 1976 | 79,382  | 64,511        | 23,352          | 779    | 3,576        | 18,997        |
| 1977 | 82,471  | 67,344        | 24,346          | 813    | 3,851        | 19,682        |
| 1978 | 86,697  | 71,026        | 25,585          | 851    | 4,229        | 20,505        |
| 1979 | 89,823  | 73,876        | 26,461          | 958    | 4,463        | 21,040        |
| 1980 | 90,406  | 74,166        | 25,658          | 1,027  | 4,346        | 20,285        |
| 1981 | 91,152  | 75,121        | 25,497          | 1,139  | 4,188        | 20,170        |
| 1982 | 89,544  | 73,707        | 23,812          | 1,128  | 3,904        | 18,780        |
| 1983 | 90,152  | 74,282        | 23,330          | 952    | 3,946        | 18,432        |
| 1984 | 94,408  | 78,384        | 24,718          | 966    | 4,380        | 19,372        |
| 1985 | 97,387  | 80,992        | 24,842          | 927    | 4,668        | 19,248        |
| 1986 | 99,344  | 82,651        | 24,533          | 777    | 4,810        | 18,947        |
| 1987 | 101,958 | 84,948        | 24,674          | 717    | 4,958        | 18,999        |
| 1988 | 105,210 | 87,824        | 25,125          | 713    | 5,098        | 19,314        |
| 1989 | 107,895 | 90,117        | 25,254          | 692    | 5,171        | 19,391        |
| 1990 | 109,419 | 91,115        | 24,905          | 709    | 5,120        | 19,076        |
| 1991 | 108,256 | 89,854        | 23,745          | 689    | 4,650        | 18,406        |
| 1992 | 108,604 | 89,959        | 23,231          | 635    | 4,492        | 18,104        |
| 1993 | 110,525 | 91,708        | 23,256          | 611    | 4,642        | 18,003        |

Note: Data presented in table B-1 are from the establishment survey. Recent data may differ from those previously published because of revisions to reflect new benchmarks. These estimates are currently projected from March 1993 benchmark levels. When more recent benchmark data are introduced, data beginning April 1993 are subject to revision.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table B-2. Employees on nonfarm payrolls of service-producing industries, 1960-93 annual averages (In thousands)**

| Year | Service-producing |                                  |                 |              |                                    |          |            |       |        |
|------|-------------------|----------------------------------|-----------------|--------------|------------------------------------|----------|------------|-------|--------|
|      | Total             | Transportation, public utilities | Wholesale trade | Retail trade | Finance, insurance and real estate | Services | Government |       |        |
|      |                   |                                  |                 |              |                                    |          | Federal    | State | Local  |
| 1960 | 33,755            | 4,004                            | 3,153           | 8,238        | 2,628                              | 7,378    | 2,270      | 1,536 | 4,547  |
| 1961 | 34,142            | 3,903                            | 3,142           | 8,195        | 2,688                              | 7,619    | 2,279      | 1,607 | 4,708  |
| 1962 | 35,098            | 3,906                            | 3,207           | 8,359        | 2,754                              | 7,982    | 2,340      | 1,668 | 4,881  |
| 1963 | 36,013            | 3,903                            | 3,258           | 8,520        | 2,830                              | 8,277    | 2,358      | 1,747 | 5,121  |
| 1964 | 37,278            | 3,951                            | 3,347           | 8,812        | 2,911                              | 8,660    | 2,348      | 1,856 | 5,392  |
| 1965 | 38,839            | 4,036                            | 3,477           | 9,239        | 2,977                              | 9,036    | 2,378      | 1,996 | 5,700  |
| 1966 | 40,743            | 4,158                            | 3,608           | 9,637        | 3,058                              | 9,498    | 2,564      | 2,141 | 6,080  |
| 1967 | 42,495            | 4,268                            | 3,700           | 9,906        | 3,185                              | 10,045   | 2,719      | 2,302 | 6,371  |
| 1968 | 44,158            | 4,318                            | 3,791           | 10,308       | 3,337                              | 10,567   | 2,737      | 2,442 | 6,660  |
| 1969 | 46,023            | 4,442                            | 3,919           | 10,785       | 3,512                              | 11,169   | 2,758      | 2,533 | 6,904  |
| 1970 | 47,302            | 4,515                            | 4,006           | 11,034       | 3,645                              | 11,548   | 2,731      | 2,664 | 7,158  |
| 1971 | 48,276            | 4,476                            | 4,014           | 11,338       | 3,772                              | 11,797   | 2,696      | 2,747 | 7,437  |
| 1972 | 50,007            | 4,541                            | 4,127           | 11,822       | 3,908                              | 12,276   | 2,684      | 2,859 | 7,790  |
| 1973 | 51,897            | 4,656                            | 4,291           | 12,315       | 4,046                              | 12,857   | 2,663      | 2,923 | 8,146  |
| 1974 | 53,471            | 4,725                            | 4,447           | 12,539       | 4,148                              | 13,441   | 2,724      | 3,039 | 8,407  |
| 1975 | 54,345            | 4,542                            | 4,430           | 12,630       | 4,165                              | 13,892   | 2,748      | 3,179 | 8,758  |
| 1976 | 56,030            | 4,582                            | 4,562           | 13,193       | 4,271                              | 14,551   | 2,733      | 3,273 | 8,865  |
| 1977 | 58,125            | 4,713                            | 4,723           | 13,792       | 4,467                              | 15,302   | 2,727      | 3,377 | 9,023  |
| 1978 | 61,113            | 4,923                            | 4,985           | 14,556       | 4,724                              | 16,252   | 2,753      | 3,474 | 9,446  |
| 1979 | 63,363            | 5,136                            | 5,221           | 14,972       | 4,975                              | 17,112   | 2,773      | 3,541 | 9,633  |
| 1980 | 64,748            | 5,146                            | 5,292           | 15,018       | 5,160                              | 17,890   | 2,866      | 3,610 | 9,765  |
| 1981 | 65,655            | 5,165                            | 5,375           | 15,171       | 5,298                              | 18,615   | 2,772      | 3,640 | 9,619  |
| 1982 | 65,732            | 5,081                            | 5,295           | 15,158       | 5,340                              | 19,021   | 2,739      | 3,640 | 9,458  |
| 1983 | 66,821            | 4,952                            | 5,283           | 15,587       | 5,466                              | 19,664   | 2,774      | 3,662 | 9,434  |
| 1984 | 69,690            | 5,156                            | 5,568           | 16,512       | 5,684                              | 20,746   | 2,807      | 3,734 | 9,482  |
| 1985 | 72,544            | 5,233                            | 5,727           | 17,315       | 5,948                              | 21,927   | 2,875      | 3,832 | 9,687  |
| 1986 | 74,811            | 5,247                            | 5,761           | 17,880       | 6,273                              | 22,957   | 2,899      | 3,893 | 9,901  |
| 1987 | 77,284            | 5,362                            | 5,848           | 18,422       | 6,533                              | 24,110   | 2,943      | 3,967 | 10,100 |
| 1988 | 80,086            | 5,514                            | 6,030           | 19,023       | 6,630                              | 25,504   | 2,971      | 4,076 | 10,339 |
| 1989 | 82,642            | 5,625                            | 6,187           | 19,475       | 6,668                              | 26,907   | 2,988      | 4,182 | 10,609 |
| 1990 | 84,514            | 5,793                            | 6,173           | 19,601       | 6,709                              | 27,934   | 3,085      | 4,305 | 10,914 |
| 1991 | 84,511            | 5,762                            | 6,081           | 19,284       | 6,646                              | 28,336   | 2,966      | 4,346 | 11,081 |
| 1992 | 85,373            | 5,721                            | 5,997           | 19,356       | 6,602                              | 29,052   | 2,969      | 4,408 | 11,267 |
| 1993 | 87,269            | 5,787                            | 5,958           | 19,717       | 6,712                              | 30,278   | 2,915      | 4,484 | 11,417 |

Note: Data presented in table B-2 are from the establishment survey. Recent data may differ from those previously published because of revisions to reflect new benchmarks. These estimates are currently projected from March 1993 benchmark levels. When more recent benchmark data are introduced, data beginning April 1993 are subject to revision.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table C-1. Average hours and earnings of production or nonsupervisory workers<sup>a</sup>  
on private nonfarm payrolls by major industry,  
1964-93 annual averages**

| Year | Total private <sup>a</sup> |                 |                 | Mining       |                 |                 | Construction |                 |                 |
|------|----------------------------|-----------------|-----------------|--------------|-----------------|-----------------|--------------|-----------------|-----------------|
|      | Weekly hours               | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings |
| 1964 | 38.7                       | \$2.36          | \$91.33         | 41.9         | \$2.81          | \$117.74        | 37.2         | \$3.55          | \$132.06        |
| 1965 | 38.8                       | 2.46            | 95.45           | 42.3         | 2.92            | 123.52          | 37.4         | 3.70            | 138.38          |
| 1966 | 38.6                       | 2.56            | 98.82           | 42.7         | 3.05            | 130.24          | 37.6         | 3.89            | 146.26          |
| 1967 | 38.0                       | 2.68            | 101.84          | 42.6         | 3.19            | 135.89          | 37.7         | 4.11            | 154.95          |
| 1968 | 37.8                       | 2.85            | 107.73          | 42.6         | 3.35            | 142.71          | 37.3         | 4.41            | 164.49          |
| 1969 | 37.7                       | 3.04            | 114.61          | 43.0         | 3.60            | 154.80          | 37.9         | 4.79            | 181.54          |
| 1970 | 37.1                       | 3.23            | 119.83          | 42.7         | 3.85            | 164.40          | 37.3         | 5.24            | 195.45          |
| 1971 | 36.9                       | 3.45            | 127.31          | 42.4         | 4.06            | 172.14          | 37.2         | 5.69            | 211.67          |
| 1972 | 37.0                       | 3.70            | 136.90          | 42.6         | 4.44            | 189.14          | 36.5         | 6.06            | 221.19          |
| 1973 | 36.9                       | 3.94            | 145.39          | 42.4         | 4.75            | 201.40          | 36.8         | 6.41            | 235.89          |
| 1974 | 36.5                       | 4.24            | 154.76          | 41.9         | 5.23            | 219.14          | 36.6         | 6.81            | 249.25          |
| 1975 | 36.1                       | 4.53            | 163.53          | 41.9         | 5.95            | 249.31          | 36.4         | 7.31            | 266.08          |
| 1976 | 36.1                       | 4.86            | 175.45          | 42.4         | 6.46            | 273.90          | 36.8         | 7.71            | 283.73          |
| 1977 | 36.0                       | 5.25            | 189.00          | 43.4         | 6.94            | 301.20          | 36.5         | 8.10            | 295.65          |
| 1978 | 35.8                       | 5.69            | 203.70          | 43.4         | 7.67            | 332.88          | 36.8         | 8.66            | 318.69          |
| 1979 | 35.7                       | 6.16            | 219.91          | 43.0         | 8.49            | 365.07          | 37.0         | 9.27            | 342.99          |
| 1980 | 35.3                       | 6.66            | 235.10          | 43.3         | 9.17            | 397.06          | 37.0         | 9.94            | 367.78          |
| 1981 | 35.2                       | 7.25            | 255.20          | 43.7         | 10.04           | 438.75          | 36.9         | 10.82           | 399.26          |
| 1982 | 34.8                       | 7.68            | 267.26          | 42.7         | 10.77           | 459.88          | 36.7         | 11.63           | 426.82          |
| 1983 | 35.0                       | 8.02            | 280.70          | 42.5         | 11.28           | 479.40          | 37.1         | 11.94           | 442.97          |
| 1984 | 35.2                       | 8.32            | 292.86          | 43.3         | 11.63           | 503.58          | 37.8         | 12.13           | 458.51          |
| 1985 | 34.9                       | 8.57            | 299.09          | 43.4         | 11.98           | 519.93          | 37.7         | 12.32           | 464.46          |
| 1986 | 34.8                       | 8.76            | 304.85          | 42.2         | 12.46           | 525.81          | 37.4         | 12.48           | 466.75          |
| 1987 | 34.8                       | 8.98            | 312.50          | 42.4         | 12.54           | 531.70          | 37.8         | 12.71           | 480.44          |
| 1988 | 34.7                       | 9.28            | 322.02          | 42.3         | 12.80           | 541.44          | 37.9         | 13.08           | 495.73          |
| 1989 | 34.6                       | 9.66            | 334.24          | 43.0         | 13.26           | 570.18          | 37.9         | 13.54           | 513.17          |
| 1990 | 34.5                       | 10.01           | 345.35          | 44.1         | 13.68           | 603.29          | 38.2         | 13.77           | 526.01          |
| 1991 | 34.3                       | 10.32           | 353.98          | 44.4         | 14.19           | 630.04          | 38.1         | 14.00           | 533.40          |
| 1992 | 34.4                       | 10.57           | 363.61          | 43.9         | 14.54           | 638.31          | 38.0         | 14.15           | 537.70          |
| 1993 | 34.5                       | 10.83           | 373.64          | 44.3         | 14.60           | 646.78          | 38.4         | 14.37           | 551.81          |

See footnotes at end of table.

**Table C-1. Average hours and earnings of production or nonsupervisory workers<sup>a</sup>  
on private nonfarm payrolls by major industry,  
1964–93 annual averages (continued)**

| Year       | Manufacturing |                 |                                     |                 | Transportation and public utilities |                 |                 | Wholesale trade |                 |                 |
|------------|---------------|-----------------|-------------------------------------|-----------------|-------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|            | Weekly hours  | Hourly earnings | Hourly earnings, excluding overtime | Weekly earnings | Weekly hours                        | Hourly earnings | Weekly earnings | Weekly hours    | Hourly earnings | Weekly earnings |
| 1964 ..... | 40.7          | \$2.53          | \$2.43                              | \$102.97        | 41.1                                | \$2.89          | \$118.78        | 40.7            | \$2.52          | \$102.56        |
| 1965 ..... | 41.2          | 2.61            | 2.50                                | 107.53          | 41.3                                | 3.03            | 125.14          | 40.8            | 2.60            | 106.08          |
| 1966 ..... | 41.4          | 2.71            | 2.59                                | 112.19          | 41.2                                | 3.11            | 128.13          | 40.7            | 2.73            | 111.11          |
| 1967 ..... | 40.6          | 2.82            | 2.71                                | 114.49          | 40.5                                | 3.23            | 130.82          | 40.3            | 2.87            | 115.66          |
| 1968 ..... | 40.7          | 3.01            | 2.88                                | 122.51          | 40.6                                | 3.42            | 138.85          | 40.1            | 3.04            | 121.90          |
| 1969 ..... | 40.6          | 3.19            | 3.05                                | 129.51          | 40.7                                | 3.63            | 147.74          | 40.2            | 3.23            | 129.85          |
| 1970 ..... | 39.8          | 3.35            | 3.23                                | 133.33          | 40.5                                | 3.85            | 155.93          | 39.9            | 3.43            | 136.86          |
| 1971 ..... | 39.9          | 3.57            | 3.45                                | 142.44          | 40.1                                | 4.21            | 168.82          | 39.4            | 3.64            | 143.42          |
| 1972 ..... | 40.5          | 3.82            | 3.66                                | 154.71          | 40.4                                | 4.65            | 187.86          | 39.4            | 3.85            | 151.69          |
| 1973 ..... | 40.7          | 4.09            | 3.91                                | 166.46          | 40.5                                | 5.02            | 203.31          | 39.2            | 4.07            | 159.54          |
| 1974 ..... | 40.0          | 4.42            | 4.25                                | 176.80          | 40.2                                | 5.41            | 217.48          | 38.8            | 4.38            | 169.94          |
| 1975 ..... | 39.5          | 4.83            | 4.67                                | 190.79          | 39.7                                | 5.88            | 233.44          | 38.6            | 4.72            | 182.19          |
| 1976 ..... | 40.1          | 5.22            | 5.02                                | 209.32          | 39.8                                | 6.45            | 256.71          | 38.7            | 5.02            | 194.27          |
| 1977 ..... | 40.3          | 5.68            | 5.44                                | 228.90          | 39.9                                | 6.99            | 278.90          | 38.8            | 5.39            | 209.13          |
| 1978 ..... | 40.4          | 6.17            | 5.91                                | 249.27          | 40.0                                | 7.57            | 302.80          | 38.8            | 5.88            | 228.14          |
| 1979 ..... | 40.2          | 6.70            | 6.43                                | 269.34          | 39.9                                | 8.16            | 325.58          | 38.8            | 6.39            | 247.93          |
| 1980 ..... | 39.7          | 7.27            | 7.02                                | 288.62          | 39.6                                | 8.87            | 351.25          | 38.4            | 6.95            | 266.88          |
| 1981 ..... | 39.8          | 7.99            | 7.72                                | 318.00          | 39.4                                | 9.70            | 382.18          | 38.5            | 7.55            | 290.68          |
| 1982 ..... | 38.9          | 8.49            | 8.25                                | 330.26          | 39.0                                | 10.32           | 402.48          | 38.3            | 8.08            | 309.46          |
| 1983 ..... | 40.1          | 8.83            | 8.52                                | 354.08          | 39.0                                | 10.79           | 420.81          | 38.5            | 8.54            | 328.79          |
| 1984 ..... | 40.7          | 9.19            | 8.82                                | 374.03          | 39.4                                | 11.12           | 438.13          | 38.5            | 8.88            | 341.88          |
| 1985 ..... | 40.5          | 9.54            | 9.16                                | 386.37          | 39.5                                | 11.40           | 450.30          | 38.4            | 9.15            | 351.36          |
| 1986 ..... | 40.7          | 9.73            | 9.34                                | 396.01          | 39.2                                | 11.70           | 458.64          | 38.3            | 9.34            | 357.72          |
| 1987 ..... | 41.0          | 9.91            | 9.48                                | 406.31          | 39.2                                | 12.03           | 471.58          | 38.1            | 9.59            | 365.38          |
| 1988 ..... | 41.1          | 10.19           | 9.73                                | 418.81          | 38.8                                | 12.26           | 475.69          | 38.1            | 9.98            | 380.24          |
| 1989 ..... | 41.0          | 10.48           | 10.02                               | 429.68          | 38.9                                | 12.60           | 490.14          | 38.0            | 10.39           | 394.82          |
| 1990 ..... | 40.8          | 10.83           | 10.37                               | 441.86          | 38.9                                | 12.97           | 504.53          | 38.1            | 10.79           | 411.10          |
| 1991 ..... | 40.7          | 11.18           | 10.71                               | 455.03          | 38.7                                | 13.22           | 511.61          | 38.1            | 11.15           | 424.82          |
| 1992 ..... | 41.0          | 11.46           | 10.95                               | 469.86          | 38.9                                | 13.45           | 523.21          | 38.2            | 11.39           | 435.10          |
| 1993 ..... | 41.4          | 11.74           | 11.18                               | 486.04          | 39.6                                | 13.63           | 539.75          | 38.2            | 11.73           | 448.09          |

See footnotes at end of table.

**Table C-1. Average hours and earnings of production or nonsupervisory workers<sup>a</sup> on private nonfarm payrolls by major industry, 1964-93 annual averages (continued)**

| Year | Retail trade |                 |                 | Finance, insurance and real estate |                 |                 | Services     |                 |                 |
|------|--------------|-----------------|-----------------|------------------------------------|-----------------|-----------------|--------------|-----------------|-----------------|
|      | Weekly hours | Hourly earnings | Weekly earnings | Weekly hours                       | Hourly earnings | Weekly earnings | Weekly hours | Hourly earnings | Weekly earnings |
| 1964 | 37.0         | \$1.75          | \$64.75         | 37.3                               | \$2.30          | \$85.79         | 36.1         | \$1.94          | \$70.03         |
| 1965 | 36.6         | 1.82            | 66.61           | 37.2                               | 2.39            | 88.91           | 35.9         | 2.05            | 73.60           |
| 1966 | 35.9         | 1.91            | 68.57           | 37.3                               | 2.47            | 92.13           | 35.5         | 2.17            | 77.04           |
| 1967 | 35.3         | 2.01            | 70.95           | 37.1                               | 2.58            | 95.72           | 35.1         | 2.29            | 80.38           |
| 1968 | 34.7         | 2.16            | 74.95           | 37.0                               | 2.75            | 101.75          | 34.7         | 2.42            | 83.97           |
| 1969 | 34.2         | 2.30            | 78.66           | 37.1                               | 2.93            | 108.70          | 34.7         | 2.61            | 90.57           |
| 1970 | 33.8         | 2.44            | 82.47           | 36.7                               | 3.07            | 112.67          | 34.4         | 2.81            | 96.66           |
| 1971 | 33.7         | 2.60            | 87.62           | 36.6                               | 3.22            | 117.85          | 33.9         | 3.04            | 103.06          |
| 1972 | 33.4         | 2.75            | 91.85           | 36.6                               | 3.36            | 122.98          | 33.9         | 3.27            | 110.85          |
| 1973 | 33.1         | 2.91            | 96.32           | 36.6                               | 3.53            | 129.20          | 33.8         | 3.47            | 117.29          |
| 1974 | 32.7         | 3.14            | 102.68          | 36.5                               | 3.77            | 137.61          | 33.6         | 3.75            | 126.00          |
| 1975 | 32.4         | 3.36            | 108.86          | 36.5                               | 4.06            | 148.19          | 33.5         | 4.02            | 134.67          |
| 1976 | 32.1         | 3.57            | 114.60          | 36.4                               | 4.27            | 155.43          | 33.3         | 4.31            | 143.52          |
| 1977 | 31.6         | 3.85            | 121.66          | 36.4                               | 4.54            | 165.26          | 33.0         | 4.65            | 153.45          |
| 1978 | 31.0         | 4.20            | 130.20          | 36.4                               | 4.89            | 178.00          | 32.8         | 4.99            | 163.67          |
| 1979 | 30.6         | 4.53            | 138.62          | 36.2                               | 5.27            | 190.77          | 32.7         | 5.36            | 175.27          |
| 1980 | 30.2         | 4.88            | 147.38          | 36.2                               | 5.79            | 209.60          | 32.6         | 5.85            | 190.71          |
| 1981 | 30.1         | 5.25            | 158.03          | 36.3                               | 6.31            | 229.05          | 32.6         | 6.41            | 208.97          |
| 1982 | 29.9         | 5.48            | 163.85          | 36.2                               | 6.78            | 245.44          | 32.6         | 6.92            | 225.59          |
| 1983 | 29.8         | 5.74            | 171.05          | 36.2                               | 7.29            | 263.90          | 32.7         | 7.31            | 239.04          |
| 1984 | 29.8         | 5.85            | 174.33          | 36.5                               | 7.63            | 278.50          | 32.6         | 7.59            | 247.43          |
| 1985 | 29.4         | 5.94            | 174.64          | 36.4                               | 7.94            | 289.02          | 32.5         | 7.90            | 256.75          |
| 1986 | 29.2         | 6.03            | 176.08          | 36.4                               | 8.36            | 304.30          | 32.5         | 8.18            | 265.85          |
| 1987 | 29.2         | 6.12            | 178.70          | 36.3                               | 8.73            | 316.90          | 32.5         | 8.49            | 275.93          |
| 1988 | 29.1         | 6.31            | 183.62          | 35.9                               | 9.06            | 325.25          | 32.6         | 8.88            | 289.49          |
| 1989 | 28.9         | 6.53            | 188.72          | 35.8                               | 9.53            | 341.17          | 32.6         | 9.38            | 305.79          |
| 1990 | 28.8         | 6.75            | 194.40          | 35.8                               | 9.97            | 356.93          | 32.5         | 9.83            | 319.48          |
| 1991 | 28.6         | 6.94            | 198.48          | 35.7                               | 10.39           | 370.92          | 32.4         | 10.23           | 331.45          |
| 1992 | 28.8         | 7.12            | 205.06          | 35.8                               | 10.82           | 387.36          | 32.5         | 10.54           | 342.55          |
| 1993 | 28.8         | 7.29            | 209.95          | 35.8                               | 11.35           | 406.33          | 32.5         | 10.79           | 350.68          |

<sup>a</sup>Data relate to production workers in mining and manufacturing; construction workers in construction; and nonsupervisory workers in transportation and public utilities; wholesale and retail trade; finance, insurance, and real estate; and services.

Note: Data presented in table C-1 are from the establishment survey. Recent data may differ slightly from those previously published because of revisions to reflect new benchmarks. These estimates are currently projected from March 1993 benchmark levels. When more recent benchmark data are introduced, data beginning April 1993 are subject to revision.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table D-1. Civilian labor force by sex, age, race, and Hispanic origin, 1979 and 1992, and moderate growth projection to 2005 (Numbers in thousands)**

| Group  | Level            |         |         | Change           |           | Percent change   |           | Percent distribution |       |       | Annual labor force growth rate (percent) |           |
|--|------------------|---------|---------|------------------|-----------|------------------|-----------|----------------------|-------|-------|--|-----------|
|  | 1979             | 1992    | 2005    | 1979-1992        | 1992-2005 | 1979-1992        | 1992-2005 | 1979                 | 1992  | 2005  | 1979-1992                                | 1992-2005 |
| Total, 16 years and older . . . . .                        | 104,962          | 126,982 | 150,516 | 22,020           | 23,534    | 21.0             | 18.5      | 100.0                | 100.0 | 100.0 | 1.5                                      | 1.3       |
| 16 to 24 . . . . .   | 25,407           | 20,454  | 24,127  | -4,953           | 3,673     | -19.5            | 18.0      | 24.2                 | 16.1  | 16.0  | -1.7                                     | 1.3       |
| 25 to 54 . . . . .   | 64,520           | 91,097  | 105,054 | 26,577           | 13,957    | 41.2             | 15.3      | 61.5                 | 71.7  | 69.8  | 2.7                                      | 1.1       |
| 55 and older . . . . .                                     | 15,034           | 15,432  | 21,335  | 398              | 5,903     | 2.6              | 38.3      | 14.3                 | 12.2  | 14.2  | .2                                       | 2.5       |
| Men, 16 years and older . . . . .                          | 60,726           | 69,184  | 78,718  | 8,458            | 9,534     | 13.9             | 13.8      | 57.9                 | 54.5  | 52.3  | 1.0                                      | 1.0       |
| Women, 16 years and older . . . . .                        | 44,235           | 57,798  | 71,798  | 13,563           | 14,000    | 30.7             | 24.2      | 42.1                 | 45.5  | 47.7  | 2.1                                      | 1.7       |
| White, 16 years and older . . . . .                        | 91,923           | 108,526 | 124,847 | 16,603           | 16,321    | 18.1             | 15.0      | 87.6                 | 85.5  | 82.9  | 1.3                                      | 1.1       |
| Black, 16 years and older . . . . .                        | 10,678           | 13,891  | 17,395  | 3,213            | 3,504     | 30.1             | 25.2      | 10.2                 | 10.9  | 11.6  | 2.0                                      | 1.7       |
| Asian and other, 16 years and older <sup>a</sup> . . . . . | 2,361            | 4,565   | 8,274   | 2,204            | 3,709     | 93.4             | 81.2      | 2.2                  | 3.6   | 5.5   | 5.2                                      | 4.7       |
| Hispanic, 16 years and older <sup>b</sup> . . . . .        | ( <sup>c</sup> ) | 10,131  | 16,581  | ( <sup>c</sup> ) | 6,450     | ( <sup>c</sup> ) | 63.7      | ( <sup>c</sup> )     | 8.0   | 11.0  | 4.3 <sup>d</sup>                         | 3.9       |
| Other than Hispanic, 16 years and older . . . . .          | ( <sup>c</sup> ) | 116,851 | 133,935 | ( <sup>c</sup> ) | 17,084    | ( <sup>c</sup> ) | 14.6      | ( <sup>c</sup> )     | 92.0  | 89.0  | 1.1 <sup>d</sup>                         | 1.1       |
| White, non-Hispanic . . . . .                              | ( <sup>c</sup> ) | 98,819  | 109,753 | ( <sup>c</sup> ) | 10,934    | ( <sup>c</sup> ) | 11.1      | ( <sup>c</sup> )     | 77.8  | 72.9  | .9 <sup>d</sup>                          | .8        |

<sup>a</sup> The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaskan natives. The historical data are derived by subtracting "black" from the "black and other" group; projections are made directly, not by subtraction.

<sup>b</sup> Persons of Hispanic origin may be of any race.

<sup>c</sup> Data for Hispanic origin were not available before 1980.

<sup>d</sup> Data are for 1980-92.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table D-2. Civilian labor force participation rates by sex, age, race,  
and Hispanic origin, 1979 and 1992, and moderate growth projection to 2005  
(Percent)**

| Group   | Participation rate |      |      | Annual growth rate |           |
|---|--------------------|------|------|--------------------|-----------|
|   | 1979               | 1992 | 2005 | 1979-1992          | 1992-2005 |
| Total, 16 years and older . . . . .                           | 63.7               | 66.3 | 68.8 | 1.5                | 1.3       |
| Men, 16 years and older . . . . .                             | 77.8               | 75.6 | 74.7 | 1.0                | 1.0       |
| 16 to 19 . . . . .  | 61.5               | 41.1 | 55.5 | -2.8               | 2.1       |
| 20 to 24 . . . . .  | 86.4               | 83.3 | 84.4 | -1.3               | .9        |
| 25 to 34 . . . . .  | 95.3               | 93.8 | 93.5 | 1.3                | -1.2      |
| 35 to 44 . . . . .  | 95.7               | 93.8 | 93.5 | 3.6                | .6        |
| 45 to 54 . . . . .  | 91.4               | 90.8 | 90.2 | 1.5                | 3.1       |
| 55 to 64 . . . . .  | 72.8               | 67.0 | 69.7 | -.6                | 2.8       |
| 65 and older . . . . .  | 19.9               | 16.1 | 14.7 | .5                 | .5        |
| Women, 16 years and older . . . . .                           | 50.9               | 57.8 | 63.2 | 2.1                | 1.7       |
| 16 to 19 . . . . .  | 54.2               | 49.2 | 52.4 | -2.6               | 2.1       |
| 20 to 24 . . . . .  | 69.0               | 71.2 | 73.6 | -.9                | .8        |
| 25 to 34 . . . . .  | 63.9               | 74.1 | 80.7 | 2.4                | -.5       |
| 35 to 44 . . . . .  | 63.6               | 76.8 | 86.2 | 5.0                | 1.5       |
| 45 to 54 . . . . .  | 58.3               | 72.7 | 82.8 | 3.1                | 4.1       |
| 55 to 64 . . . . .  | 41.7               | 46.6 | 52.4 | .7                 | 3.2       |
| 65 and older . . . . .  | 8.3                | 8.3  | 8.8  | 1.9                | 1.3       |
| White, 16 years and older . . . . .                           | 63.9               | 66.7 | 70.2 | 1.3                | 1.1       |
| Black, 16 years and older . . . . .                           | 61.4               | 63.3 | 66.2 | 2.0                | 1.7       |
| Asian and other, 16 years<br>and older <sup>a</sup> . . . . . | 66.1               | 65.6 | 66.6 | 5.2                | 4.7       |
| Hispanic, 16 years and older <sup>b</sup> . . . . .           | ( <sup>c</sup> )   | 66.5 | 68.4 | 4.3 <sup>d</sup>   | 3.9       |

<sup>a</sup> The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaskan natives. The historical data are derived by subtracting "black" from the "black and other" group; projections are made directly, not by subtraction.

<sup>b</sup> Persons of Hispanic origin may be of any race.

<sup>c</sup> Data for Hispanic origin were not available before 1980.

<sup>d</sup> Data are for 1980-92.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table D-3. Civilian noninstitutional population by sex, age, race,  
and Hispanic origin, 1979 and 1992, and moderate growth projection to 2005  
(Numbers in thousands)**

| Group   | Level            |         |         | Change           |           | Annual growth rate (percent) |           | Percent distribution |       |       |
|---|------------------|---------|---------|------------------|-----------|------------------------------|-----------|----------------------|-------|-------|
|   | 1979             | 1992    | 2005    | 1979-1992        | 1992-2005 | 1979-1992                    | 1992-2005 | 1979                 | 1992  | 2005  |
| Total, 16 years and older . . . .                             | 164,863          | 191,576 | 218,861 | 26,713           | 27,285    | 1.2                          | 1.0       | 100.0                | 100.0 | 100.0 |
| 16 to 24 . . . . .  | 37,011           | 30,931  | 35,739  | -6,080           | 4,808     | -1.4                         | 1.1       | 22.4                 | 16.1  | 16.3  |
| 25 to 54 . . . . .  | 82,876           | 108,847 | 119,653 | 25,971           | 10,806    | 2.1                          | .7        | 50.3                 | 56.8  | 54.7  |
| 55 and older . . . . .  | 44,977           | 51,798  | 63,469  | 6,821            | 11,671    | 1.1                          | 1.6       | 27.3                 | 27.0  | 29.0  |
| Men, 16 years and older . . . .                               | 78,020           | 91,541  | 105,340 | 13,521           | 13,799    | 1.2                          | 1.1       | 47.3                 | 47.8  | 48.1  |
| 16 to 24 . . . . .  | 18,183           | 15,347  | 17,941  | -2,836           | 2,594     | -1.3                         | 1.2       | 11.0                 | 8.0   | 8.2   |
| 25 to 54 . . . . .  | 40,183           | 53,330  | 58,682  | 13,147           | 5,352     | 2.2                          | .7        | 24.4                 | 27.8  | 26.8  |
| 55 and older . . . . .  | 19,653           | 22,864  | 28,717  | 3,211            | 5,853     | 1.2                          | 1.8       | 11.9                 | 11.9  | 13.1  |
| Women, 16 years and older . .                                 | 86,843           | 100,035 | 113,521 | 13,192           | 13,486    | 1.1                          | 1.0       | 52.7                 | 52.2  | 51.9  |
| 16 to 24 . . . . .  | 18,827           | 15,584  | 17,798  | -3,243           | 2,214     | -1.4                         | 1.0       | 11.4                 | 8.1   | 8.1   |
| 25 to 54 . . . . .  | 42,693           | 55,517  | 60,971  | 12,824           | 5,454     | 2.0                          | .7        | 25.9                 | 29.0  | 27.9  |
| 55 and older . . . . .  | 25,324           | 28,934  | 34,751  | 3,610            | 5,817     | 1.0                          | 1.4       | 15.4                 | 15.1  | 15.9  |
| White, 16 years and older . . .                               | 143,894          | 162,658 | 180,153 | 18,764           | 17,495    | .9                           | .8        | 87.3                 | 84.9  | 82.3  |
| Black, 16 years and older . . .                               | 17,397           | 21,958  | 26,288  | 4,561            | 4,330     | 1.8                          | 1.4       | 10.6                 | 11.5  | 12.0  |
| Asian and other, 16 years<br>and older <sup>a</sup> . . . . . | 3,572            | 6,961   | 12,420  | 3,389            | 5,459     | 5.3                          | 4.6       | 2.2                  | 3.6   | 5.7   |
| Hispanic, 16 years and<br>older <sup>b</sup> . . . . .        | ( <sup>c</sup> ) | 15,244  | 24,240  | ( <sup>c</sup> ) | 8,996     | ( <sup>c</sup> )             | 3.6       | ( <sup>c</sup> )     | 8.0   | 11.1  |

<sup>a</sup> The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaskan natives. The historical data are derived by subtracting "black" from the "black and other" group; projections are made directly, not by subtraction.

<sup>b</sup> Persons of Hispanic origin may be of any race.

<sup>c</sup> Data for Hispanic origin were not available before 1980.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table D-4. Civilian labor force, 1992 and projected to 2005,  
and projected entrants and leavers, 1992–2005**

| Group                               | Labor force<br>1992 | Entrants<br>1992–2005 | Leavers<br>1992–2005 | Labor force<br>2005 |
|-------------------------------------|---------------------|-----------------------|----------------------|---------------------|
| <b>Number (in thousands)</b>        |                     |                       |                      |                     |
| Total .....                         | 126,982             | 51,215                | 27,681               | 150,516             |
| Men .....                           | 69,184              | 25,125                | 15,591               | 78,718              |
| Women .....                         | 57,798              | 26,090                | 12,090               | 71,798              |
| White, non-Hispanic .....           | 98,817              | 33,384                | 22,448               | 109,753             |
| Men .....                           | 53,995              | 16,107                | 12,884               | 57,218              |
| Women .....                         | 44,822              | 17,278                | 9,564                | 52,535              |
| Black, non-Hispanic .....           | 13,694              | 6,096                 | 3,160                | 16,630              |
| Men .....                           | 6,786               | 2,881                 | 1,505                | 8,163               |
| Women .....                         | 6,908               | 3,215                 | 1,656                | 8,467               |
| Hispanic origin .....               | 10,131              | 7,801                 | 1,352                | 16,581              |
| Men .....                           | 6,091               | 4,339                 | 802                  | 9,628               |
| Women .....                         | 4,040               | 3,462                 | 550                  | 6,953               |
| Asian and other, non-Hispanic ..... | 4,340               | 3,958                 | 746                  | 7,552               |
| Men .....                           | 2,312               | 1,798                 | 401                  | 3,709               |
| Women .....                         | 2,028               | 2,135                 | 320                  | 4,843               |
| <b>Share (percent)</b>              |                     |                       |                      |                     |
| Total .....                         | 100.0               | 100.0                 | 100.0                | 100.0               |
| Men .....                           | 54.5                | 49.1                  | 56.3                 | 52.3                |
| Women .....                         | 45.5                | 50.9                  | 43.7                 | 47.7                |
| White, non-Hispanic .....           | 77.8                | 65.2                  | 81.0                 | 72.9                |
| Men .....                           | 42.5                | 31.4                  | 46.5                 | 38.0                |
| Women .....                         | 35.3                | 33.7                  | 34.5                 | 34.9                |
| Black, non-Hispanic .....           | 10.8                | 11.9                  | 11.4                 | 11.0                |
| Men .....                           | 5.3                 | 5.6                   | 5.4                  | 5.4                 |
| Women .....                         | 5.4                 | 6.3                   | 6.0                  | 5.6                 |
| Hispanic origin .....               | 8.0                 | 15.2                  | 4.9                  | 11.0                |
| Men .....                           | 4.8                 | 8.5                   | 2.9                  | 6.4                 |
| Women .....                         | 3.2                 | 6.8                   | 2.0                  | 4.6                 |
| Asian and other, non-Hispanic ..... | 3.4                 | 7.7                   | 2.7                  | 5.0                 |
| Men .....                           | 1.8                 | 3.5                   | 1.4                  | 2.5                 |
| Women .....                         | 1.6                 | 4.6                   | 1.2                  | 2.6                 |

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table D-5. Median age of the labor force, by sex, race, and Hispanic origin, 1962–2005  
(Age in years)**

| Group                                    | 1962             | 1970             | 1979             | 1992 | 1995 | 2000 | 2005 |
|--|------------------|------------------|------------------|------|------|------|------|
| Total .....                              | 40.5             | 39.0             | 34.7             | 37.2 | 37.8 | 39.2 | 40.5 |
| Men .....                                | 40.5             | 39.4             | 35.3             | 37.3 | 37.8 | 39.2 | 40.4 |
| Women .....                              | 40.4             | 38.3             | 33.9             | 37.2 | 37.8 | 39.3 | 40.5 |
| White .....                              | 40.9             | 39.3             | 34.9             | 37.5 | 38.0 | 39.6 | 40.9 |
| Black <sup>a</sup> .....                 | 38.3             | 36.6             | 33.3             | 35.6 | 36.3 | 37.7 | 38.8 |
| Asian and other races <sup>b</sup> ..... | ( <sup>c</sup> ) | ( <sup>c</sup> ) | 33.1             | 30.5 | 36.9 | 37.6 | 38.3 |
| Hispanic origin <sup>d</sup> .....       | ( <sup>e</sup> ) | ( <sup>e</sup> ) | ( <sup>e</sup> ) | 33.9 | 34.1 | 35.3 | 35.8 |

<sup>a</sup> For 1962 and 1970: black and other.

<sup>b</sup> The "Asian and other race" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaskan natives. The historical data are derived by subtracting "black" from the "black and other" group.

<sup>c</sup> Data not available before 1972.

<sup>d</sup> Persons of Hispanic origin may be of any race.

<sup>e</sup> Data for Hispanic origin were not available before 1980.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table D-6. Three projections of the civilian labor force by sex, age, race, and Hispanic origin, 2005**

| Group  | Participation rate<br>(percent) |          |      | Level<br>(thousands) |          |         |
|--|---------------------------------|----------|------|----------------------|----------|---------|
|  | High                            | Moderate | Low  | High                 | Moderate | Low     |
| Total .....  | 70.1                            | 68.8     | 67.3 | 156,454              | 150,516  | 147,252 |
| Men .....  | 75.8                            | 74.7     | 73.6 | 81,062               | 78,718   | 77,558  |
| Women .....  | 65.0                            | 63.2     | 61.4 | 75,391               | 71,798   | 69,694  |
| 16 to 24 years .....                                   | 69.1                            | 67.5     | 65.6 | 25,315               | 24,127   | 23,436  |
| 25 to 54 years .....                                   | 88.9                            | 87.8     | 86.4 | 108,726              | 105,054  | 103,348 |
| 55 years and older .....                               | 34.9                            | 33.6     | 32.3 | 22,413               | 21,335   | 20,469  |
| White, 16 years and older .....                        | 70.5                            | 69.5     | 68.1 | 128,961              | 124,847  | 122,478 |
| Black, 16 years and older .....                        | 68.2                            | 66.2     | 64.0 | 18,022               | 17,395   | 16,820  |
| Asian and other, 16 years and older <sup>a</sup> ..... | 68.9                            | 66.6     | 64.0 | 9,470                | 8,274    | 7,954   |
| Hispanic, 16 years and older <sup>b</sup> .....        | 70.9                            | 68.4     | 66.0 | 18,286               | 16,581   | 16,006  |

<sup>a</sup> The "Asian and other" group includes (1) Asians and Pacific Islanders and (2) American Indians and Alaskan natives. The historical data are derived by subtracting "black" from the "black and other" group.

<sup>b</sup> Persons of Hispanic origin may be of any race.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

**Table E-1. Number of participants served under JTPA Titles II-A, II-B, and III by State:  
Program Year 1991 (for Title II-A and Title III data) and Fiscal Year 1992 (for Title II-B data)**

| State                | Title II-A<br>(PY 1991) | Title II-B<br>(FY 1992) | Title III<br>(PY 1991) |
|----------------------|-------------------------|-------------------------|------------------------|
| U.S. Total           | 1,021,771               | 782,139                 | 332,217                |
| Alabama              | 14,095                  | 12,089                  | 5,137                  |
| Alaska               | 2,353                   | 1,228                   | 533                    |
| Arizona              | 9,871                   | 7,646                   | 6,299                  |
| Arkansas             | 19,368                  | 9,140                   | 4,764                  |
| California           | 92,352                  | 83,432                  | 22,698                 |
| Colorado             | 18,300                  | 7,009                   | 5,904                  |
| Connecticut          | 5,230                   | 6,528                   | 3,417                  |
| Delaware             | 2,140                   | 1,623                   | 806                    |
| District of Columbia | 1,170                   | 7,410                   | 449                    |
| Florida              | 80,753                  | 31,276                  | 13,724                 |
| Georgia              | 18,890                  | 14,234                  | 12,345                 |
| Hawaii               | 2,366                   | 1,320                   | 514                    |
| Idaho                | 5,606                   | 1,935                   | 1,158                  |
| Illinois             | 44,031                  | 38,936                  | 22,034                 |
| Indiana              | 20,833                  | 11,768                  | 6,499                  |
| Iowa                 | 7,994                   | 3,398                   | 3,263                  |
| Kansas               | 4,774                   | 3,096                   | 1,342                  |
| Kentucky             | 31,953                  | 12,391                  | 12,802                 |
| Louisiana            | 35,299                  | 25,631                  | 7,455                  |
| Maine                | 3,551                   | 3,307                   | 2,818                  |
| Maryland             | 26,633                  | 13,302                  | 3,881                  |
| Massachusetts        | 11,017                  | 18,901                  | 21,737                 |
| Michigan             | 49,169                  | 33,189                  | 15,501                 |
| Minnesota            | 19,053                  | 8,322                   | 5,761                  |
| Mississippi          | 24,041                  | 11,254                  | 5,076                  |
| Missouri             | 19,805                  | 13,070                  | 11,312                 |
| Montana              | 4,457                   | 1,797                   | 1,553                  |
| Nebraska             | 3,253                   | 1,937                   | 647                    |
| Nevada               | 3,242                   | 1,796                   | 696                    |
| New Hampshire        | 2,563                   | 2,020                   | 808                    |
| New Jersey           | 15,329                  | 19,184                  | 3,110                  |
| New Mexico           | 12,318                  | 6,701                   | 2,982                  |
| New York             | 47,404                  | 66,498                  | 18,811                 |
| North Carolina       | 17,972                  | 10,006                  | 5,381                  |
| North Dakota         | 1,887                   | 1,757                   | 605                    |
| Ohio                 | 51,885                  | 29,571                  | 13,893                 |
| Oklahoma             | 11,833                  | 6,801                   | 3,812                  |
| Oregon               | 10,320                  | 4,701                   | 4,700                  |
| Pennsylvania         | 45,595                  | 30,522                  | 8,899                  |

**Table E-1. Number of participants served under JTPA Titles II-A, II-B, and III by State: Program Year 1991 (for Title II-A and Title III data) and Fiscal Year 1992 (for Title II-B data) (continued)**

| State                | Title II-A<br>(PY 1991) | Title II-B<br>(FY 1992) | Title III<br>(PY 1991) |
|----------------------|-------------------------|-------------------------|------------------------|
| Rhode Island.....    | 3,067                   | 2,633                   | 2,374                  |
| South Carolina ..... | 10,976                  | 8,992                   | 6,734                  |
| South Dakota .....   | 4,597                   | 1,691                   | 558                    |
| Tennessee .....      | 26,960                  | 13,485                  | 4,862                  |
| Texas .....          | 73,743                  | 49,254                  | 23,484                 |
| Utah .....           | 4,803                   | 2,375                   | 962                    |
| Vermont .....        | 2,659                   | 1,640                   | 1,292                  |
| Virginia .....       | 8,816                   | 10,726                  | 3,965                  |
| Washington.....      | 12,779                  | 8,545                   | 5,591                  |
| West Virginia .....  | 8,630                   | 9,386                   | 3,105                  |
| Wisconsin .....      | 20,041                  | 12,301                  | 12,155                 |
| Wyoming .....        | 2,032                   | 749                     | 261                    |
| Puerto Rico.....     | 43,963                  | 95,636                  | 3,748                  |

Source: U.S. Department of Labor, Employment and Training Administration. For Title II-A: JTPA Annual Status Report (February 17, 1994); for Title II-B: JTPA Summer Performance Report (April 11, 1994); for Title III: JTPA Annual Status Report and Worker Adjustment Annual Program Report (February 17, 1994). Title II-B data are for Service Delivery Area programs during the summer of 1992.

**Table E-2. Expenditures under JTPA Titles II-A and II-B by State: Program Year 1991  
(for Title II-A data) and Fiscal Year 1992 (for Title II-B data)**

| State                | Title II-A<br>(PY 1991) | Title II-B<br>(FY 1992) |
|----------------------|-------------------------|-------------------------|
| U.S. Total           | \$1,746,143,701         | \$1,005,423,549         |
| Alabama              | 40,639,430              | 20,994,725              |
| Alaska               | 6,151,695               | 2,585,025               |
| Arizona              | 25,395,858              | 12,325,283              |
| Arkansas             | 26,445,049              | 11,953,983              |
| California           | 190,614,029             | 125,817,050             |
| Colorado             | 24,550,858              | 10,827,812              |
| Connecticut          | 13,056,927              | 7,993,675               |
| Delaware             | 5,210,372               | 2,328,232               |
| District of Columbia | 3,831,023               | 6,614,795               |
| Florida              | 81,277,297              | 42,233,034              |
| Georgia              | 42,563,808              | 21,004,800              |
| Hawaii               | 4,195,253               | 2,200,272               |
| Idaho                | 7,747,732               | 3,509,658               |
| Illinois             | 90,757,170              | 46,150,269              |
| Indiana              | 33,308,944              | 17,988,206              |
| Iowa                 | 14,037,460              | 6,477,471               |
| Kansas               | 7,452,289               | 4,429,736               |
| Kentucky             | 36,958,892              | 16,962,047              |
| Louisiana            | 60,244,464              | 32,428,284              |
| Maine                | 6,139,831               | 5,592,481               |
| Maryland             | 18,109,588              | 15,596,196              |
| Massachusetts        | 26,184,585              | 26,410,938              |
| Michigan             | 94,737,315              | 54,962,820              |
| Minnesota            | 18,901,304              | 12,441,629              |
| Mississippi          | 34,334,131              | 14,630,410              |
| Missouri             | 35,904,643              | 19,069,318              |
| Montana              | 7,125,448               | 3,260,713               |
| Nebraska             | 5,147,344               | 2,836,875               |
| Nevada               | 5,187,795               | 2,791,264               |
| New Hampshire        | 4,835,691               | 4,154,414               |
| New Jersey           | 33,493,807              | 26,925,711              |
| New Mexico           | 14,721,719              | 6,473,551               |
| New York             | 108,870,218             | 82,668,135              |
| North Carolina       | 23,334,988              | 14,473,730              |
| North Dakota         | 4,234,960               | 2,447,697               |
| Ohio                 | 75,785,587              | 41,313,546              |
| Oklahoma             | 23,997,215              | 11,074,240              |
| Oregon               | 17,709,279              | 8,079,282               |
| Pennsylvania         | 62,785,135              | 39,997,306              |

**Table E-2. Expenditures under JTPA Titles II-A and II-B by State: Program Year 1991  
(for Title II-A data) and Fiscal Year 1992 (for Title II-B data) (continued)**

| State                    | Title II-A<br>(PY 1991) | Title II-B<br>(FY 1992) |
|--------------------------|-------------------------|-------------------------|
| Rhode Island . . . . .   | 5,723,628               | 4,348,195               |
| South Carolina . . . . . | 18,267,857              | 10,971,226              |
| South Dakota . . . . .   | 4,266,435               | 2,018,107               |
| Tennessee . . . . .      | 31,206,004              | 18,294,908              |
| Texas . . . . .          | 146,930,592             | 78,894,069              |
| Utah . . . . .           | 7,769,726               | 3,502,534               |
| Vermont . . . . .        | 4,867,795               | 2,146,103               |
| Virginia . . . . .       | 27,298,122              | 16,715,678              |
| Washington . . . . .     | 32,328,923              | 17,272,349              |
| West Virginia . . . . .  | 19,565,502              | 10,161,861              |
| Wisconsin . . . . .      | 24,730,956              | 12,272,077              |
| Wyoming . . . . .        | 4,945,085               | 1,884,789               |
| Puerto Rico . . . . .    | 82,263,943              | 36,917,040              |

Source: U.S. Department of Labor, Employment and Training Administration (JTPA Semiannual Status Report [February 17, 1994] and JTPA Summer Performance Report [April 11, 1994]). Title II-B data are for Service Delivery Area programs during the summer of 1992.

**Table E-3. Formula and discretionary expenditures under JTPA Title III by State:  
Program Year 1991**

| State                     | PY 1991       |               |
|---------------------------|---------------|---------------|
|                           | Formula       | Discretionary |
| U.S. Total .....          | \$412,895,346 | \$73,173,982  |
| Alabama .....             | 10,453,594    | 173,641       |
| Alaska .....              | 1,396,528     | 0             |
| Arizona .....             | 4,391,067     | 17,834        |
| Arkansas .....            | 6,879,157     | 782,519       |
| California .....          | 39,207,891    | 9,128,511     |
| Colorado .....            | 5,399,322     | 0             |
| Connecticut.....          | 3,396,679     | 2,038,540     |
| Delaware.....             | 489,301       | 0             |
| District of Columbia..... | 854,904       | 0             |
| Florida .....             | 22,088,031    | 2,465,300     |
| Georgia .....             | 9,478,044     | 6,401,887     |
| Hawaii.....               | 586,368       | 0             |
| Idaho.....                | 1,427,128     | 412,719       |
| Illinois.....             | 28,123,740    | 698,472       |
| Indiana .....             | 8,663,670     | 1,023,129     |
| Iowa .....                | 3,081,598     | 1,960,743     |
| Kansas .....              | 2,384,922     | 0             |
| Kentucky.....             | 7,843,603     | 322,015       |
| Louisiana .....           | 13,417,594    | 0             |
| Maine .....               | 1,053,597     | 1,596,152     |
| Maryland .....            | 3,318,357     | 673,644       |
| Massachusetts.....        | 7,076,227     | 4,952,431     |
| Michigan.....             | 29,144,829    | 2,212,910     |
| Minnesota.....            | 3,855,828     | 1,987,000     |
| Mississippi.....          | 7,283,958     | 143,708       |
| Missouri .....            | 9,537,008     | 1,397,320     |
| Montana .....             | 1,431,730     | 567,211       |
| Nebraska.....             | 965,337       | 44,016        |
| Nevada .....              | 1,359,196     | 67,500        |
| New Hampshire .....       | 1,109,697     | 598,106       |
| New Jersey .....          | 7,115,606     | 2,449,393     |
| New Mexico.....           | 3,583,115     | 1,966         |
| New York .....            | 24,567,020    | 7,387,325     |
| North Carolina.....       | 4,141,068     | 821,593       |
| North Dakota .....        | 596,164       | 240,676       |
| Ohio .....                | 22,123,931    | 1,844,533     |
| Oklahoma.....             | 5,533,698     | 0             |
| Oregon .....              | 4,814,619     | 2,179,185     |
| Pennsylvania.....         | 14,090,983    | 4,975,382     |

**Table E-3. Formula and discretionary expenditures under JTPA Title III by State:  
Program Year 1991 (continued)**

| State               | PY 1991    |               |
|---------------------|------------|---------------|
|                     | Formula    | Discretionary |
| Rhode Island.....   | 1,749,187  | 53,284        |
| South Carolina..... | 3,866,749  | 1,217,851     |
| South Dakota.....   | 661,485    | 0             |
| Tennessee.....      | 6,668,522  | 0             |
| Texas.....          | 35,455,570 | 5,102,329     |
| Utah.....           | 1,437,714  | 483,627       |
| Vermont.....        | 473,315    | 457,499       |
| Virginia.....       | 4,885,868  | 788,955       |
| Washington.....     | 8,063,704  | 3,025,590     |
| West Virginia.....  | 7,057,332  | 0             |
| Wisconsin.....      | 4,679,056  | 1,728,665     |
| Wyoming.....        | 670,840    | 0             |
| Puerto Rico.....    | 14,960,895 | 750,821       |

Source: U.S. Department of Labor, Employment and Training Administration (JTPA Semiannual Status Report and Worker Adjustment Program Quarterly Financial Report [February 17, 1994]).

**Table E-4. Characteristics of individuals served by the Employment Service by State:  
Program Year 1991**

| State                | Total applications | Women     | Economically disadvantaged | Veterans  |
|----------------------|--------------------|-----------|----------------------------|-----------|
| U.S. Total           | 20,422,902         | 8,442,308 | 2,732,891                  | 2,648,439 |
| Alabama              | 465,694            | 213,892   | 108,204                    | 56,370    |
| Alaska               | 107,036            | 41,006    | 5,096                      | 16,491    |
| Arizona              | 339,102            | 131,707   | 28,313                     | 47,729    |
| Arkansas             | 308,676            | 139,589   | 19,445                     | 36,746    |
| California           | 1,212,459          | 491,201   | 28,862                     | 167,847   |
| Colorado             | 299,068            | 116,316   | 35,574                     | 48,397    |
| Connecticut          | 283,690            | 110,093   | 38,583                     | 33,527    |
| Delaware             | 40,193             | 15,999    | 40                         | 7,294     |
| District of Columbia | 91,733             | 41,231    | 20,823                     | 9,047     |
| Florida              | 1,187,072          | 495,390   | 26,810                     | 152,888   |
| Georgia              | 621,880            | 263,365   | 174,150                    | 93,314    |
| Guam                 | 6,488              | 2,455     | 1,806                      | 267       |
| Hawaii               | 78,637             | 35,005    | 12,188                     | 10,811    |
| Idaho                | 145,194            | 61,039    | 9,561                      | 17,871    |
| Illinois             | 978,399            | 387,758   | 136,291                    | 114,151   |
| Indiana              | 403,899            | 165,955   | 71,609                     | 63,989    |
| Iowa                 | 287,895            | 124,778   | 22,231                     | 29,434    |
| Kansas               | 206,121            | 83,393    | 19,470                     | 28,399    |
| Kentucky             | 449,271            | 191,355   | 115,328                    | 54,567    |
| Louisiana            | 360,015            | 150,957   | 23,243                     | 43,552    |
| Maine                | 144,073            | 55,649    | 4,881                      | 20,832    |
| Maryland             | 263,517            | 106,599   | 17,977                     | 38,382    |
| Massachusetts        | 343,076            | 136,058   | 92,401                     | 34,774    |
| Michigan             | 777,958            | 285,850   | 184,654                    | 122,263   |
| Minnesota            | 329,893            | 132,184   | 22,112                     | 46,696    |
| Mississippi          | 333,093            | 157,256   | 53,007                     | 32,561    |
| Missouri             | 590,287            | 254,318   | 181,009                    | 76,021    |
| Montana              | 111,415            | 47,247    | 1,158                      | 14,755    |
| Nebraska             | 122,891            | 53,814    | 13,254                     | 16,921    |
| Nevada               | 97,631             | 33,466    | 695                        | 22,652    |
| New Hampshire        | 72,112             | 27,899    | 10,214                     | 12,817    |
| New Jersey           | 538,127            | 226,779   | 52,977                     | 47,712    |
| New Mexico           | 142,700            | 54,498    | 34,116                     | 23,221    |
| New York             | 960,071            | 392,889   | 166,423                    | 97,838    |
| North Carolina       | 762,929            | 359,127   | 71,956                     | 90,825    |
| North Dakota         | 95,314             | 44,382    | 12,060                     | 8,606     |
| Ohio                 | 593,854            | 232,694   | 145,334                    | 101,176   |
| Oklahoma             | 332,537            | 134,159   | 42,139                     | 51,627    |
| Oregon               | 345,022            | 133,212   | 2,628                      | 54,687    |
| Pennsylvania         | 674,719            | 264,074   | 101,040                    | 106,484   |
| Puerto Rico          | 189,284            | 74,176    | 154,450                    | 9,197     |
| Rhode Island         | 76,097             | 33,446    | 3,104                      | 6,304     |
| South Carolina       | 400,763            | 189,114   | 35,628                     | 48,845    |
| South Dakota         | 96,913             | 46,141    | 20,272                     | 9,073     |

**Table E-4. Characteristics of individuals served by the Employment Service by State:  
Program Year 1991 (continued)**

| State                | Total applications | Women   | Economically disadvantaged | Veterans |
|----------------------|--------------------|---------|----------------------------|----------|
| Tennessee .....      | 475,949            | 209,200 | 42,666                     | 59,678   |
| Texas .....          | 1,784,402          | 732,402 | 157,668                    | 189,256  |
| Utah .....           | 217,529            | 94,200  | 22,483                     | 16,997   |
| Vermont .....        | 76,319             | 30,503  | 9,193                      | 8,088    |
| Virgin Islands ..... | 14,054             | 7,424   | 5,464                      | 1,478    |
| Virginia .....       | 540,901            | 223,857 | 11,533                     | 86,447   |
| Washington .....     | 377,615            | 140,215 | 55,265                     | 68,168   |
| West Virginia .....  | 202,079            | 77,003  | 57,607                     | 28,794   |
| Wisconsin .....      | 386,580            | 158,884 | 43,430                     | 51,192   |
| Wyoming .....        | 80,676             | 31,105  | 6,466                      | 11,381   |

Source: U.S. Department of Labor, Employment and Training Administration.

**Table E-5. Selected services provided to applicants by the Employment Service by State:  
Program Year 1991**

| State                | Referred to Jobs | Placed in Jobs | Referred to Training | Placed in Training | Counseled |
|----------------------|------------------|----------------|----------------------|--------------------|-----------|
| U.S. Total           | 7,599,434        | 2,586,704      | 357,093              | 117,741            | 683,553   |
| Alabama              | 205,491          | 82,179         | 6,610                | 1,242              | 1,656     |
| Alaska               | 43,864           | 20,489         | 497                  | 150                | 4,235     |
| Arizona              | 134,894          | 32,546         | 2,228                | 574                | 3,907     |
| Arkansas             | 143,097          | 61,394         | 17                   | 9                  | 1,167     |
| California           | 441,489          | 193,831        | 6,731                | 3,520              | 10,111    |
| Colorado             | 129,458          | 43,105         | 6,607                | 1,345              | 4,316     |
| Connecticut          | 59,494           | 11,036         | 6,942                | 2,034              | 7,858     |
| Delaware             | 9,350            | 2,488          | 709                  | 380                | 1,315     |
| District of Columbia | 22,402           | 11,269         | 4,992                | 3,081              | 20,186    |
| Florida              | 604,684          | 142,737        | 11,958               | 4,274              | 17,159    |
| Georgia              | 226,508          | 71,781         | 2,302                | 1,867              | 39,108    |
| Guam                 | 1,634            | 1,515          | 1,870                | 1,080              | —         |
| Hawaii               | 29,518           | 6,715          | 2,187                | 1,309              | 2,366     |
| Idaho                | 90,759           | 32,662         | 588                  | 808                | 3,705     |
| Illinois             | 253,217          | 120,162        | 16,363               | 2,949              | 5,491     |
| Indiana              | 136,371          | 35,604         | 20,340               | 2,607              | 2,367     |
| Iowa                 | 159,707          | 59,288         | 20,570               | 2,623              | 8,623     |
| Kansas               | 93,025           | 27,706         | 11,422               | 2,116              | 12,637    |
| Kentucky             | 173,033          | 71,240         | 18,354               | 10,251             | 47,545    |
| Louisiana            | 130,076          | 46,843         | 7,547                | 1,333              | 3,071     |
| Maine                | 49,253           | 10,045         | 6,418                | 983                | 743       |
| Maryland             | 86,827           | 27,024         | 3,646                | 3,068              | 158,090   |
| Massachusetts        | 111,128          | 25,939         | 6,820                | 3,009              | 16,492    |
| Michigan             | 112,080          | 57,423         | 3,192                | 1,148              | 19,728    |
| Minnesota            | 147,892          | 52,696         | 1,288                | 532                | 3,859     |
| Mississippi          | 141,265          | 60,434         | 18,146               | 11,134             | 8,366     |
| Missouri             | 232,344          | 63,891         | 15,252               | 5,813              | 10,662    |
| Montana              | 60,603           | 22,459         | 3,540                | 527                | 5,631     |
| Nebraska             | 69,638           | 25,838         | 2,248                | 587                | 7,359     |
| Nevada               | 48,991           | 12,421         | 1,353                | 1,776              | 2,146     |
| New Hampshire        | 30,232           | 8,013          | 1,061                | 617                | 3,900     |
| New Jersey           | 59,980           | 16,187         | 12,281               | 901                | 12,022    |
| New Mexico           | 41,856           | 19,589         | 1,533                | 775                | 1,745     |
| New York             | 207,823          | 66,589         | 7,665                | 6,806              | 43,428    |
| North Carolina       | 405,494          | 131,240        | 4,726                | 2,142              | 15,779    |
| North Dakota         | 65,200           | 26,309         | 3,068                | 3,124              | 7,003     |
| Ohio                 | 158,401          | 50,549         | 6,746                | 1,752              | 7,565     |
| Oklahoma             | 119,731          | 48,003         | 49,355               | 4,115              | 6,958     |
| Oregon               | 144,733          | 41,587         | 3,091                | 750                | 22,813    |
| Pennsylvania         | 228,554          | 75,588         | 9,104                | 3,532              | 4,343     |
| Puerto Rico          | 33,701           | 21,780         | 777                  | 913                | 8,278     |
| Rhode Island         | 15,451           | 4,478          | 1,037                | 109                | 2,769     |
| South Carolina       | 195,778          | 56,728         | 4,116                | 1,379              | 4,585     |
| South Dakota         | 67,107           | 30,017         | 381                  | 745                | 3,155     |

**Table E-5. Selected services provided to applicants by the Employment Service by State:  
Program Year 1991 (continued)**

| State                | Referred to Jobs | Placed in Jobs | Referred to Training | Placed in Training | Counseled |
|----------------------|------------------|----------------|----------------------|--------------------|-----------|
| Tennessee .....      | 179,050          | 53,904         | 5,139                | 2,152              | 1,883     |
| Texas .....          | 730,755          | 269,190        | 17,157               | 5,716              | 56,040    |
| Utah .....           | 135,745          | 48,302         | 287                  | 287                | 11,439    |
| Vermont .....        | 26,302           | 6,124          | 321                  | 50                 | 1,912     |
| Virgin Islands ..... | 4,105            | 1,527          | 799                  | 214                | 651       |
| Virginia .....       | 177,418          | 53,986         | 451                  | 602                | 2,446     |
| Washington .....     | 163,125          | 52,622         | 7,996                | 2,864              | 20,157    |
| West Virginia .....  | 69,385           | 21,166         | 7,268                | 4,648              | 5,227     |
| Wisconsin .....      | 144,199          | 32,677         | 943                  | 369                | 6,194     |
| Wyoming .....        | 47,217           | 17,789         | 1,054                | 1,050              | 3,362     |

Source: U.S. Department of Labor, Employment and Training Administration.

**Table E-6. Regular State unemployment insurance benefit data: U.S. totals, FY 1990-1992, and by State for 12 months ending September 30, 1992**

| Fiscal Year/<br>State | Initial<br>Claims | Average<br>Weekly<br>Unem-<br>ployed | Percent<br>of<br>Covered<br>Employ-<br>ment | Total<br>Benefic-<br>iaries | Average<br>Weekly<br>Bene-<br>ficiaries | Average<br>Weekly<br>Wage | Average<br>Weekly<br>Benefit | Percent<br>Average<br>Weekly<br>Wage | Potential<br>Weeks<br>of<br>Benefits | Actual<br>Weeks<br>of<br>Benefits | Exhaus-<br>tees'<br>Weeks<br>of<br>Benefits | Number<br>of<br>Exhaus-<br>tees | Exhaus-<br>tees as<br>Percent<br>of<br>Recip-<br>ients |
|-----------------------|-------------------|--------------------------------------|---|-----------------------------|---|---------------------------|------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|---|---------------------------------|--|
| 1990 .....            | 18,889,811        | 2,387,234                            | 2.2   | 8,091,439                   | 2,109,745                               | 442.20                    | 159.56                       | 36.1                                 | 23.8                                 | 13.6                              | 23.1  | 2,192,132                       | 28.4   |
| 1991 .....            | 23,269,783        | 3,226,114                            | 3.1   | 10,147,281                  | 2,879,863                               | 461.38                    | 168.54                       | 36.5                                 | 25.3                                 | 14.8                              | 23.2  | 3,187,381                       | 33.5   |
| 1992 .....            | 22,443,506        | 3,330,717                            | 3.2   | 9,645,930                   | 2,955,968                               | 479.75                    | 172.72                       | 36.0                                 | 25.7                                 | 15.9                              | 23.3  | 3,875,452                       | 39.6   |
| Alabama .....         | 373,513           | 40,583                               | 2.6   | 161,928                     | 35,036                                  | 411.18                    | 120.07                       | 29.2                                 | 24.0                                 | 11.3                              | 22.8  | 40,957                          | 24.2   |
| Alaska .....          | 99,598            | 14,320                               | 6.5   | 46,585                      | 14,366                                  | 597.83                    | 170.07                       | 28.4                                 | 20.7                                 | 16.0                              | 20.4  | 23,746                          | 51.9   |
| Arizona .....         | 209,051           | 35,661                               | 2.4   | 95,453                      | 29,255                                  | 430.14                    | 146.16                       | 34.0                                 | 23.0                                 | 15.9                              | 21.9  | 38,555                          | 39.5   |
| Arkansas .....        | 251,241           | 32,213                               | 3.6   | 103,312                     | 25,656                                  | 372.00                    | 148.28                       | 39.9                                 | 22.7                                 | 12.9                              | 21.3  | 36,278                          | 35.1   |
| California .....      | 3,833,925         | 554,717                              | 4.5   | 1,492,609                   | 500,413                                 | 540.70                    | 150.19                       | 27.8                                 | 36.0                                 | 17.4                              | 24.0  | 633,627                         | 42.4   |
| Colorado .....        | 162,945           | 26,757                               | 1.8   | 79,593                      | 20,041                                  | 466.71                    | 176.35                       | 37.8                                 | 22.3                                 | 13.1                              | 16.7  | 35,838                          | 44.0   |
| Connecticut .....     | 343,469           | 60,052                               | 4.0   | 169,476                     | 58,971                                  | 609.13                    | 209.36                       | 34.4                                 | 26.0                                 | 18.1                              | 26.0  | 73,041                          | 38.7   |
| Delaware .....        | 61,038            | 8,039                                | 2.4   | 29,713                      | 7,989                                   | 501.08                    | 180.91                       | 36.1                                 | 25.5                                 | 14.0                              | 25.7  | 7,473                           | 25.7   |
| Dist. Col. ....       | 46,752            | 11,359                               | 2.7   | 28,054                      | 11,698                                  | 657.07                    | 224.80                       | 34.2                                 | 23.9                                 | 21.7                              | 24.9  | 19,081                          | 64.4   |
| Florida .....         | 677,503           | 129,953                              | 2.5   | 358,879                     | 108,908                                 | 428.40                    | 157.06                       | 36.7                                 | 21.0                                 | 15.8                              | 20.3  | 191,603                         | 54.4   |
| Georgia .....         | 474,541           | 58,800                               | 2.1   | 243,986                     | 53,831                                  | 453.84                    | 148.04                       | 32.6                                 | 21.3                                 | 11.5                              | 20.9  | 102,787                         | 40.4   |
| Hawaii .....          | 77,976            | 10,169                               | 2.0   | 33,822                      | 9,836                                   | 473.12                    | 235.71                       | 49.8                                 | 26.0                                 | 15.1                              | 26.0  | 9,675                           | 32.2   |
| Idaho .....           | 115,673           | 14,416                               | 3.6   | 47,177                      | 11,091                                  | 383.11                    | 155.24                       | 40.5                                 | 19.4                                 | 12.2                              | 17.1  | 16,130                          | 34.2   |
| Illinois .....        | 956,157           | 161,053                              | 3.2   | 409,495                     | 144,586                                 | 520.50                    | 182.28                       | 35.0                                 | 26.0                                 | 18.4                              | 26.0  | 176,379                         | 42.1   |
| Indiana .....         | 384,438           | 43,403                               | 1.8   | 156,302                     | 34,875                                  | 440.15                    | 123.67                       | 28.1                                 | 22.8                                 | 11.6                              | 20.4  | 45,431                          | 30.4   |
| Iowa .....            | 174,337           | 25,716                               | 2.2   | 90,951                      | 23,545                                  | 390.15                    | 169.30                       | 43.4                                 | 22.4                                 | 13.5                              | 21.0  | 27,790                          | 29.5   |
| Kansas .....          | 156,606           | 23,174                               | 2.2   | 73,879                      | 20,990                                  | 408.40                    | 177.53                       | 43.5                                 | 22.6                                 | 14.8                              | 21.5  | 27,300                          | 37.5   |
| Kentucky .....        | 338,888           | 35,474                               | 2.5   | 130,407                     | 32,872                                  | 407.36                    | 143.46                       | 35.2                                 | 26.0                                 | 13.1                              | 26.0  | 31,758                          | 23.1   |
| Louisiana .....       | 256,504           | 40,871                               | 2.7   | 112,200                     | 33,737                                  | 418.69                    | 116.57                       | 27.8                                 | 26.0                                 | 15.6                              | 26.0  | 35,421                          | 33.6   |
| Maine .....           | 157,112           | 21,035                               | 4.3   | 62,939                      | 19,166                                  | 404.56                    | 166.86                       | 41.2                                 | 20.3                                 | 15.8                              | 21.1  | 28,085                          | 41.4   |
| Maryland .....        | 318,043           | 62,653                               | 3.3   | 152,448                     | 51,102                                  | 497.75                    | 180.23                       | 36.2                                 | 26.0                                 | 17.4                              | 26.0  | 53,902                          | 34.5   |
| Massachusetts ..      | 533,885           | 108,557                              | 4.1   | 266,113                     | 97,159                                  | 554.80                    | 225.56                       | 40.7                                 | 27.5                                 | 19.0                              | 27.3  | 139,965                         | 46.8   |
| Michigan .....        | 1,289,302         | 139,072                              | 3.7   | 514,149                     | 125,568                                 | 513.96                    | 211.81                       | 41.2                                 | 22.7                                 | 12.7                              | 20.4  | 166,827                         | 35.1   |
| Minnesota .....       | 256,308           | 46,138                               | 2.2   | 140,529                     | 42,723                                  | 472.07                    | 197.14                       | 41.8                                 | 23.3                                 | 15.8                              | 21.9  | 49,984                          | 34.6   |
| Mississippi .....     | 221,355           | 28,002                               | 3.1   | 81,120                      | 21,001                                  | 357.28                    | 121.53                       | 34.0                                 | 23.4                                 | 13.5                              | 22.4  | 26,249                          | 32.5   |
| Missouri .....        | 546,389           | 63,503                               | 2.9   | 189,703                     | 54,275                                  | 439.10                    | 145.02                       | 33.0                                 | 21.9                                 | 14.9                              | 20.7  | 74,820                          | 38.6   |
| Montana .....         | 56,549            | 8,761                                | 3.0   | 25,186                      | 6,714                                   | 358.31                    | 134.12                       | 37.4                                 | 20.3                                 | 13.9                              | 18.1  | 9,301                           | 37.9   |
| Nebraska .....        | 72,142            | 9,436                                | 1.3   | 33,952                      | 7,737                                   | 378.64                    | 131.25                       | 34.7                                 | 22.9                                 | 11.8                              | 17.2  | 10,725                          | 31.3   |
| Nevada .....          | 130,154           | 20,743                               | 3.4   | 62,585                      | 18,505                                  | 458.01                    | 167.67                       | 36.6                                 | 22.6                                 | 15.4                              | 22.4  | 25,237                          | 39.5   |
| New Hampshire ..      | 72,898            | 11,646                               | 2.5   | 41,713                      | 9,775                                   | 462.45                    | 134.19                       | 29.0                                 | 26.0                                 | 12.2                              | 26.0  | 9,461                           | 18.9   |
| New Jersey .....      | 669,277           | 136,236                              | 4.1   | 357,521                     | 129,750                                 | 596.30                    | 223.65                       | 37.5                                 | 23.7                                 | 18.9                              | 23.2  | 207,537                         | 56.6   |
| New Mexico .....      | 70,735            | 13,869                               | 2.5   | 32,535                      | 10,621                                  | 387.10                    | 137.92                       | 35.6                                 | 25.8                                 | 17.0                              | 25.4  | 13,092                          | 38.9   |
| New York .....        | 1,412,379         | 287,649                              | 3.8   | 703,704                     | 280,288                                 | 600.11                    | 196.24                       | 32.7                                 | 26.0                                 | 20.7                              | 26.0  | 371,125                         | 51.2   |
| North Carolina ..     | 889,297           | 66,855                               | 2.2   | 269,292                     | 54,280                                  | 414.43                    | 158.77                       | 38.3                                 | 22.9                                 | 10.5                              | 21.2  | 64,196                          | 21.9   |
| North Dakota ..       | 33,160            | 4,775                                | 1.9   | 15,669                      | 4,001                                   | 351.31                    | 145.28                       | 41.4                                 | 19.8                                 | 13.3                              | 17.6  | 6,224                           | 38.4   |

**Table E-6. Regular State unemployment insurance benefit data: U.S. totals, FY 1990-1992, and by State for 12 months ending September 30, 1992 (continued)**

| Fiscal Year/<br>State | Initial<br>Claims | Average<br>Weekly<br>Unem-<br>ployed | Percent<br>of<br>Covered<br>Employ-<br>ment | Total<br>Benefic-<br>iaries | Average<br>Weekly<br>Bene-<br>ficiaries | Average<br>Weekly<br>Wage | Average<br>Weekly<br>Benefit | Percent<br>Average<br>Weekly<br>Wage | Potential<br>Weeks<br>of<br>Benefits | Actual<br>Weeks<br>of<br>Benefits | Exhaus-<br>tees'<br>Weeks<br>of<br>Benefits | Number<br>of<br>Exhaus-<br>tees | Exhaus-<br>tees as<br>Percent<br>of<br>Recip-<br>ients |
|-----------------------|-------------------|--------------------------------------|---|-----------------------------|---|---------------------------|------------------------------|--------------------------------------|--------------------------------------|-----------------------------------|---|---------------------------------|--|
| Ohio .....            | 897,157           | 132,451                              | 2.9   | 386,003                     | 109,769                                 | 464.47                    | 179.53                       | 38.7                                 | 25.6                                 | 14.8                              | 25.4  | 122,950                         | 33.0   |
| Oklahoma .....        | 163,716           | 23,007                               | 2.0   | 67,073                      | 18,401                                  | 402.44                    | 157.93                       | 39.2                                 | 21.7                                 | 14.3                              | 21.2  | 27,620                          | 43.2   |
| Oregon .....          | 382,294           | 52,562                               | 4.3   | 150,161                     | 46,209                                  | 437.62                    | 170.73                       | 39.0                                 | 25.8                                 | 16.0                              | 25.0  | 51,963                          | 33.9   |
| Pennsylvania ..       | 1,319,841         | 200,891                              | 4.2   | 541,326                     | 181,513                                 | 480.14                    | 199.67                       | 41.6                                 | 25.9                                 | 17.4                              | 25.8  | 193,119                         | 34.8   |
| Puerto Rico ...       | 254,745           | 53,503                               | 6.3   | 114,383                     | 41,329                                  | 264.98                    | 82.54                        | 31.2                                 | 20.0                                 | 18.8                              | 20.0  | 69,618                          | 58.9   |
| Rhode Island ..       | 146,864           | 21,297                               | 5.2   | 64,518                      | 19,720                                  | 450.98                    | 207.32                       | 46.0                                 | 21.9                                 | 15.9                              | 20.8  | 31,337                          | 46.2   |
| South Carolina .      | 369,341           | 38,935                               | 2.7   | 127,908                     | 31,366                                  | 398.66                    | 142.70                       | 35.8                                 | 22.9                                 | 12.8                              | 21.5  | 38,115                          | 28.1   |
| South Dakota ..       | 22,622            | 2,546                                | .9  | 8,659                       | 1,841                                   | 331.44                    | 127.03                       | 38.3                                 | 24.8                                 | 11.1                              | 24.6  | 1,040                           | 12.4   |
| Tennessee .....       | 509,038           | 58,339                               | 2.8   | 201,290                     | 48,442                                  | 421.24                    | 122.59                       | 29.1                                 | 21.8                                 | 12.5                              | 22.3  | 72,013                          | 34.0   |
| Texas .....           | 904,445           | 153,327                              | 2.2   | 437,890                     | 133,929                                 | 467.13                    | 174.46                       | 37.3                                 | 20.8                                 | 15.9                              | 20.2  | 218,639                         | 51.7   |
| Utah .....            | 70,524            | 10,921                               | 1.6   | 39,032                      | 9,543                                   | 404.39                    | 173.24                       | 42.8                                 | 20.6                                 | 12.7                              | 19.4  | 12,805                          | 32.4   |
| Vermont .....         | 51,612            | 10,004                               | 4.2   | 28,322                      | 8,937                                   | 417.99                    | 154.71                       | 37.0                                 | 26.0                                 | 16.4                              | 25.7  | 8,206                           | 27.7   |
| Virgin Islands ..     | 5,305             | 766                                  | 1.8   | 2,761                       | 749                                     | 426.27                    | 158.58                       | 37.2                                 | 23.8                                 | 14.1                              | 23.1  | 1,024                           | 43.0   |
| Virginia .....        | 407,175           | 42,967                               | 1.7   | 141,643                     | 36,057                                  | 454.74                    | 162.62                       | 35.8                                 | 20.9                                 | 13.2                              | 20.3  | 50,971                          | 35.8   |
| Washington ...        | 555,773           | 83,163                               | 3.9   | 222,018                     | 76,450                                  | 472.77                    | 173.31                       | 36.7                                 | 26.1                                 | 17.9                              | 24.7  | 71,579                          | 31.9   |
| West Virginia ..      | 112,560           | 22,247                               | 3.8   | 63,858                      | 18,790                                  | 413.72                    | 160.85                       | 38.9                                 | 26.0                                 | 15.3                              | 25.7  | 18,889                          | 29.2   |
| Wisconsin .....       | 512,557           | 63,783                               | 2.9   | 223,328                     | 58,956                                  | 429.97                    | 174.29                       | 40.5                                 | 24.4                                 | 13.7                              | 22.2  | 51,977                          | 22.1   |
| Wyoming .....         | 34,797            | 4,352                                | 2.3   | 12,778                      | 3,610                                   | 396.69                    | 163.73                       | 41.3                                 | 22.3                                 | 14.7                              | 20.5  | 3,987                           | 33.2   |

Source: U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service.