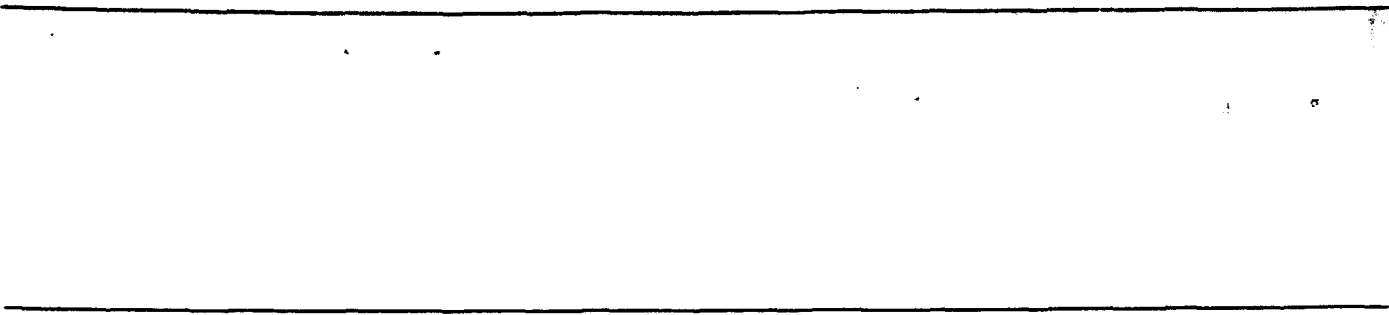


July 1987

# PLANT CLOSINGS

## Limited Advance Notice and Assistance Provided Dislocated Workers





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United States  
General Accounting Office  
Washington, D.C. 20548

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**Human Resources Division**

B-223485

July 17, 1987

The Honorable Edward M. Kennedy  
Chairman, Committee on Labor and  
Human Resources  
United States Senate

The Honorable Augustus F. Hawkins  
Chairman, Committee on Education and Labor  
House of Representatives

This report was prepared as part of our basic legislative responsibility to provide information needed by the Congress. This is the final report in a series that GAO has issued on the plant closings and dislocated worker issue. This report provides additional information on the extent of business closures and permanent layoffs, and provides a perspective from business associations and labor organizations on employer practices relating to advance notice and reemployment assistance to dislocated workers.

As part of its deliberations on trade legislation, the Congress is addressing issues relating to the expansion of federal assistance to dislocated workers and mandatory advance notice requirements. This report should be useful to the Congress in the conference on these bills since the Senate and House versions differ on several significant points.

Copies of this report are being sent to the appropriate Senate and House committees and subcommittees; the Director, Office of Management and Budget; the Secretary of Labor; and other interested parties.

A handwritten signature in cursive script, reading 'Richard L. Fogel'.

Richard L. Fogel  
Assistant Comptroller General

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# Executive Summary

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## Purpose

The Bureau of Labor Statistics estimated that about 10.8 million workers lost their jobs because of business closures and permanent layoffs between January 1981 and January 1986. While many of these dislocated workers were readily able to find new jobs, others had a difficult time—particularly older workers, women, minorities, and those with nontransferable skills. Despite the economic recovery, and falling unemployment rates, many workers continue to be dislocated by business closures or permanent layoffs. (See p. 12.)

To assist the Congress in assessing the problems of worker dislocation and employer practices related to advance notice and assistance provided to workers, GAO conducted a national survey of 2,600 business establishments to determine:

- the extent of business closures and permanent layoffs between January 1983 and December 1984,
- the length of advance notice provided to affected workers, and
- the assistance offered to dislocated workers by their employers.

GAO's preliminary results were presented at a conference cosponsored with the Office of Technology Assessment in April 1986 and were provided to the Secretary of Labor's Task Force on Economic Adjustment and Worker Dislocation. Briefing reports to Senators Lloyd Bentsen and Howard Metzenbaum also included data from GAO's analysis. This is the final in a series of reports issued on dislocated workers and plant closings. (See pp. 16-17.)

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## Background

While many dislocated workers likely have difficulty becoming reemployed, federal programs available to assist these workers reach only a small portion of them. According to the Bureau of Labor Statistics, nearly 40 percent of dislocated workers were unemployed for more than 6 months following their dislocation, and the National Academy of Sciences estimated that between 20 and 30 percent of dislocated workers lack basic skills. While programs such as the Employment Service are available to assist unemployed workers, title III of the Job Training Partnership Act was established to meet the specific needs of dislocated workers. From October 1982 through June 30, 1987, about \$750 million in federal funds was available for title III activities; however, the program served a relatively small percentage of dislocated workers, at most 7 percent in program years 1984 and 1985. (See p. 12.)

A bill to greatly expand federal assistance provided to dislocated workers has passed the House (H.R. 3) and another is pending before the Senate (S. 1420). Both bills would increase the federal funds for assistance to dislocated workers to \$980 million annually, and require states to establish rapid-response mechanisms to facilitate the quick delivery of services to dislocated workers. The Senate bill and an alternative House bill (H.R. 1122, passed by the Education and Labor Committee) include requirements that employers provide their workers with advance notice of an impending closure or permanent layoff. The advance notice provision in the House bill would require between 90 and 180 days' notice when 50 or more workers are affected. The Senate bill applies to establishments with 100 or more workers and requires 60 days' advance notice. Both bills allow exclusions for firms confronted by unforeseeable circumstances. (See p. 13.)

Mandatory advance notice is a controversial issue. Some business associations, such as the National Association of Manufacturers, maintain that such a requirement would have a detrimental effect on the economy through its impact on corporate decision making. Labor organizations, such as the United Auto Workers, state that advance notice is a fundamental matter of economic and social justice.

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## Results in Brief

In 1983 and 1984 closures and permanent layoffs at about 16,200 establishments having 50 or more employees resulted in the dislocation of 1.3 million workers. Sixty percent of the closures and layoffs occurred in the manufacturing sector, reflecting long-term employment declines in many of these industries. Over one-third of the closures and layoffs occurred in industries adversely affected by foreign competition. However, a quarter million workers were also dislocated from the fast growing service sector.

Major business and labor organizations agree that to be effective reemployment assistance should be in place before dislocation occurs. However, few employers provided advance notice adequate to establish such programs. The median length of notice provided to workers was 7 days. About a third of establishments provided no notice before employment was terminated.

About one in seven employers offered workers a comprehensive assistance package composed of the most frequently cited worker assistance measures—income maintenance, continued health insurance coverage,

counseling, and job search assistance, but only 5 percent combined such assistance with more than 30 days' advance notice.

The proposals to expand federal assistance to dislocated workers pending before the Congress would significantly increase the amount of assistance available to dislocated workers under title III of the Job Training Partnership Act and encourage greater integration of public and private sector assistance by requiring states to establish rapid-response mechanisms.

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## GAO's Analysis

Over three-fourths of the 1.3 million workers dislocated in 1983 and 1984 were laid off from larger establishments (those that had 100 or more employees). Closures and permanent layoffs affected about 1 in every 15 larger business establishments in the United States. (See p. 19. Only about 7 percent of employers indicated that they were going out of business. In addition, most firms were well established, having been located at their site for over 15 years.

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## Manufacturing Sector Hardest Hit

Of the nation's 35,000 larger manufacturing establishments, 12 percent experienced a closure or permanent layoff in 1983 or 1984. The rate of occurrence among manufacturing establishments was 3 to 4 times the rate in the service and trade sectors. In addition, closures and layoffs were dominated by industries that produced durable goods, such as steel, autos, and machinery, affecting 3,000 establishments or 1 out of 5 durable goods producers. (See p. 21.)

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## Foreign Competition Exacts Toll

During 1983 and 1984, 2,800 establishments that experienced closures and layoffs were in industries certified as trade impacted by the Department of Labor and the International Trade Commission, affecting over 400,000, or 65 percent, of the workers dislocated from the manufacturing sector.

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## All Regions Affected

While business closures and permanent layoffs are commonly associated with the heavily industrialized states in the Northeast and Midwest, many establishments closed or laid off workers in all parts of the country. The West South Central region, composed of Arkansas, Louisiana, Oklahoma, and Texas, for example, had the nation's highest rate of occurrence, affecting 12 percent of the region's larger establishments compared to about 7 percent nationwide. In this region, as well as across

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the country, closures and layoffs were concentrated in the manufacturing sector.

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### Advance Notice and Reemployment Assistance Limited

Labor organizations, such as the AFL-CIO, support the need for advance notice of an impending closure or permanent layoff to plan and develop comprehensive adjustment programs for affected workers. Some business associations, such as the Business Roundtable, also recognize the benefits of providing advance notice, when possible. Depending upon the circumstances surrounding the closure or layoff, 30 to 180 days was cited as necessary to establish an effective program. Less than 20 percent of establishments provided more than 30 days' advance notice to their workers, only 5 percent provided more than 90 days' notice and less than 2 percent provided more than 180 days. (See pp. 34-35.)

Income maintenance benefits were offered by nearly half of the establishments to their dislocated workers, but were infrequently combined with job placement assistance. About 7 percent of establishments participated in a project operated under title III of the Job Training Partnership Act. (See p. 48.)

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### Notice and Assistance Vary

Such characteristics as the presence of a union, whether those dislocated were blue-collar or white-collar workers, and whether the worker dislocation resulted from a closure or permanent layoff appear related to the length of advance notice provided and the extent to which assistance was offered to workers. Most establishments (80 percent) provided their blue-collar and white-collar workers the same length of notice, an average of 7 days. However, blue-collar workers are less likely to be offered assistance than white-collar workers. (See pp. 35-36 and p. 46.)

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### Recommendations

GAO is making no recommendations and takes no position on the bills pending before the Congress. These bills address the issues of the availability of reemployment assistance for dislocated workers by expanding the title III program, and increase the potential for early intervention by requiring states to establish rapid-response mechanisms. The controversial notice issue is addressed by the proposals for mandatory advance notice.

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### Agency Comments

GAO did not obtain comments on this report.

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**Abbreviations**

AFL-CIO	American Federation of Labor and Congress of Industrial Organizations
BLS	Bureau of Labor Statistics
CPS	Current Population Survey
GAO	General Accounting Office
JTPA	Job Training Partnership Act
NAB	National Alliance of Business
NaCOR	National Center on Occupational Readjustment, Inc.
OTA	Office of Technology Assessment
SBA	Small Business Administration
SIC	Standard Industrial Classification
UAW	United Auto Workers

# Introduction

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Based on data obtained in the supplement to the January 1986 Current Population Survey (CPS), the Bureau of Labor Statistics (BLS) estimated that 10.8 million workers 20 years of age or older lost their jobs because of closures or layoffs during the 5-year period January 1981 to January 1986—an average of about 2.2 million workers a year. Despite the economic recovery and declining unemployment rates, many workers continue to be adversely affected by business closures or permanent layoffs.

While many of these dislocated workers were able to find new jobs, about a third were unemployed or no longer in the work force when the January 1986 survey was conducted. In addition, 38 percent of workers remained unemployed for more than 6 months following their dislocation. Older workers, women, and minorities were less likely to be reemployed at the time of the CPS interview. Less than half of the dislocated workers 55 and over were employed at the time of the BLS survey. In contrast, 72 percent of those under 55 were reemployed. About 60 percent of the women were reemployed compared with 71 percent of the men; 57 percent of the minorities were working compared to 68 percent of the dislocated nonminority workers.

The loss of a job due to closure or permanent layoff can have a serious emotional and financial impact on dislocated workers and their families. Generally, dislocated workers have had a history of stable employment, with about a third having job tenure of 5 years or more, yet they often are inadequately prepared to compete in the job market. In addition, according to the National Academy of Sciences, 20 to 30 percent of dislocated workers lack basic skills. Even when dislocated workers are able to find new employment, they may be unable to find work at comparable wages or salaries. Over 40 percent of the workers reemployed in full-time jobs earned less than in their prior jobs; for 30 percent, the wages at their new job were 20 percent or more below their prior wages.

A major closure or permanent layoff can also have a serious impact on the community. The ripple effect of a major closure or layoff is often seen in the closure of smaller businesses or the loss of jobs dependent on the closed establishment and the loss of the purchasing power of its workers. Property values often decline and the tax base erodes, leaving schools and other community services underfunded and unable to cope with the increased need for social welfare assistance for dislocated workers and their families.

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## Federal Assistance

Several programs and agencies are available to assist workers dislocated by closures and permanent layoffs to find reemployment. However, these programs reach only a small portion of the affected workers.

The Employment Service (ES) is available to help all unemployed workers, including those dislocated by a closure or permanent layoff. However, because most jobs available through the Employment Service are low skill and low paying, relatively few dislocated workers seek its placement assistance. The Trade Act of 1974 provides assistance to workers who lost their jobs due to import competition. The program offers workers income maintenance, retraining, relocation, and job search assistance. However, most participants have received only income maintenance assistance. Funding for the program has fluctuated, rising to about \$1.6 billion in 1980 and then declining to about \$50 million in 1985. For 1987, \$148 million were allocated to the program.

Title III of the Job Training Partnership Act (JTPA) (Public Law 97-300) provides funds to state governments for establishing programs tailored to meet the specific needs of dislocated workers. Title III provides a variety of training and job placement activities to help participants get back into the work force. Since the beginning of the program in October 1982, through June 30, 1987, \$750 million in federal funds was available for title III activities. While we do not know how many dislocated workers would benefit from assistance under the program, we did find that the program served a relatively small percentage of dislocated workers—6 percent in program year 1984 and about 7 percent in program year 1985.

A proposal to greatly expand federal assistance provided to dislocated workers is contained in the Trade and International Economic Policy Reform Act of 1987 (H.R. 3), passed by the House on April 30, 1987. A similar bill has been passed by the Senate Labor and Human Resources Committee and is pending before the Senate as part of its trade bill (S. 1420). Both bills would increase the federal funds for assistance to dislocated workers under title III of JTPA to about \$980 million annually. In addition, the proposed legislation would require states to establish local rapid-response mechanisms to facilitate the quick delivery of services to affected workers.

The Senate bill and a bill passed by the House Education and Labor Committee (H.R. 1122) include requirements that employers provide their workers with advance notice of an impending closure or permanent layoff. The advance notice provision in the House bill would

require at least 90 days' notice when 50 to 100 employees are affected, 120 days' notice when a closure or layoff affects 101 to 500 employees, and 180 days' notice when more than 500 employees are affected. The Senate bill applies to establishments with 100 or more workers and requires 60 days' advance notice. In the event of a permanent layoff, the bill requires notice to be given if 50 or more workers are affected and the layoff involves one third of the workforce. These bills recognize that unforeseen events or business circumstances may occur; in such cases, exclusions to the advance notice requirement are allowed.

The proposals for mandatory advance notice in the event of a closure or permanent layoff are controversial. Many business associations are opposed to mandatory advance notice because such requirements would decrease their competitiveness on the world market by constraining their ability to close outdated and unproductive facilities. In addition, the National Association of Manufacturers state that firms are fearful of losing suppliers, credit, customers, or employees if closing decisions are known too far in advance. Labor representatives, however, maintain that advance notice of a closing or permanent layoff is a fundamental matter of economic and social justice. The United Auto Workers' president has stated that advance notice increases considerably the chances that workers will be able to make a less painful adjustment to their job loss.

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## Objectives, Scope, and Methodology

To assist the Congress in assessing the issues of business closures and layoffs and employer practices related to advance notice and assistance provided to dislocated workers, we surveyed a national sample of business establishments<sup>1</sup> to determine:

- the extent of business closures and permanent layoffs,
- the length of advance notice provided to affected workers, and
- the assistance offered to dislocated workers by their former employers<sup>2</sup>

To determine the extent of business closures and permanent layoffs, by industry and geographic location, we surveyed a national stratified random sample of 2,600 business establishments which, based on a comparison of Dun and Bradstreet records from December 31, 1982, and

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<sup>1</sup>A business establishment is defined as "any single unit which produces goods or services, such as a factory, office, or store. It is a single physical location that is engaged in one, or predominately one, type of activity."

<sup>2</sup>We did not attempt to evaluate the effectiveness of the assistance offered.



December 31, 1984, appeared to have closed or experienced a significant layoff<sup>3</sup> during the period January 1, 1983, through December 31, 1984. The Dun and Bradstreet data, maintained to determine business credit risk, were further developed as a business database by the Small Business Administration (SBA). We used the Dun and Bradstreet data base in our analysis because of its national scope and comprehensive listing of individual business establishments by geographic location. The database contains listings on over 5 million establishments. According to SBA officials, the Dun and Bradstreet database contains information for virtually all establishments with employees.

Officials from SBA, as well as other researchers who have used the Dun and Bradstreet database, advised us that while the comparison of the databases would provide an indicator of business closures and layoffs, the comparison may overstate the actual number of events. Changes in name or ownership of establishments, for example, may result in a change in the Dun's number (a control number used to identify each establishment in the database) but not an actual closure or layoff. To determine the actual number of closures, we selected a sample of 2,400 establishments with 100 or more employees from the Dun and Bradstreet comparison to verify the information obtained from the comparison. The sample as stratified by geographic area, industrial group, and number of employees is shown in appendix I. We also selected a sample of 200 establishments with 50 to 99 employees.

For each of the 2,600 establishments in our sample, we attempted to contact corporate officials to determine whether the establishment had actually closed or experienced a significant permanent layoff in 1983 and 1984. We contacted officials in 90 percent of the establishments. In total, about 600 establishments were actually closed or had experienced a significant layoff during 1983 to 1984. The remaining establishments did not close or have a layoff in the time period in our analysis. In some instances the layoffs or closures occurred before January 1, 1983. In other cases, the changes in ownership of the establishment had resulted in a change in the Dun's number, but the facility remained open with no reduction in the work force.<sup>4</sup>

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<sup>3</sup>A significant layoff is defined as a reduction in employment at the establishment during 1983 and 1984 of at least 20 percent, or a minimum of 200 in the case of establishments with more than 1,000 employees.

<sup>4</sup>Appendix II contains a detailed discussion of our use of the Dun and Bradstreet database for the purposes of identifying business closures and permanent layoffs and the principal sources of error encountered in the use of the data.

The rates of closure or permanent layoff used in our analysis were calculated using the projected number of closures or layoffs determined from our verified sample and the total number of establishments in the United States as determined by the Bureau of Census, Department of Commerce.<sup>5</sup> Differences by such characteristics as establishment size, region, blue-collar workers versus white-collar workers, and so on, in the extent of closures and layoffs, the length of advance notice provided, or the assistance offered by employers cited in the text of this report are statistically significant at the 95-percent confidence level.<sup>6</sup>

Additional information for our analysis was obtained from the industrial outlook for the United States compiled by the Department of Commerce, and the BLS analysis of the January 1984 and 1986 supplements to the CPS.<sup>7</sup>

To determine the length of advance notice and assistance provided to affected workers by their employers, we distributed questionnaires to the 484 establishments with 100 or more employees that we identified as having closed or experienced a permanent layoff. About 78 percent, or 376, of the establishments responded to our questionnaire.

The methodology used for gathering and analyzing the data contained in this report was reviewed before implementation by a panel of experts representing the perspectives of workers, business, government, and academia. Our work was performed between September 1985 and May 1987 and conforms with generally accepted government auditing standards.

The preliminary results of our analysis were discussed at a conference jointly sponsored by GAO and the Office of Technology Assessment (OTA) in April 1986 and were provided to the Secretary of Labor's Task Force on Economic Adjustment and Worker Dislocation. Briefing reports to Senator Lloyd Bentsen (GAO/HRD-86-116BR, July 1, 1986) and Senator Howard Metzenbaum (GAO/HRD-87-86BR, Apr. 17, 1987) also included

<sup>5</sup>See, County Business Patterns 1983, U. S. CBP-83-1, U. S. Department of Commerce, Bureau of the Census, 1985.

<sup>6</sup>A more detailed presentation of all aspects of our methodology, including sample selection and statistical validity, are contained in appendix I. Appendix VII contains all the data used in the text of the report with the associated level of statistical significance indicated.

<sup>7</sup>See, 1987 Industrial Outlook: Prospects for over 350 Industries, International Trade Administration, U.S. Department of Commerce, January 1987, Displaced Workers 1979-83, Bulletin 2240, Bureau of Labor Statistics, U. S. Department of Labor, July 1985 and Francis W. Horvath, "The Pulse of Economic Change: Displaced Workers of 1981-85", Monthly Labor Review, June 1987.

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data from our analysis. This is the final in a series of reports we have issued on dislocated workers and plant closings.<sup>8</sup>

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<sup>8</sup>See page facing back cover of this report for a complete list of related reports and information on how to order.

# Extent of Business Closures and Permanent Layoffs

In 1983 and 1984, business closures and permanent layoffs at 16,200 establishments with 50 or more employees dislocated 1.3 million U.S. workers. Similar to recent BLS reports,<sup>1</sup> which estimated that 2.2 million workers were dislocated annually during the 5-year period from 1981 to 1986, our findings indicate that despite improvements in our economy, many people continue to be dislocated from their jobs. Sixty percent of the closures and layoffs occurred in the manufacturing sector, reflecting long-term employment declines in many of these industries. Closures and layoffs were dominated by industries that produced durable goods, accounting for nearly half the dislocated workers. Increased competition in the world market exacted a toll, with one in three closures and permanent layoffs occurring in industries certified by the Department of Labor or International Trade Commission as adversely affected by foreign trade. The fast-growing service sector had closures and layoffs affecting 250,000 workers.

Business closures and layoffs are often associated with economically depressed areas in "Rust Belt" states of the industrial north. But closures and layoffs are a national problem, with jobs lost and businesses closing in all regions of the country. While many closures and layoffs occurred in the heavily industrialized Midwest and Northeastern states, the Southern and Western states suffered as well. For example, the previously prosperous, oil-rich West South Central region had the nation's highest incidence of closures and permanent layoffs during 1983 and 1984.

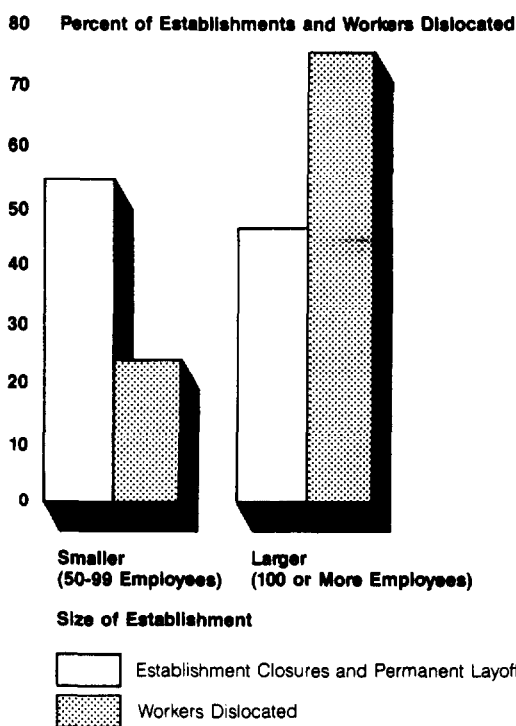
Finding new employment for workers dislocated by business closures and permanent layoffs challenges our nation's economic resiliency. Many dislocated workers face difficulties finding a new job. Reemployment barriers, such as lack of marketable skills or a depressed labor market, often result in long periods of unemployment or acceptance of lower paying jobs. Finding a comparable job is particularly difficult for the 390,000 workers laid off from industries with declining employment. These workers face reemployment in new industries or occupations, where the transfer of their skills may be difficult. Further, over 490,000 workers lost jobs in regions where slow economic growth provided fewer reemployment opportunities.

<sup>1</sup>See, Francis W. Horvath, "The Pulse of Economic Change: Displaced Workers of 1981-85," *Monthly Labor Review*, June 1987, U.S. Department of Labor, Bureau of Labor Statistics, and appendix III for a comparison of the GAO estimate of worker dislocation to the BLS findings.

## Profile of Establishments and Workers Affected

Between January 1983 and December 1984, 16,200 business establishments, employing over 2.5 million workers, closed or had a significant reduction in their employment. Over 1.3 million workers lost their jobs, about half from the 3,700 establishments that permanently ceased operations. Most of the workers (76 percent) were laid off from 7,400 establishments that had 100 or more employees. (See figure 2.1.)

**Figure 2.1: Establishments Affected and Workers Dislocated in 1983 and 1984 by Size of Establishment**



Closures and layoffs affected about 1 in every 15 U.S. business establishments that employed 100 or more workers.<sup>2</sup> While business failures, especially among fledgling companies, are expected in a competitive economy, we found that most employment reductions and closures

<sup>2</sup>The discussion of the number of establishments and workers affected by business closures and permanent layoffs in the remainder of this chapter refers to establishments with 100 or more workers because the discussion is based on responses to our questionnaire, which was sent only to these larger establishments. The discussions in chapter 3, on the advance notice provided, and chapter 4, on the assistance offered, also are based on responses to our questionnaire, and thus, also refer only to establishments with 100 or more workers.

resulted from the efforts of well-established employers to improve efficiency rather than because of bankruptcy. (See table 2.1.) About 90 percent of establishments had been at their location 5 years or more, and over half for 15 years or more. Officials at only 8 percent of the 7,400 establishments said their business had experienced a financial reorganization or dissolution under bankruptcy proceedings. Most business officials (55 percent) said that, in their opinion, the employment reduction or establishment closure was an effort to improve efficiency by consolidating facilities or product lines, acquiring additional facilities, closing obsolete facilities, or automating production.

**Table 2.1: Factors Cited by Business Officials as Key Factors Influencing the Closure or Layoff Decision**

<b>Factory</b>	<b>Percent of officials citing factor</b>
<b>Plant, equipment, labor, and capital:</b>	
High labor costs	45
Consolidation of product line or service	27
Low productivity	26
Facility consolidation	25
Poor management	20
Facility obsolescence	20
Production automation	15
Product obsolescence	12
Bankruptcy	8
Acquired by another company	6
Acquired additional facilities	6
Natural disaster	1
<b>General business environment:</b>	
Reduced product demand	60
Increased competition	56
Inflated value of U.S. dollar	25
Limited access to foreign markets	14
<b>Government regulations:</b>	
State or local regulations	2
Federal regulations	18
Industry deregulation	8

Business's drive to improve efficiency responds to increased competition in domestic and world markets. Many business officials (45 percent) said their high labor costs had a significant influence on the decision to

close or lay off workers. However, officials at only 1 in 3 business establishments said low productivity or poor management was a key factor contributing to the closure/layoff decision.

Most of the establishment closures and permanent layoffs (80 percent) identified through our survey affected both white-collar and blue-collar workers. But, based on our analysis of BLS data, blue-collar workers were more likely to be dislocated, losing their jobs at twice the rate of white-collar workers. Blue-collar workers in skilled and semiskilled occupations lost jobs at three times the rate of white-collar workers accounting for nearly half of the workers dislocated. Dislocated workers from less skilled blue-collar occupations experienced lower rates of reemployment and were more likely to accept lower paying jobs.

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## Manufacturing Sector Hardest Hit

Sixty percent of the closures and permanent layoffs at establishments with 100 or more employees occurred in the manufacturing sector.<sup>3</sup> These closures and layoffs affected 1 in every 8 of the nation's 35,000 larger manufacturing establishments, resulting in job loss for 688,000 workers. While over 300,000 people were laid off in other industries, the rate of occurrence among manufacturing establishments was more than three times the rate in the service and trade industries. (See figure 2.2.)

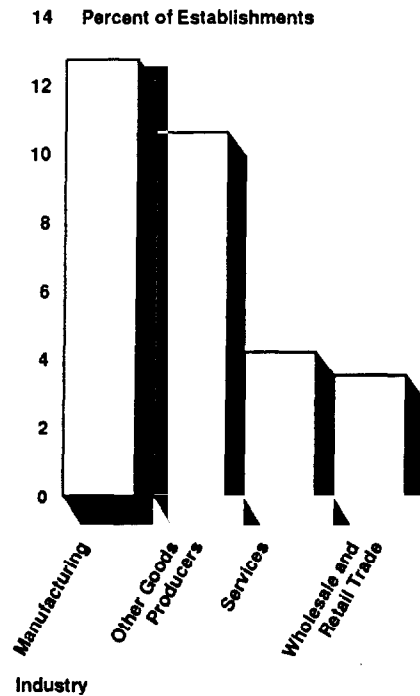
Manufacturers of durable goods, such as steel, autos, and machinery, had the highest rate of occurrence of any industry group, affecting 1 in every 5 of the business establishments in these industries. (See table 2.2.) About half (46 percent) of all dislocated workers were from durable goods producers. Two industries—fabricated metal (i.e., sheet metal, hand tools, or metal forgings) and nonelectrical machinery manufacturers (i.e., engines, farm equipment, or industrial equipment) were particularly hard hit, dislocating over 250,000 workers.

Closures and permanent layoffs also occurred at about 1,500 nondurable goods manufacturing establishments. About 1 in every 10 of the industry's estimated 16,000 establishments were affected, resulting in job losses for 221,000 workers. Most (60 percent) of these dislocated workers were in the food and textile industries. Closures and layoffs in food industries affected 450 establishments and nearly 10 percent of the estimated 1 million workers employed in the industry. Fourteen percent of

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<sup>3</sup>See appendix IV for the specific industries, based on 2-digit Standard Industrial Classification (SIC) code, in the manufacturing, trade, and services sectors.

**Figure 2.2: Rate of Establishment Closure and Layoff by Industry**



the nation's textile manufacturing establishments closed or had a permanent layoff in 1983 and 1984, affecting 230 establishments and 36,900 of the 590,000 workers in the industry.

Other goods producers also had a high incidence of business closures and permanent layoffs. For example, 12 percent of establishments in the mining, oil, and gas extraction industries were affected, laying off over 27,000 employees. The high incidence of closures and layoffs in durable goods manufacturing may also have affected wholesale traders of these goods, with about 1 in every 10 of such establishments experiencing a closure or layoff, affecting about 23,000 workers.

Despite dramatic employment gains in the service sector, we found that 176,000 service industry workers lost their jobs as a result of business closures and layoffs during 1983 and 1984. About 1,700 establishments 4 percent of the establishments in service industries, closed or experienced a permanent layoff. In addition, over 300 retail trade establishments closed or had a permanent layoff affecting 38,000 workers.



**Chapter 2  
Extent of Business Closures and  
Permanent Layoffs**

Within the service sector, industries with closer ties to manufacturing, such as finance, transportation, and business services, had relatively higher rates of occurrence. Over half the business officials from these industries cited reduced product demand when explaining significant factors influencing the company's closure or layoff decision. Over half of the officials in finance and transportation establishments responding to our questionnaire cited government regulation or deregulation as a significant factor in the closure/layoff decision, reflecting industry adjustment to regulatory changes.

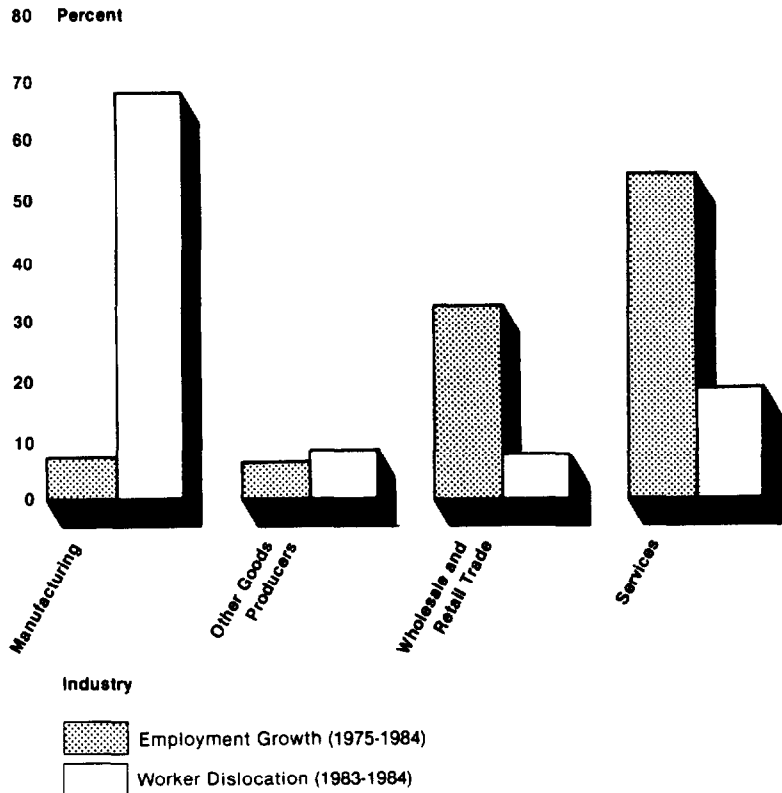
**Table 2.2: Establishment Closures and Layoffs, by Selected Industries**

	Number of establishments	Rate of occurrence	Number of employees
<b>All Industries<sup>a</sup></b>	<b>7,400</b>	<b>7.4</b>	<b>1,021,400</b>
<b>Durable goods manufacturing:</b>	2,970	17.3	467,600
Nonelectrical machinery	840	25.4	146,200
Fabricated metal	590	21.2	108,100
Transportation equipment	220	15.2	47,400
Primary metal	180	12.5	15,300
Electrical machinery	400	12.4	44,900
Lumber and wood	150	11.9	21,200
<b>Nondurable goods manufacturing:</b>	1,480	9.4	220,800
Textile	230	14.0	36,900
Food	450	13.0	96,300
Chemicals	180	11.6	20,000
Rubber and plastics	170	11.4	13,200
Apparel	280	9.5	25,900
<b>Other goods producers:</b>	600	10.6	80,700
Mining, oil, and gas	230	12.5	27,400
Construction	300	8.2	42,400
<b>Wholesale and retail trade:</b>	690	3.5	76,800
Wholesale, durable goods	260	11.1	23,200
Wholesale, nondurable goods	110	5.1	15,200
Retail trade	310	2.2	38,400
<b>Service sector:</b>	1,660	4.2	175,500
Transportation	300	10.1	37,400
Finance	200	6.4	14,100
Business services	420	5.9	44,400
Insurance and real estate	160	4.6	21,700
Consumer/personal services	190	3.7	17,800
Professional services	340	2.6	27,800

<sup>a</sup>Only selected industries are displayed, and industries listed under major groups may not sum to total.

Our analysis of BLS employment data showed that the U.S. economy has generated 16 million new jobs since 1975.<sup>4</sup> As shown in figure 2.3, most of these new jobs were in service industries. At the same time, most manufacturing industries experienced slow growth, and some had significant employment declines. Closures and permanent layoffs are indicative of long-term employment declines in many industries. We found that over a third of the closures and permanent layoffs occurred in industries with a net loss of jobs over the 10-year period 1975-84.

**Figure 2.3: Comparison of Employment Growth to Worker Dislocation by Industry**



<sup>4</sup>For employment figures by industry for the period covered, see U.S. Bureau of the Census, Statistical Abstract of the United States: 1986, 106th edition, Washington, D.C., 1985.

Further analysis of the BLS data showed that the manufacturing sector employed about 1 million more workers in 1984 than in 1975. However, most establishment closures and permanent layoffs (55 percent) occurred in specific segments of the manufacturing sector with declining employment. We found that 64 of the 143 segments in the manufacturing sector<sup>6</sup> had chronic job loss in the long-term (1975-84) and in the more recent 1980-84 period as well. Job losses in these industries totaled 13 percent over the 10-year period. For example, the steel industry experienced significant declines in employment, reducing the number of jobs by 37 percent over the 10-year period. Of the 300,000 jobs lost, over 80 percent were in production. And, the long-term slump of the U.S. steel industry shows no sign of reversing.

## Increased Foreign Competition Exacts Toll

The U.S. International Trade Administration reported<sup>6</sup> that since 1980, manufacturers continued to face increases in competition from foreign producers. For example, import penetration of manufacturers' market share rose from 26 to 36 percent for autos and 12 to 28 percent for other capital goods. During 1983 and 1984, 62 percent of the 688,000 dislocated workers in the manufacturing sector were laid off from industries where establishments were certified<sup>7</sup> as adversely affected by foreign trade. (See table 2.3.) A total of 2,800 trade-impacted establishments were affected by closures and permanent layoffs, most (67 percent) in industries that manufactured durable goods.

**Table 2.3: Establishment Closures and Layoffs in Trade-Impacted Industries**

	All closure-layoffs		Trade-impacted Industries	
	Establishments	Employees	Establishments	Employees
<b>All industries</b>	7,400	1,021,400	2,800	433,800
Manufacturing	4,450	688,400	2,720	427,300
Other industries	2,950	333,000	80	6,500

Trade-impacted establishments producing nondurable goods had a high incidence of closures and permanent layoffs. The rate of occurrence among trade-impacted establishments (14 percent) was 50 percent

<sup>5</sup>The 143 subsectors of the manufacturing industry were identified by three-digit SIC codes.

<sup>6</sup>U.S. Department of Commerce, International Trade Administration, 1987 U.S. Industrial Outlook, January 1987.

<sup>7</sup>The four-digit SIC codes for establishments in our sample that had a closure or layoff were matched to the SIC codes for establishments certified as adversely affected by foreign trade by either the International Trade Commission or the Office of Trade Adjustment Assistance, U.S. Department of Labor, during 1983 and 1984.

higher than the rate for other nondurable goods manufacturers. For example, a third of the establishments manufacturing textiles were in segments of the textile industry certified as trade impacted. About 1 in 3 of these establishments had a closure or layoff, compared to about 1 in 7 for other textile manufacturers overall.

Increased foreign competition is traditionally associated with labor-intensive or low technology industries, but "knowledge-intensive" manufacturers were affected as well. During 1983 and 1984, 1,300 establishments in high technology industries closed or had a layoff, affecting 203,000 employees. Such industries had a 17-percent rate of occurrence and accounted for 30 percent of the establishment closures and permanent layoffs in the manufacturing sector. High technology industries<sup>8</sup> are so defined because they exceed the manufacturing average for the percentage of employees in technical occupations, such as engineers and computer scientists. Specific industries include manufacturers of missiles, office computing machines, scientific instruments, drugs, and communication equipment.

The impact of foreign competition on the closure or layoff decision was noted by business officials from trade-impacted industries. Officials at 88 percent of these establishments said that reduced product demand, increased competition, decreased value of the U.S. dollar, and limited access to foreign markets were major contributors to the closure or layoff decision. The International Trade Administration reported that

"the outlook for U.S. domestic manufacturing has become increasingly dependent on world trade. This linkage is evident in the current (1987) U.S. recovery as a large share (two-thirds) of increased domestic demand is met by imports."

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## All Regions Affected

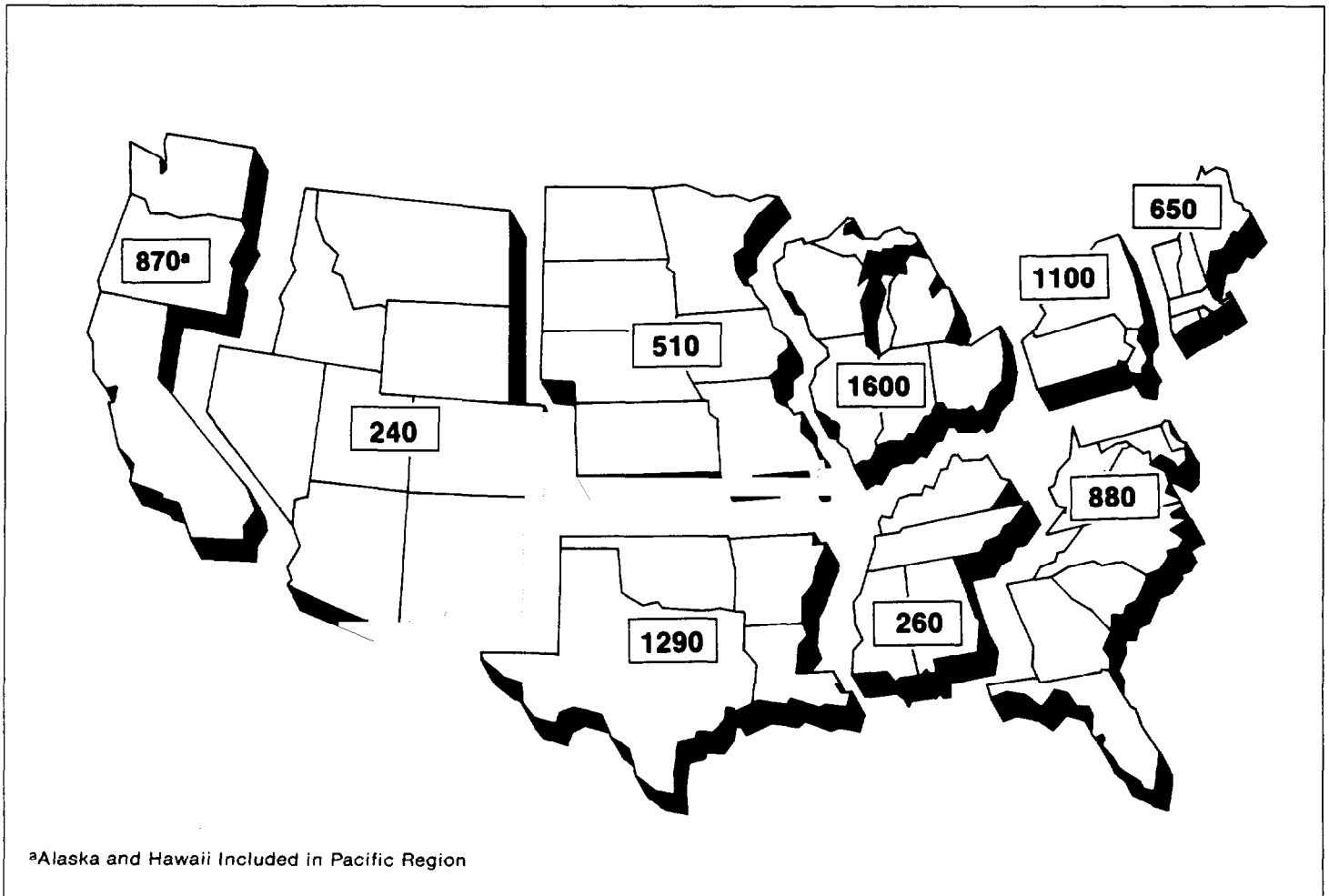
Business closures and permanent layoffs are commonly associated with the heavily industrialized states in the Northeast and Midwest regions. While some regions experienced more closures and layoffs than others, as shown in figure 2.4, large numbers of establishments closed and workers laid off in all parts of the country during 1983 and 1984. The highest and lowest rates of occurrence for closures and layoffs among the nine regions were in the South. The West South Central region had

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<sup>8</sup>The definition of high technology industries is based on the research reported in "Defining High Technology Industries," Glasmeyer, Markusen, and Hall, Institute of Urban and Regional Development, University of California, Berkeley, June 1983. See appendix VI for a list of the 29 high technology industries.

the nation's highest rate, 12 percent, while the East South Central region had the lowest, 4.6 percent. (See figure 2.5.)

Figure 2.4: Number of Establishment Closures and Permanent Layoffs by Region



Over 169,000 workers lost jobs from about 1,300 establishment closures and permanent layoffs in the West South Central region. Oil price declines brought trouble to these previously prosperous states, affecting 12 percent (about 1 in 8) of the region's larger business establishments. Thirty-six percent of the laid off workers were from establishments directly related to the oil industry.

Problems in durable goods manufacturing affected the East North Central states, with these industries laying off two-thirds of the 226,000 dislocated workers identified in our survey. Most of these jobs were lost from closures and permanent layoffs by machinery and fabricated metal manufacturers. Reemployment could be difficult in this region, which had the slowest employment growth of any region over the 10-year period 1975-84, and was the only region with employment declines in the 1980's.

The 650 closures and permanent layoffs in the New England states left 88,000 workers without jobs. These closures and layoffs were concentrated in the manufacturing sector, where the 19-percent closure/layoff rate among manufacturing establishments was second only to the 21-percent rate in the West South Central states. While the region's economy has had healthy growth, with significant employment gains and low unemployment, a 1986 study by the state of Massachusetts<sup>9</sup> reported that its dislocated workers continued to experience difficulties making the transition to new jobs.

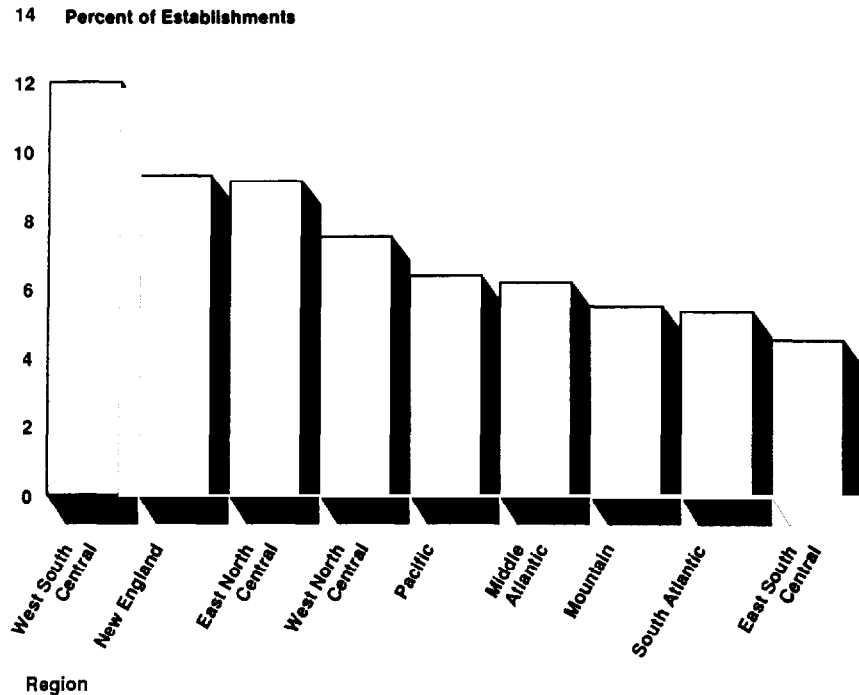
The East South Central states had the nation's lowest incidence of closures and permanent layoffs, affecting 5 percent of the region's larger business establishments during 1983 and 1984. But the 43,000 laid off workers faced reemployment barriers due to slow economic growth and high unemployment. BLS found that, over the last 5 years, the reemployment experiences of dislocated workers in this region were among the worst in the nation. Nearly 40 percent of the 400,000 dislocated workers were either unemployed or out of the labor force at the time of the BLS survey.

In the South Atlantic region, 40 percent of the 880 establishment closures and permanent layoffs were in industries that manufactured nondurable goods. Establishment closures and permanent layoffs in the textile and apparel industries dominated closures and layoffs in this region, with 27 percent of the 80,200 dislocated workers from these two industries. Textile manufacturing is concentrated in Georgia and North and South Carolina. While the region as a whole is gaining employment, it is unlikely that local economies could readily absorb the 22,000 dislocated textile and apparel workers into new jobs.

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<sup>9</sup>See The Final Report of the Mature Industries Research Project on Plant Closings, Commonwealth of Massachusetts, Division of Employment Security, January 1986.

Figure 2.5: Rate of Establishment Closure and Layoff by Region



In the Pacific region, the 6.4-percent rate of occurrence for establishment closures and permanent layoffs was below the national average (7.4 percent). In this region, almost 900 closures and permanent layoffs left 160,000 workers looking for new jobs. As in other regions, most of the dislocated workers (64 percent) came from manufacturing industries. These western states had a large concentration of closures and permanent layoffs in high technology industries, accounting for over a third of the 500 closures and layoffs in the manufacturing sector. OTA reported<sup>10</sup> that import competition and decreased demand led to employment declines and widespread layoffs in California's "high-tech" industries. According to OTA, dislocated workers from these industries "experienced significantly longer periods of unemployment than basic industry workers."

<sup>10</sup>U.S. Congress, Office of Technology Assessment, Plant Closings: Advance Notice and Rapid Response - Special Report, OTA-ITE-321, September 1986.

# Few Establishments Provided Adequate Advance Notice

Several major business associations and labor organizations agree that workers dislocated by closures and layoffs need time to adjust to the trauma of job loss and to help facilitate transition to reemployment. Many of these business associations have encouraged their members to provide as much advance notice as possible. However, our survey of business closures and permanent layoffs showed that few establishments provided their workers advance notice adequate to establish an effective reemployment assistance program. About one-third of the establishments provided their workers no advance notice at all.

Our analysis also showed that such characteristics as the presence of a union, whether dislocation resulted from a closure or a permanent lay-off, and whether the establishment was from a nonmanufacturing industry appeared to be related to employer practices concerning advance notice. While most establishments (80 percent) provided both white and blue collar workers the same length of notice, establishments with a union were more likely to provide their workers advance notice than establishments with no union representation. Workers were more likely to receive longer advance notice if the establishment had experienced a closure rather than a permanent layoff or the workers were from nonmanufacturing industries.

## Business and Labor Agree on Benefits of Advance Notice

While business leaders generally disagree with union officials on the need for mandatory requirements for advance notice, both recognize the benefits, especially when coupled with a comprehensive program of assistance. (See table 3.1.)

According to these groups as well as other business and labor leaders, advance notice provides time to:

- plan and implement programs to help workers adjust to their dislocation and find reemployment,
- increase worker participation in adjustment programs, and
- improve the efficiency and effectiveness of adjustment programs by helping dislocated workers find comparable jobs faster.



**Chapter 3  
Few Establishments Provided Adequate  
Advance Notice**

**Table 3.1: Business Associations and Labor Organizations Recognize Benefits of Advance Notice**

<b>Business association/union</b>	<b>Advance notice .....</b>
Conference Board	is beneficial to employees and is an essential element in a plant closure program.
Business Roundtable	helps mitigate the adverse consequences of a plant closing.
AFL-CIO	gives the communities and workers a fair chance to plan a way to ease the dislocation.
Committee For Economic Development	allows employees the time to adjust and management the time to plan and implement business closures in a way that minimizes hardships.
National Association Of Manufacturers	allows the time needed to implement a plan to enhance the dislocated workers' opportunities for reemployment.
National Center On Occupational Readjustment	to employees and others can help mitigate the adverse effect of a closure.

One of the most important benefits cited by these leaders is that companies, labor, and others have time to plan and develop adjustment assistance programs before workers are dislocated. Starting the adjustment process as early as possible is important to allow the dislocated worker time to plan for a new career and learn job search skills, and help to reduce the stress accompanied by job loss. With sufficient lead time, services to workers can be ready at the time of layoff, or before. In general, management and labor are able to play a more organized, active, and supportive role when employees are still working at the plant.

Advance notice also increases worker participation in assistance programs. Various reports on these programs indicate that more workers join projects that begin about the time of job loss because it is easier to let workers know that help is available before they become unemployed and out of touch. For example, a 1986 report prepared under contract for OTA,<sup>1</sup> states that a strong correlation was found between the amount of time on layoff and success in recruiting workers to participate in an assistance program. Participation appears to be two to three times higher around plant closing time than a year or 18 months after the plant closes. In addition, an impact evaluation of the Buffalo Dislocated Worker Demonstration Program<sup>2</sup> concluded that the low participation rate (less than 20 percent) for the program was caused, in part, by the long average time period between layoff and program recruitment. The

<sup>1</sup>Balfe and Fedrau, Review and Analysis of Company/Union Sponsored Comprehensive Displaced Worker Assistance Centers Receiving JTPA Title III Support, April 1986.

<sup>2</sup>Mathematica Policy Research, Inc., An Impact Evaluation of the Buffalo Dislocated Worker Demonstration Program, March 1985.

report also concluded that programs that focus the recruitment effort soon after workers are laid off could be expected to have higher participation rates. In addition, the Philadelphia Area Labor Management Committee found that when worker assistance workshops are given before layoffs, the employee participation rate is between 70 and 80 percent; when they are offered after layoff, the participation rate is less than 20 percent.

In addition to increasing participation, advance notice can also improve the efficiency and effectiveness of adjustment programs and may decrease the cost of layoff to the company. For example, the National Center on Occupational Readjustment (NaCOR)<sup>3</sup> states that outplacement services are most cost effective if initiated while the worker is still employed at the plant, during the period between the announcement and the actual closing. In a case study performed by NaCOR, the unemployment insurance taxes were considerably lower than anticipated by the company because employees were given outplacement assistance before leaving the company and many workers accepted positions with other employers before being dislocated or shortly thereafter. NaCOR stated that the savings to the company in 1 month alone was over \$500,000.

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## **Suggested Length of Advance Notice**

Business associations generally recommend that, when possible, advance notice be provided to workers. Labor organizations cite the need for advance notice that provides sufficient time to implement a program of worker assistance. However, these groups differ on the length of time that is adequate. Studies by the academic community, business organizations, and government agencies of case studies and other literature<sup>4</sup> suggest that from 30 to 180 days are generally needed to establish and implement a comprehensive assistance program for dislocated workers. (See table 3.2.)

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<sup>3</sup>National Center on Occupational Readjustment Inc., Managing Plant Closings and Occupational Readjustment: An Employer/s Guidebook, 1984.

<sup>4</sup>See the bibliography for a complete listing of the literature we reviewed.

**Table 3.2: Estimated Time Needed for Adequate Advance Notice**

<b>Business association or government agency</b>	<b>Estimated length of time to plan and implement comprehensive adjustment assistance</b>
National Association of Manufacturers	42 days
National Center on Occupational Readjustment	30 to 180 days
Canadian Industrial Adjustment Service	56 to 112 days
Office of Technology Assessment	56 to 112 days
National Academy of Sciences	60 to 90 days

In Canada, about three-fourths of the work force is covered by provincial and federal laws that require advance notice of between 56 and 112 days, depending on the number of workers involved. Officials from the Canadian Industrial Adjustment Service said that it takes all of the required time to effectively prepare for the closing when demand for services is at a peak.

OTA<sup>5</sup> reported that preparedness for fast action to assist the workers dislocated in the event of a closure or layoff includes the following elements:

- Plans at the division or corporate level to help dislocated workers include commitment of company resources, especially space and staff.
- Someone in the plant is assigned decision-making authority to take charge of the company's part of the program.
- A worker assistance program is announced at the same time as the plant closing announcement.
- Plans include determining what public funds and programs are available and readiness to negotiate with state and local agencies to get them.

OTA also cited the following factors as contributing to a faster response: the need for a strong company commitment to serving its dislocated workers, a strong partnership with a supportive union or worker representatives, expert consultation, a high degree of cooperation from public agencies, and experience in developing and operating dislocated worker projects.

<sup>5</sup>U.S. Congress, Office of Technology Assessment, Plant Closings: Advance Notice and Rapid Response Special Report, OTA-ITE-321, September 1986.

Getting federal funds in time to set up a dislocated worker assistance project before the layoffs begin is often difficult and increases the time required to implement an adjustment program. OTA reported that it was not unusual to have a delay of 3 or more months from the time a JTPA agency commits to funding a project until the grant is executed. We also found that some states were slow in implementing title III projects to respond to dislocations of workers by business closures or permanent layoffs.<sup>6</sup>

While the amount of time required to plan and implement an assistance program will vary depending on the situation, our review of the positions of business organizations and the research of academic and government agencies suggest that between 30 and 180 days would be adequate to plan and implement a comprehensive worker adjustment program.

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## Limited Advance Notice Given

Our survey of business establishments experiencing a closure or permanent layoff showed that relatively few provided their workers notice adequate to establish an effective worker assistance program. Over 30 percent of the establishments provided no notice at all. The median length of time provided was 7 days. Less than 20 percent of the establishments provided their workers more than 30 days' advance notice, and only 5 percent of the establishments provided their workers more than 90 days' notice, the amount of advance notice required by proposed legislation for employers that lay off 50 to 100 employees.<sup>7</sup> Less than 2 percent of the establishments provided their workers with more than 180 days' notice, the amount of advance notice required by the proposed legislation for employers that lay off 500 or more employees. (See figure 3.1.)

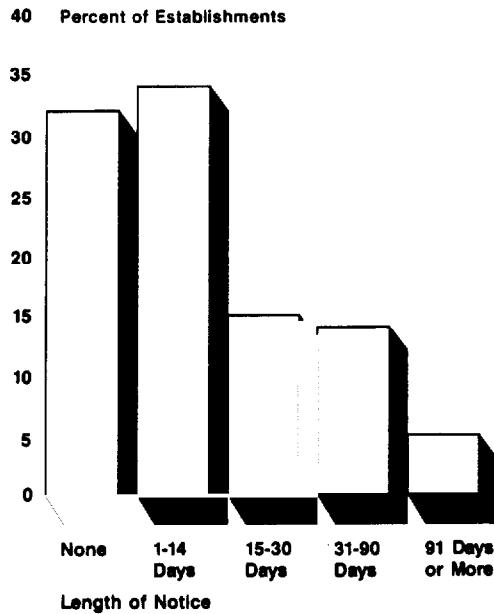
While relatively few establishments provided notice adequate to establish an effective worker assistance program, our analysis showed that such characteristics as the presence of union representation, whether

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<sup>6</sup>Dislocated Workers: Local Programs and Outcomes Under the Job Training Partnership Act (GAO/HRD-87-41, Mar. 5, 1987).

<sup>7</sup>See discussion of the legislative proposals in chapter 1. Advance notice requirements are included in S. 538, which has passed the Labor and Human Resources Committee, and H.R. 1122, which has passed the Education and Labor Committee.

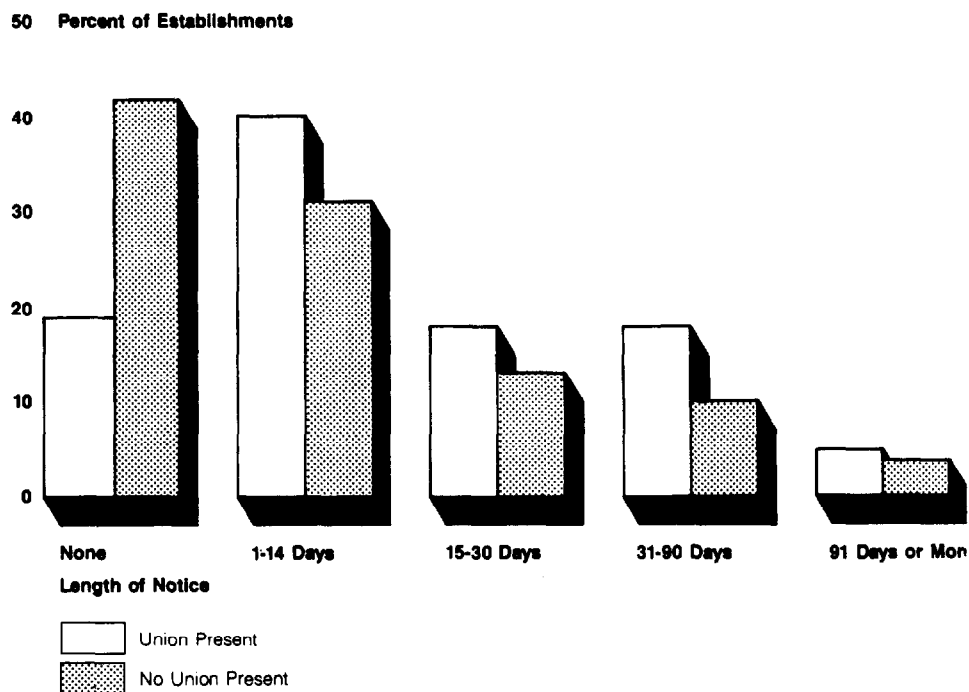
Figure 3.1: Length of Advance Notice  
Provided by Establishments



those dislocated were blue-collar or white-collar workers, and whether the worker dislocation resulted from a closure or permanent layoff appear related to the length of advance notice provided. For example, most establishments (80 percent) provided both blue-collar and white-collar workers the same length of notice. Those establishments that treated their workers differently, however, provided shorter notice to blue-collar workers. Blue-collar workers received a 10-day median notice while white-collar workers received a 30-day median notice.

Establishments with a union present were more likely to provide their workers advance notice than those without union representation. For example, less than 20 percent of establishments with a union present provided no notice to their blue-collar workers, compared with 40 percent of the establishments without union representation. (See figure 3.2.)

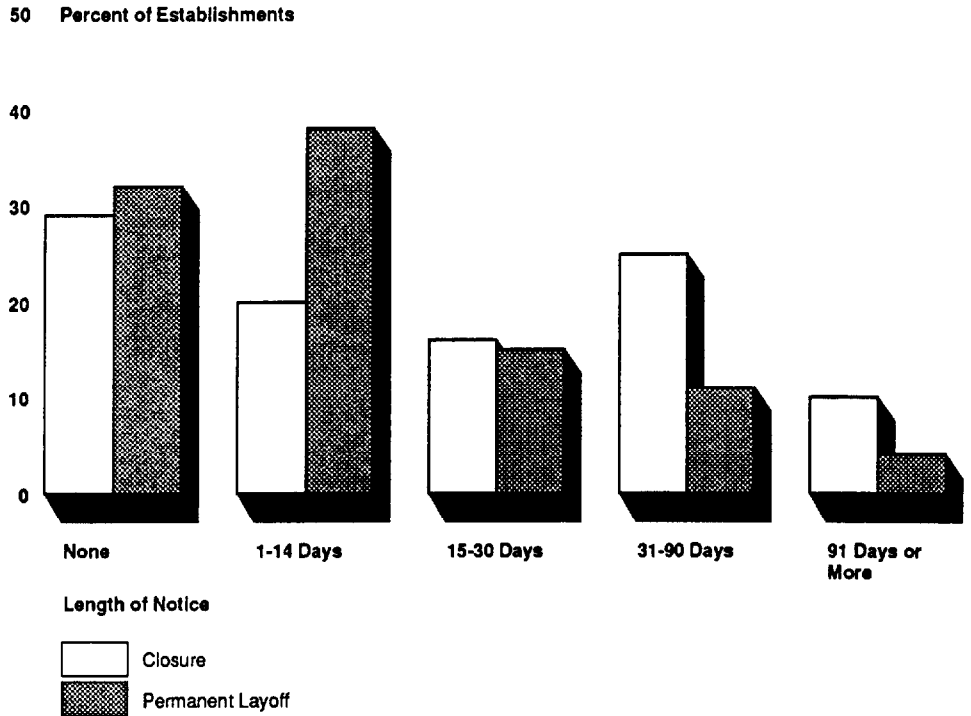
**Figure 3.2: Length of Advance Notice Provided by Union Status for Blue-Collar Workers**



Increases in the length of advance notice provided in unionized establishments could be part of a trend identified by other researchers. According to the Department of Labor and the American Federation of Labor and Congress of Industrial Organizations (AFL-CIO), organized labor has responded to the problems caused by plant closings by trying to protect its members by negotiating collective bargaining agreements that provide for job security, extended benefits, and notification of the workers well before a shutdown occurs. A Labor Department report<sup>8</sup> on plant closings stated that about 10 percent of collective bargaining agreements before January 1981 required advance notice, but the length was usually only several weeks or a month at most. In most major negotiations in 1982, the subject of advance notice was on the bargaining agenda. A period of between 3 to 6 months developed as the usual time period.

<sup>8</sup>U.S. Department of Labor, Plant Closings: What Can Be Learned From Best Practice, 1982.

**Figure 3.3: Length of Advance Notice Provided for Closures and Permanent Layoffs**

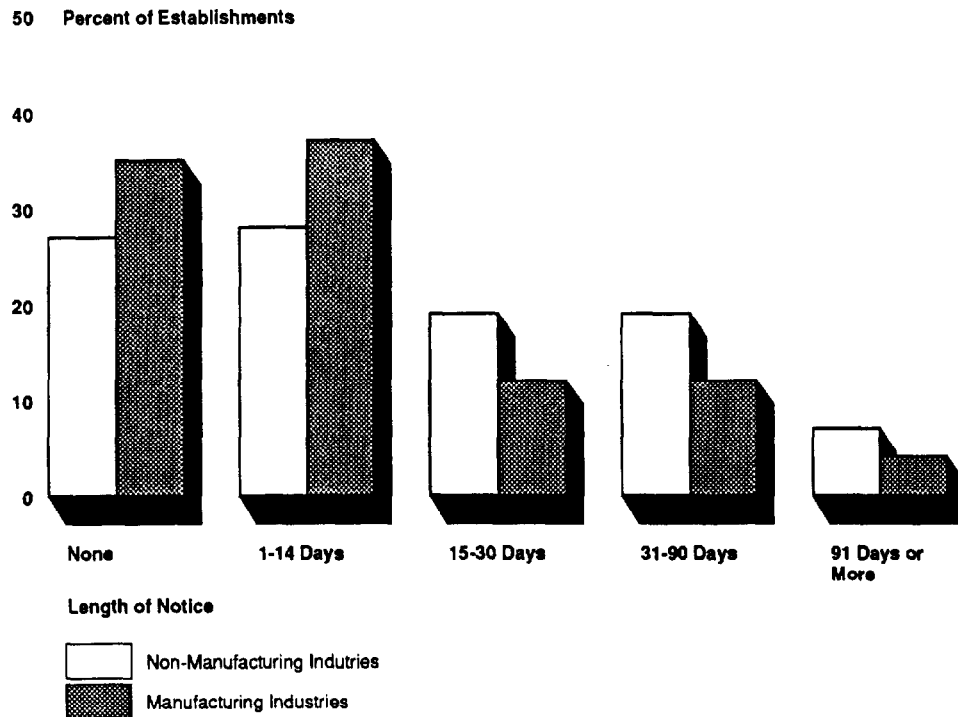


Our study showed that about 30 percent of establishments with union representation that experienced a closure or permanent layoff had a union contract with an advance notice requirement. The length of notice required ranged from 1 to 120 days with an average of 32 days. While unions help insure that their members are provided advance notice, less than half of the establishments involved in a closure or layoff had a union.

As shown in figure 3.3, establishments that closed were more likely to provide longer advance notice to their workers than establishments that experienced a permanent layoff but remained open. For example, one-third of the establishments that closed provided their workers with more than 30 days' advance notice compared with 15 percent of the establishments that had permanent layoffs.

Establishments from the manufacturing sector were less likely to provide advance notice than nonmanufacturing establishments. For example, while about three-fourths (72 percent) of establishments in the

Figure 3.4: Length of Advance Notice  
 Provided by Industry



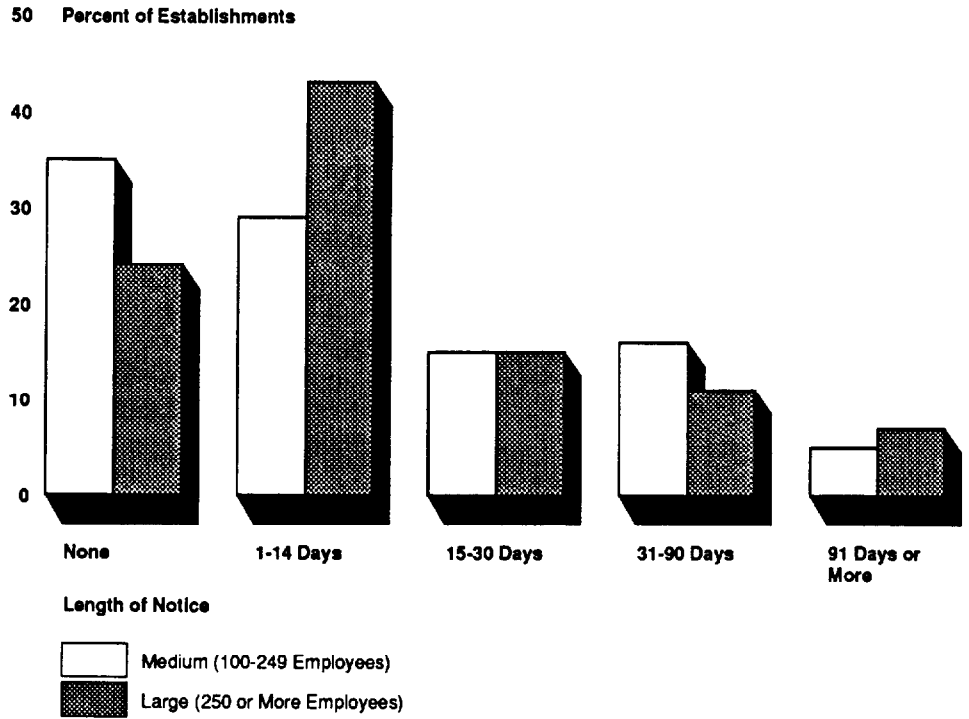
manufacturing sector provided 14 days or less notice to their employees. about 55 percent of the nonmanufacturing establishments provided 14 days or less notice. (See figure 3.4.)

This is of particular concern because workers from the manufacturing sector are more likely to experience difficulty in finding a comparable job. A report by the National Alliance of Business (NAB)<sup>9</sup> concluded that workers who lose their manufacturing jobs will not readily fit into job openings in the service sector or into new manufacturing positions that require familiarity with new, more sophisticated equipment. Jobs for which laid off workers could immediately qualify would often force them to accept pay reductions. In addition, NAB found that dislocated workers were older, less educated, accustomed to higher earnings, and less likely to have had recent experience in job search when compared with the general unemployed worker. The dislocated worker is also likely to experience significant earnings losses and both psychological and health problems in adjusting to loss of a job held for a long time.

<sup>9</sup>National Alliance of Business, *Worker Adjustment to Plant Shutdowns and Mass Layoffs: An Analysis of Program Experience and Policy Options*, August 1981.



Figure 3.5: Length of Advance Notice  
Provided by Size of Establishment



The length of advance notice provided to workers did not vary by establishment size. (See figure 3.5.) Mid-size establishments (100 to 249 employees) provided advance notice to their employees about as often as establishments with 250 or more employees.

# Few Establishments Offered Comprehensive Assistance

Advance notice alone is insufficient to insure rapid reemployment for dislocated workers. Labor groups and business associations often recommend that, in addition to advance notice, placement and financial assistance be provided to workers, facilitating their transition to new jobs. However, we found that while most establishments offered their workers some form of financial or placement assistance, few offered a comprehensive package of reemployment assistance. In addition, even fewer establishments combined comprehensive assistance with advance notice adequate to provide effective assistance.

## Comprehensive Assistance Package

Business associations and labor organizations generally support the need for assistance to dislocated workers (as shown in table 4.1) and recommend that such assistance be provided when needed and include financial benefits and placement assistance, such as:

- income maintenance benefits (severance pay, pay in lieu of notice, lump sum payment or supplementary unemployment benefits);
- the continuation of health insurance coverage;<sup>1</sup>
- the continuation of life insurance coverage;
- early retirement options;
- relocation assistance (company transfer or inter-plant relocation assistance);
- counseling (career, personal, testing and skill assessment);
- job search assistance (job search, time off for job search, administrative support, or job clubs); and
- occupational training.

The Department of Labor Task Force report and testimony<sup>2</sup> by the United Auto Workers (UAW) union president, among others, noted the financial difficulties faced by many dislocated workers. Financial assistance, in the form of income maintenance benefits, helps dislocated workers avoid the potential for overwhelming financial problems before they become reemployed. Because dislocated workers tend to be older

<sup>1</sup>As part of the Budget Reconciliation Act of 1986, dislocated workers covered by an employer group health plan can extend their coverage for up to 18 months following layoff at their own expense. Legislation introduced in the House and Senate would mandate extension of employer-paid insurance for up to 4 months following a layoff. For further information, see "Health Insurance Loss: The Case of the Displaced Worker," M. Podgursky, and P. Swain, *Monthly Labor Review*, April 1987, Volume 110, No. 4.

<sup>2</sup>Statement by Owen Bieber at joint hearings of the House Subcommittees on Labor-Management Relations and Employment Opportunities, March 17, 1987.

**Table 4.1: Business Associations and Labor Organizations Cite the Reasons for Dislocated Worker Assistance**

Organization	Why assistance is needed
NaCOR	"reemployment assistance is the critical element in hastening and easing the readjustment process."
National Alliance of Business	"because their skills in job search are rusty or non-existent to deal with the stresses of their unfamiliar situation before they can get on with the task of finding a new job understanding complicated benefit packages and how to use benefits in an effective manner."
Department Labor Task Force	"a rapid response capacity would most likely of result in high quality adjustment to jobs in new industries and occupations."
AFL-CIO	"To minimize human costs of economic change and to cushion adjustment."

and likely to have families to support with the accompanying financial responsibilities, such as mortgage payments, income maintenance benefits allow them to pursue their job search with less worry about their immediate financial condition and to take advantage of retraining or skill upgrading. Also, financial counseling helps workers manage their budgets during financial distress.

Because of the cost involved, dislocated workers may stop seeking medical help for themselves and family members if they do not have health insurance coverage, according to a recent OTA report. This is at a time when the stress of unemployment and job seeking may leave dislocated workers vulnerable to illness. The continuation of health insurance benefits assures dislocated workers that they will be able to care for their families and relieves the worry over facing expensive medical bills during their job search.

NaCOR observed that because workers affected by plant closures often have significant job tenure, many years may have passed since their last job search. Placement assistance helps demystify the job search process and increases workers' confidence, helping them to find new jobs faster. Skills assessment, testing, and career counseling are frequently cited as necessary components of an effective placement program for dislocated workers because this assistance helps workers identify career opportunities appropriate to their skills and interests.

In addition, job search training can help workers develop local labor market information, identify job openings, prepare resumes, develop personal marketing techniques, and hone telephone and personal interviewing skills. If their job skills and knowledge need updating for new jobs due to obsolescence or the lack of local opportunities, occupational

training can provide new skills or skill upgrading, facilitating the workers' transition into a new career or work environment.<sup>3</sup>

According to the National Association of Manufacturers, many dislocated workers suffer from psychological insecurity as a result of their sudden unemployment. This stress often leads to alcohol or drug abuse and can create serious family tensions, which may in turn result in psychological or physical abuse of spouses and children. Effective personal counseling helps dislocated workers deal with this anger, hostility, and stress; as a result, they are able to concentrate on the job search process and be more effective in competing for available openings.

Although business associations and labor organizations recommend a wide variety of financial and placement assistance be made available to dislocated workers (as shown in figure 4.1), the most frequently cited benefits, forming a comprehensive transition program, are

- income maintenance benefits,
- continuation of health insurance coverage,
- counseling, and
- job search assistance.

For example, the Secretary of Labor's Task Force on Economic Adjustment and Worker Dislocation composed of members from the business, labor, academic, and government communities, and the Business Roundtable, composed of chief executive officers from several Fortune 500 companies, recommend that, when feasible, businesses provide their workers income maintenance benefits, continued health and life insurance coverage, early retirement options, counseling, and job search assistance. Representatives of organized labor, including the UAW and the AFL-CIO, suggest that a broad range of reemployment assistance be provided to dislocated workers. Their recommendations also include income maintenance benefits, continuation of health insurance coverage, counseling, and job search assistance.

NaCOR states that assistance is mutually beneficial to dislocated workers and employers, as well as local communities. For example, assistance can result in reduced company costs, steady productivity, rapid worker

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<sup>3</sup>For additional information on JTPA title III projects that were successful and the assistance they provided to dislocated workers, see, Dislocated Workers: Exemplary Local Programs and Outcomes Under the Job Training Partnership Act (GAO/HRD-87-70BR, Apr. 1987).

reemployment, and reduced community costs. Rapid worker reemployment can aid employers by sparing them the cost of continuing worker health insurance premiums, reducing supplemental unemployment benefits and avoiding potential future increases in unemployment insurance premiums. The rapid reemployment of workers can benefit communities by limiting increases in social welfare costs, losses of tax revenues, and reductions in service and retail business activity. The benefits of rapid reemployment to workers are generally self-evident, including the continuation of an income stream and the reduced likelihood of financial and emotional stress.

According to the NAB, financial and placement assistance are most effective when combined with advance notice of an impending closure or permanent layoff. NAB has stated:

“Advance notice and timely intervention makes a major difference in smoothing the adjustment for employees and allows an organized reduction in force to take place when early notification is combined with the announcement of an on-site comprehensive assistance program, employees have an incentive to stay at the plant and continue working while they prepare for the transition.”

Figure 4.1: Assistance Recommended by Business Associations and Labor Organizations

Representative	Financial Assistance			
	Income Maintenance	Continuation of Health Insurance	Early Retirement	Continuation of Life Insurance
Department of Labor Task Force	■	■	■	■
Business Roundtable	■	■	■	■
United Auto Workers	■	■	■	■
National Association of Manufacturers	■	■	■	
National Center for Occupational Readjustment	■	■		
Committee for Economic Development		■	■	■
AFL - CIO	■			
National Alliance of Business				
National Commission for Employment Policy				

Legend

■ Recommendation Made

Chapter 4  
 Few Establishments Offered  
 Comprehensive Assistance

Placement Assistance				Representative
Job Search Assistance	Counseling	Occupational Training	Relocation Assistance	
■	■			Department of Labor Task Force
■	■			Business Roundtable
	■	■	■	United Auto Workers
■				National Association of Manufacturers
■	■		■	National Center for Occupational Readjustment
■	■	■		Committee for Economic Development
■	■	■	■	AFL - CIO
■	■			National Alliance of Business
■				National Commission for Employment Policy

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## Limited Assistance Offered Dislocated Workers

While most establishments offered their dislocated workers some financial or placement assistance, few offered a comprehensive package that included income maintenance, continued health insurance coverage, counseling, and job search assistance. Even fewer establishments offered such assistance combined with adequate advance notice.<sup>4</sup> In addition, while white-collar workers were more likely to be offered assistance than blue-collar workers, the assistance offered by establishments also varied with certain other factors, such as establishment size, whether dislocation resulted from a closure as compared with a permanent layoff, the presence or absence of a union at the establishment, and the length of notice provided.

Although 60 percent of establishments offered their workers some assistance, establishments were more likely to offer financial assistance than placement assistance. While income maintenance benefits were the most frequently cited assistance, less than half the establishments offered such assistance. (See figure 4.2). About 37 percent offered the continuation of health insurance coverage. Placement assistance was less frequently offered. For example, about one-third of the establishments offered job search assistance, and about 20 percent offered career and personal counseling.

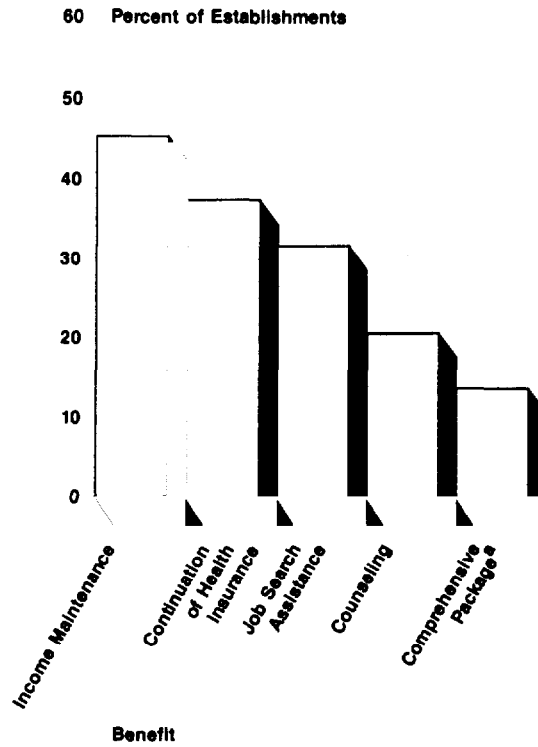
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<sup>4</sup>In chapter 3, we reported that business organizations, and academic and government agency research indicates that advance notice adequate to establish an effective reemployment assistance program can be as little as 30 days or as much as 180 days, depending upon the circumstances of the closure or layoff.



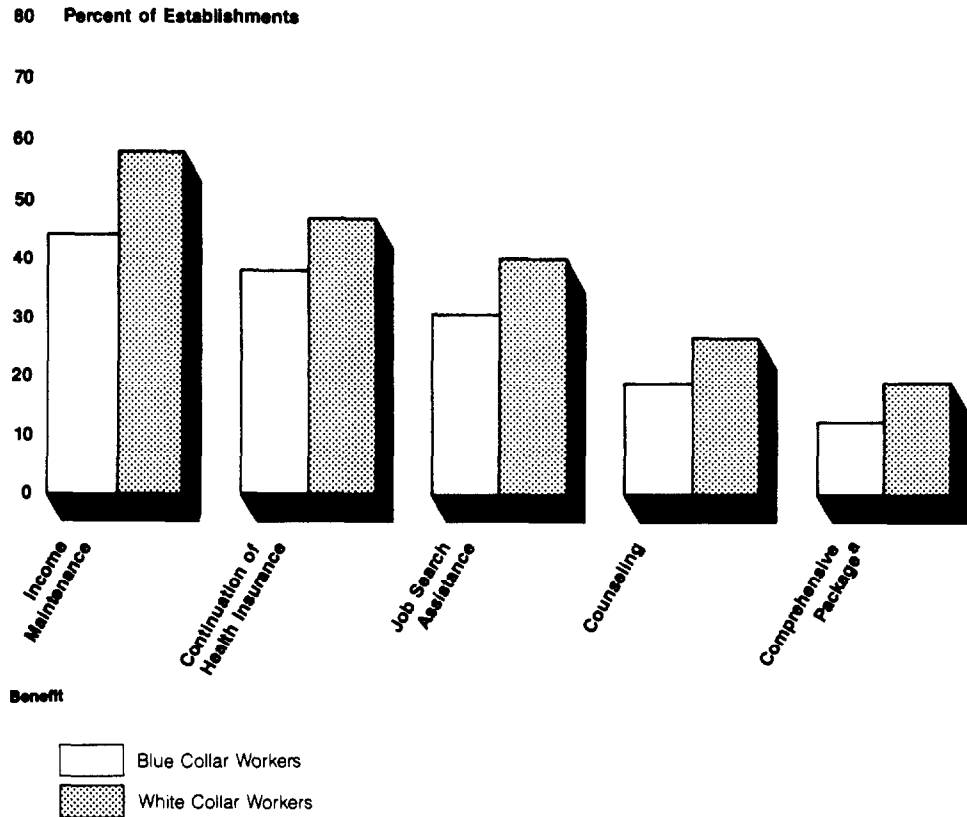
Chapter 4  
Few Establishments Offered  
Comprehensive Assistance

Figure 4.2: Establishments Offering Assistance



\*Includes Income Maintenance, Continuation of Health Insurance Coverage, Job Search Assistance, and Counseling.

**Figure 4.3: Establishments Offering Assistance to Blue-Collar and White-Collar Workers**



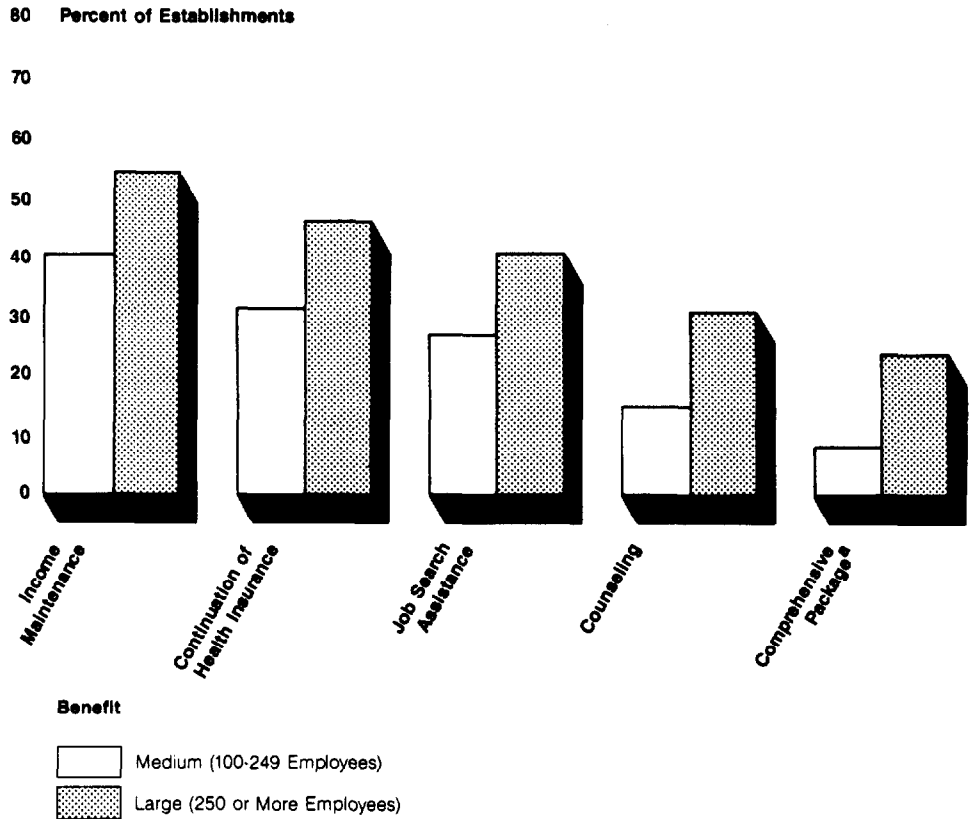
<sup>a</sup>Includes Income Maintenance, Continuation of Health Insurance Coverage, Job Search Assistance, and Counseling.

Occupational retraining is often cited as potentially beneficial for dislocated workers, and 2.4 percent of establishments offered their workers such training. In addition, title III of JTPA made available retraining, counseling, and job search assistance for dislocated workers, and 7 percent of the establishments participated in a title III project. This is typical of the experience of the title III program, which has provided assistance to only 6 or 7 percent of dislocated workers since its inception.<sup>5</sup>

A comprehensive benefit package, including the four benefits cited most frequently by business and labor groups (income maintenance benefits,

<sup>5</sup>For additional information on the JTPA title III program see *Dislocated Workers: Local Programs and Outcomes Under the Job Training Partnership Act* (GAO/HRD-87-41 March 1987).

Figure 4.4: Establishments Offering Assistance by Size of Establishment

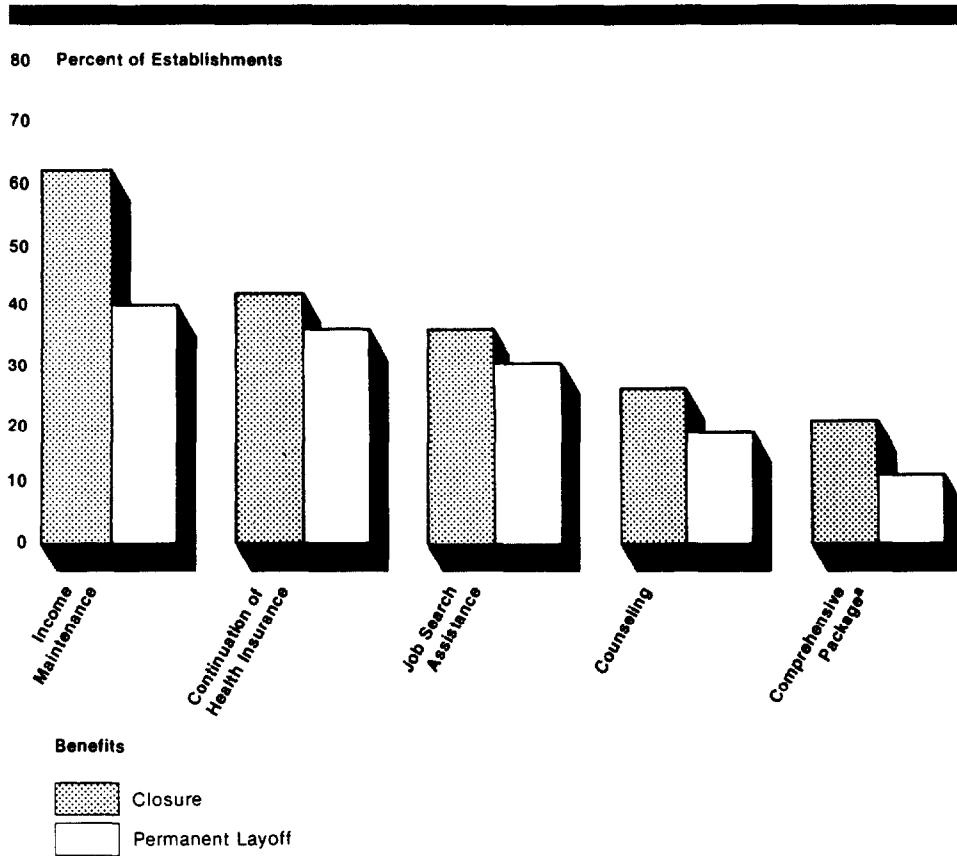


<sup>a</sup>Includes Income Maintenance, Continuation of Health Insurance Coverage, Job Search Assistance, and Counseling.

the continuation of health insurance benefits, counseling, and job search assistance) was offered by only one in seven establishments. Even fewer establishments, 5 percent, provided more than 30 days' advance notice in addition to this combination of benefits.

In general, establishments were more likely to offer assistance to white-collar workers than blue-collar workers. As shown in figure 4.3, significantly more establishments offered income maintenance benefits to their white-collar workers (56 percent) than their blue-collar workers (44 percent). In addition, establishments were more likely to offer job search assistance and the comprehensive assistance package to their white-collar workers than blue-collar workers.

**Figure 4.5: Establishments Offering Assistance for Closures and Permanent Layoffs**

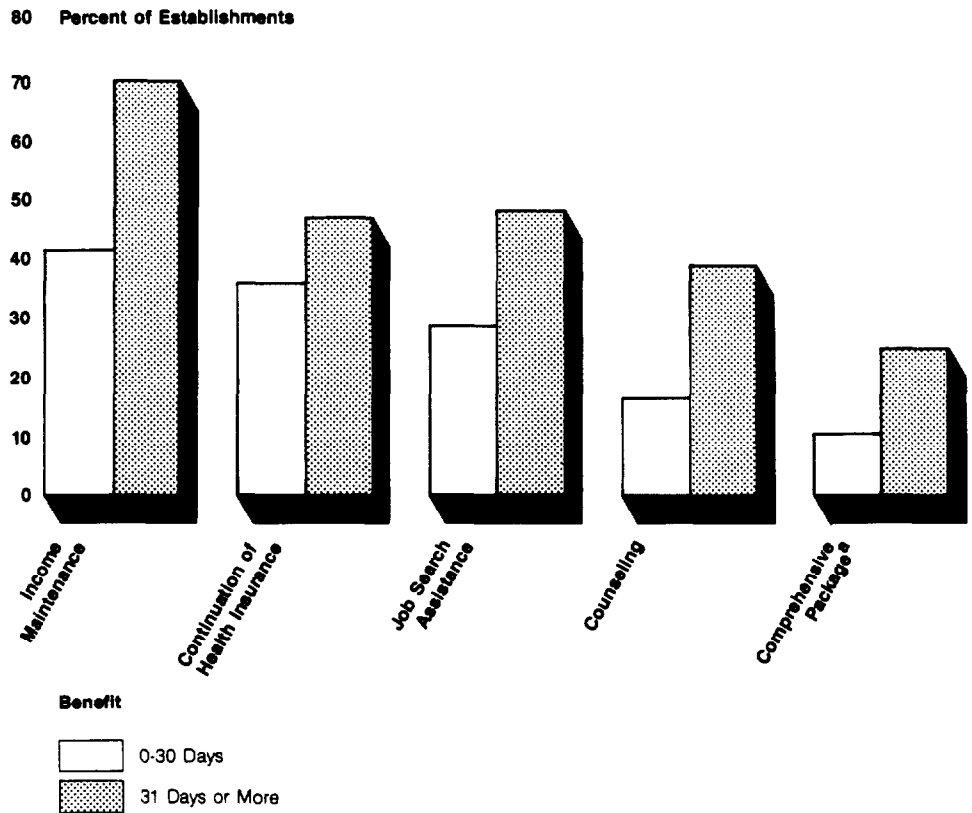


<sup>a</sup>Includes Income Maintenance, Continuation of Health Insurance Coverage, Job Search Assistance, and Counseling

Larger establishments (those with 250 or more employees) were more likely to offer their workers assistance than were smaller establishments. (See figure 4.4.) While over half of the larger establishments offered their workers income maintenance benefits compared to about 40 percent of smaller establishments, counseling was offered significantly more often by larger establishments than smaller establishments. In addition, the comprehensive benefit combination was also offered significantly more often by larger establishments than smaller establishments.

Establishments that closed were more likely to offer their workers assistance than establishments that had a permanent mass layoff. (See figure 4.5.) In particular, income maintenance benefits were offered significantly more often by establishments that closed than those that had a

**Figure 4.6: Establishments Offering Assistance by Length of Advance Notice Provided**



<sup>a</sup>Includes Income Maintenance, Continuation of Health Insurance Coverage, Job Search Assistance, and Counseling.

permanent mass layoff. The presence or absence of a union made no significant difference as to whether an establishment offered its workers financial or placement assistance.

Establishments that provided their workers with more than 30 days' advance notice were more likely to offer assistance than establishments that provided shorter notice. (See figure 4.6.) For example, establishments that provided more than 30 days' advance notice offered income maintenance benefits, counseling, and job search assistance significantly more often than establishments providing 30 days' notice or less. In addition, establishments that provided any advance notice were more likely to offer assistance than establishments that provided no notice.

# Conclusions and Policy Implications

Our analysis of business closures and permanent layoffs presented in the previous chapters shows that worker dislocation strikes all industries and affects all regions of the country. Although some workers may find work immediately, others are likely to have significant reemployment difficulties. Although a small minority of employers provided significant advance notice and offered comprehensive assistance, employers generally provided workers little or no warning of impending closures or layoffs, and offered them little assistance. Federal assistance under title III of JTPA has provided assistance to relatively few workers. However, proposals before the Congress to amend and expand the title III program, if enacted, should result in career counseling, job search, or retraining assistance being provided to significantly more dislocated workers than in the past and encourage more rapid response and greater integration of the public and private efforts to assist dislocated workers.

## Many Dislocated Workers Have Reemployment Difficulties

While some dislocated workers possess highly marketable skills and likely have little difficulty finding reemployment, others may face significant problems becoming reemployed because they possess outmoded occupational skills, live in areas with depressed economies, or have poor job search skills. For example, dislocated workers that come from industries where employment opportunities are declining or whose skills are not readily transferable to new occupations are likely to either face long periods of unemployment following their dislocation, or accept jobs with much lower wages. BLS reported that workers experience a median of 18 weeks without work following their dislocation and that 1 in 5 dislocated workers were without work for a year or more. In addition, over 50 percent of dislocated workers who had found work accepted either part-time jobs or jobs at lower wages.

## Few Employers Provided Advance Notice, Comprehensive Assistance

To facilitate the reemployment of their dislocated workers, 5 percent of the establishments that closed or had a permanent layoff provided more than 30 days' advance notice and a comprehensive assistance package. However, most employers provided their workers little or no notice of the impending closure or layoff, and relatively few offered comprehensive assistance to aid their workers' transition to new jobs.

Although no consensus exists on the length of notice needed, the minimum time cited as adequate to establish a meaningful reemployment program ranged from 30 to 180 days. However, less than 20 percent of establishments provided their workers more than 30 days' notice, and

about a third provided no notice at all. Less than 15 percent of employers offered their workers a comprehensive assistance package composed of the most frequently cited worker assistance benefits—income maintenance, continued health insurance coverage, counseling, and job search assistance.

While title III of JTPA is not the only job assistance program available to dislocated workers, it is the program specifically established to aid such workers yet it has reached a relatively small percentage of them. The career counseling, job search assistance, and training available through the title III program was provided to at most 7 percent of dislocated workers annually. If these programs provide effective assistance to dislocated workers, the number of workers who may be able to benefit from them likely is substantially larger than the number currently being served. According to BLS, nearly 40 percent of dislocated workers were unemployed for more than 6 months following their dislocation, and a third of the workers dislocated during the 5-year period covered by its survey were not employed when the survey was conducted in January 1986. If these programs provide effective assistance to dislocated workers, the number of workers who may benefit from them will be substantially larger than the number currently being served.

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## Implications for Public Policy

The proposals before the Congress to greatly expand dislocated worker assistance under title III could go a long way toward increasing the availability of reemployment assistance for dislocated workers.

The potential for early intervention is increased by the requirement in the legislative proposals before the Congress for states to establish rapid-response mechanisms. Because relatively few employers provide adequate advance notice and project start-up under title III has often been slow, the proposed rapid-response mechanisms would likely improve the ability of the public sector to respond quickly to plant closures. If properly implemented, such mechanisms would likely encourage greater integration of the public and private response to the problem of worker dislocation.

In addition, the legislation pending before both the Senate and the House that would require employers to provide advance notice would address the issue that employers generally provide little or no notice to their employees of an impending closure or permanent layoff. While guidance provided by labor organizations and some business associations state

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that advance notice can benefit employers, employees, and local communities, having a legislative requirement to provide such notice is controversial. Businesses maintain that requiring advance notice will adversely affect their ability to compete in international markets, while labor says that advance notice is a fundamental matter of economic and social justice.





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# Methodology and Sampling

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As discussed in chapter 1, our review of business closures and permanent layoffs and employer practices related to advance notice and assistance provided to dislocated workers was divided into two phases. In the first phase, we projected the number of closures and permanent layoffs during 1983 and 1984 and the number of workers dislocated by region and by industry. In the second phase, we obtained information from employers, identified in phase I as involved in a closure or layoff, concerning the length of advance notice and the categories of assistance they offered to their dislocated workers.

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## Phase I

To determine the number of establishments that experienced a closure or permanent layoff in 1983 and 1984, we selected a stratified random sample of establishments using a database compiled by Dun and Bradstreet and modified by the Small Business Administration (SBA). Several national databases exist that provide information about businesses in the United States from which it is possible to obtain data on plant closings. We chose the Dun and Bradstreet database because

- it was updated more frequently and provided more current information than other databases;
- it identified parent companies, addresses, and telephone numbers, which made it easier for us to contact officials if local company officials were not available;
- SBA had modified the Dun and Bradstreet database to improve its reliability; and
- the database could be obtained with minimal administrative effort compared to other databases maintained by each state.

Comparing the Dun and Bradstreet establishment listings of December 31, 1982 and December 31, 1984, we obtained a list of establishments that possibly had a business closure or permanent layoff. Establishments that were listed in the December 31, 1982 file, but were not listed on the December 31, 1984 file, were presumed to be potential closures. Permanent layoffs were identified by comparing the employment levels in December 31, 1982 with levels in December 31, 1984. Establishments that had reduced their workforce by a minimum of 20 employees (for establishments with less than 100 workers) or by 20 percent or 200 employees, whichever is lower, (for establishments with 100 or more workers) were defined as having significant permanent layoffs.

While this comparison provided a good starting point, SBA and Dun and Bradstreet officials advised us that because of limitations in the database the comparison may significantly overstate the number of establishments that experienced a closure or permanent layoff. Several reasons were cited for this likely overstatement of closures and layoffs. First, smaller establishments in the database are updated less frequently and events that actually occurred earlier could appear to have taken place in 1983 or 1984. Second, changes in the status of the establishment, such as new ownership or name, may cause the Dun's numbers (the control number used to identify each establishment in the database) not to match, therefore, giving the appearance of a closure when in fact the facility may have continued in operation. Third, other factors, such as improvements in the employment data obtained for each establishment, were suggested as sources of possible error, leading to an overstatement of closures and layoffs.

To assure that the basis for estimating the number of business closures and permanent layoffs was as reliable as possible, we selected a stratified random sample of establishments identified from our database match as having experienced a closure or permanent layoff for follow-up. Our sample consisted of two parts, a simple random selection of 201 establishments with 50-99 employees and a random sample of about 2,400 establishments with 100 or more employees stratified by size, industry, and regional location. (See table I.1.)

**Appendix I  
Methodology and Sampling**

**Table I.1: Sample Stratification by Industry Group, Region and Size of Establishment**

Industry Group <sup>a</sup>	Region <sup>b</sup>	Size of establishment:				Total sample size
		Number of employees (Strata number)				
		100-249	(1)	250 or more	(4)	
<b>Manufacturing</b>	Industrial north	193	(1)	124	(4)	31
	Sunbelt	166	(2)	120	(5)	28
	West	144	(3)	119	(6)	26
	<b>Subtotal</b>	<b>503</b>		<b>363</b>		<b>86</b>
<b>Wholesale/retail trade</b>	Industrial north	120	(7)	121	(10)	24
	Sunbelt	120	(8)	118	(11)	23
	West	112	(9)	122	(12)	23
	<b>Subtotal</b>	<b>352</b>		<b>361</b>		<b>71</b>
<b>Other</b>	Industrial north	176	(13)	125	(16)	30
	Sunbelt	143	(14)	114	(17)	25
	West	145	(15)	120	(18)	26
	<b>Subtotal</b>	<b>464</b>		<b>359</b>		<b>82</b>
<b>Total sample size</b>		<b>1,319</b>		<b>1,083</b>		<b>2,402</b>

<sup>a</sup>Industry groups were defined using the first two digits of the Standard Industrial Classifications (SIC) codes as follows:

- manufacturing - 20 through 39
- wholesale/retail - 50 through 59
- other - all other SIC codes, except 43 and 90 through 99.

<sup>b</sup>Regional groups were defined as follows:

— Industrial north—Connecticut, Delaware, Illinois, Indiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, Wisconsin.

— Sunbelt—Alabama, Arizona, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas.

— West—Alaska, California, Colorado, Hawaii, Idaho, Iowa, Kansas, Missouri, Montana, Nebraska, Nevada, North Dakota, Oregon, South Dakota, Utah, Washington, Wyoming.

For each of the 2,603 establishments in our sample (201 establishments with 50-99 employees, strata 20, and 2402 establishments with 100 or more employees), we attempted to contact knowledgeable corporate officials to determine whether the establishment had actually closed or experienced a permanent layoff of their workforce during 1983 and 1984. Overall, we successfully contacted officials from 2,305 establishments or about 90 percent of our sample. (See table I.2.)

**Table I.2: Actual Sample Size and Response Rate**

Strata #	Planned Sample size	Sample response	
		Number	Percent
(1)	193	176	91
(2)	166	140	84
(3)	144	132	92
(4)	124	118	95
(5)	120	109	91
(6)	119	104	87
(7)	120	105	88
(8)	120	99	82
(9)	112	102	91
(10)	121	110	91
(11)	118	108	92
(12)	122	104	85
(13)	176	150	85
(14)	143	122	85
(15)	145	123	85
(16)	125	120	96
(17)	114	103	90
(18)	120	116	97
(20)	201	164	82
<b>Total</b>	<b>2,603</b>	<b>2,305</b>	<b>89</b>

The responses from each establishment in our sample were weighted based on the ratio of the overall population to the sample size for each strata. The weights ranged from 2.0481 for strata #12 to 159.7561 for strata #20. (See table I.3.)

In each case, when our staff was able to gain a response, we obtained information on the status of the establishment during 1983 and 1984 and any changes in the number of employees. We also verified the sic codes and obtained background information on the length of time the company had been located at that site. Of the 2,305 establishments where we were able to determine whether they had experienced a closure or permanent layoff, we found that 610 establishments had experienced one. Using our weights for each cell, the projected number of establishments with 50 or more employees that experienced a closure or permanent layoff in 1983 or 1984 was 16,168. (See table I.3.)

**Table I.3: Weights and Estimated Number of Events for Each Strata in the Stratified Sample**

Strata #	Weight	Actual events	Estimated number of events
1	20.7784	76	1,579
2	14.3286	55	788
3	10.7727	49	528
4	21.7881	50	1,089
5	12.5688	35	440
6	7.7596	32	248
7	12.0381	34	409
8	8.0808	17	137
9	6.6667	16	107
10	3.8636	15	58
11	2.5000	20	50
12	2.0481	19	39
13	24.1267	25	603
14	22.9262	30	688
15	17.0569	21	359
16	15.3750	21	328
17	12.1845	15	187
18	8.3190	28	237
20	159.7561	52	8,307
<b>Total events</b>		<b>610</b>	<b>16,168</b>

Using the estimated number of closures and permanent layoffs for specific geographic areas and industries and the total number of establishments shown in the Bureau of the Census, County Business Patterns, we also calculated the estimated rate of occurrence for closures and permanent layoffs. For example, by using the estimated number of closures and permanent layoffs for establishments in the United States with 50 or more employees (16,168) and the total number of establishments in the United States with 50 or more employees (231,772), we calculated the rate of closures and layoffs (16,168 divided by 231,772) to be 7 percent.

## Phase II

To determine employers' practices related to advance notice and assistance to workers affected by closures and permanent layoffs, we sent a questionnaire to employers identified through Phase I of our analysis as having experienced a closure or layoff in 1983 or 1984. Of the 610 establishments identified from Phase I, 484 were establishments with 100 or more employees that would provide a valid basis for projecting

the results of our questionnaire to the population of establishments that had 100 or more employees and had experienced a closure or permanent layoff. We limited the distribution of questionnaires to those establishments with 100 or more employees because of the small sample size for establishments with 50 to 99 employees.

Table I.4 shows the distribution of questionnaires for each strata and the responses received. Overall, we received 376 responses or about 78 percent.

Because the questionnaire obtained some responses by worker category, we were able to analyze employer practices related to advance notice and assistance for blue-collar, in comparison to white-collar workers as well as "all" employees at the affected establishment. The analysis of practices related to "all" employees was determined by comparing the responses for blue-collar employees and white-collar employees and using the minimum answer. That is, what was the minimum length of notice provided or benefit offered to each and every worker.

For advance notice, the questionnaire asked for information related to general notice and to specific notice. General notice was defined as "an event in which groups of workers are notified that some or all of the workers may be laid off." Specific notice was defined as "an event in which individual employees are notified that on a specific date they will no longer be employed by the establishment."

For the purposes of this report, we used the specific notice responses in our analysis because, in our opinion, they better correspond to the requirements included in the legislation pending before the Congress and therefore should be more useful in their deliberations. The pattern of limited advance notice was also found when we analyzed the general notice responses. About half of the establishments in our survey provided their workers with 14 days or less general notice.

**Table I.4: Distribution of Phase II Questionnaires and Responses**

Strata #	Questionnaires distributed	Responses received	Response rate (percent)
1	69	56	81
2	52	39	75
3	46	38	83
4	42	35	83
5	31	25	81
6	30	22	73
7	26	17	65
8	17	16	94
9	14	9	64
10	12	7	58
11	14	11	79
12	13	11	85
13	22	19	86
14	29	21	72
15	19	11	58
16	15	15	100
17	11	8	73
18	22	16	73
<b>Total</b>	<b>484</b>	<b>376</b>	<b>78</b>

To analyze the extent to which establishments offered their dislocated workers assistance, we categorized the responses to the worker assistance questions into eight broad groups: (1) income maintenance benefits, (2) continuation of life insurance coverage, (3) continuation of health insurance coverage, (4) early retirement options, (5) relocation assistance, (6) counseling, (7) job search assistance, and (8) occupational training. The determination as to whether a comprehensive assistance package was offered to dislocated workers by their employers was based on the presence of four categories of assistance most frequently cited by business and labor groups: income maintenance benefits, continuation of health insurance coverage, counseling, and job search assistance.

**Sampling Error**

Because of the relatively large samples of establishments used to obtain information for both phases of our analysis, the sampling errors in our estimates at the 95 percent confidence level were relatively small. For example, our estimate of the number of closures and layoffs (16,168)



had a sampling error of (+/-) 1,034. Tables I.5 and I.6 show the sampling errors for the estimated number of closures and layoffs and the rate of occurrence for the regions and industries used in our analyses.

**Table I.5: Sampling Error Related to the Estimated Number of Closures and Layoffs by Region**

Region	Estimated number	Sampling error(+/-)	Rate of occurrence	Sampling error in percent
New England	648	123	9.3	1.8
Mid-Atlantic	1,102	160	6.2	0.9
South Atlantic	881	159	5.4	1.0
East South Central	257	91	4.6	1.7
East North Central	1,602	204	9.1	1.2
West North Central	511	113	7.5	1.7
West South Central	1,291	165	12.0	1.5
Mountain	243	77	5.5	1.8
Pacific	873	147	6.4	1.1
<b>U.S. Total</b>	<b>7,410</b>	<b>431</b>	<b>7.4</b>	<b>0.4</b>

**Appendix I  
Methodology and Sampling**

**Table I.6: Sampling Error Related to the Estimated Number of Closures and Layoffs by Industry**

	Estimated number	Sampling error (+/-)	Rate of occurrence	Sampling error in percent (+/-)
<b>All industries<sup>a</sup></b>	<b>7,408</b>	<b>432</b>	<b>7.4</b>	<b>0.4</b>
<b>Durable goods manufacturing:</b>	2,976	258	17.3	1.8
Nonelectrical machinery	840	139	25.4	4.2
Fabricated metal	592	98	21.2	3.5
Transportation equipment	218	69	15.2	4.9
Primary metal	177	65	12.5	4.6
Electrical machinery	395	105	12.4	3.0
Lumber and wood	146	53	11.9	4.0
<b>Nondurable goods manufacturing:</b>	1,477	201	9.4	1.0
Textile	228	72	14.0	4.4
Food	449	102	13.0	2.9
Chemicals	176	63	11.6	4.4
Rubber and plastics	174	87	11.4	5.7
Apparel	279	85	9.5	2.9
<b>Other goods producers:</b>	599	132	10.6	2.0
Mining, oil, and gas	227	69	12.5	3.8
Construction	295	89	8.2	2.8
<b>Wholesale and retail trade:</b>	686	124	3.5	0.6
Wholesale, durable goods	258	65	11.1	2.8
Wholesale, nondurable goods	114	52	5.1	2.0
Retail trade	314	89	2.2	0.6
<b>Service sector:</b>	1,666	206	4.2	0.8
Transportation	297	75	10.1	2.6
Finance	203	79	6.4	2.5
Business services	418	106	5.9	1.5
Insurance and real estate	158	56	4.6	1.6
Consumer/personal services	194	70	3.7	1.0
Professional services	335	100	2.6	0.8

<sup>a</sup>Only selected industries are displayed, and industries listed under major groups do not add to total.

Similarly, the sampling errors in our phase II analyses are also relatively small. For example, our estimate of the percentage of establishments that provided more than 30 days' advance notice (19.8 percent) had a sampling error of (+/-) 4 percent. Tables I.7 and I.8 show the sampling errors related to our estimates of the percentage of establishments providing advance notice and the sampling errors related to our estimates of the percentage of establishments offering their dislocated workers assistance.

**Appendix I  
Methodology and Sampling**

**Table I.7: Sampling Errors Related to the Estimated Percentage of Establishments Providing Worker Advance Notice**

<b>Length of notice (days)</b>	<b>Percentage of establishments</b>	<b>Sampling error (+/-) in percent</b>
None	31.5	5.0
1-14	33.6	5.1
15-30	15.1	3.9
31-90	14.5	3.8
91 or more	5.3	2.4

**Table I.8: Sampling Errors Related to the Estimated Percentage of Establishments Offering Assistance**

<b>Assistance</b>	<b>Percentage of establishments</b>	<b>Sampling error (+/-) in percent</b>
Income maintenance	45.0	5.1
Continuation of life insurance	21.6	4.2
Continuation of health insurance	37.0	5.0
Early retirement	12.7	3.4
Relocation assistance	15.4	3.7
Counseling	20.4	4.1
Job search assistance	31.3	4.8
Occupational training	2.4	1.6

# Analysis of Dun and Bradstreet Database Comparison

As discussed in appendix I, while the Dun and Bradstreet database was the most comprehensive list of business establishments available, SBA officials, as well as other researchers, cautioned that using the comparison of the December 31, 1982 file to the December 31, 1984 file may result in an overstatement of the actual number of business closures and permanent layoffs. To determine the actual number of closures and layoffs, we selected a stratified random sample of about 2,600 establishments with 50 or more employees, which our comparison indicated had experienced a closure or layoff. We then talked with officials from each establishment or knowledgeable representatives from the company affiliated with the establishment to verify the information obtained from the database comparison. In total, we were able to obtain information from 2,305 establishments, about 90 percent of our sample.

For 610, or 26 percent, of the establishments in our sample, the use of the Dun and Bradstreet databases accurately identified actual closures or layoffs. For the remaining 1,695 establishments, the use of the Dun and Bradstreet database falsely identified closings or layoffs. A number of reasons were found to account for this false representation, some anticipated, others quite surprising.

The most significant reasons identified in our verification included:

- incorrect employee levels;
- changes in the ownership of the establishment that would explain a change in the Duns number;
- no closure or layoff occurred and no reason for being so identified was found;
- more than one location was included in the employment levels;
- a closure or layoff occurred but outside the timeframe of our survey.

Further analysis of these differences by region and industry for establishments with 100 or more employees showed that the potential for errors varied by both region and industry. For example, the database was twice as likely to correctly predict a closure or layoff among durable goods manufacturing establishments than wholesale/retail trade establishments or service sector establishments. Table II.1 shows the differences in the reliability of the Dun and Bradstreet database as a predictor of closures and layoffs for selected industries.

Appendix II  
 Analysis of Dun and Bradstreet  
 Database Comparison

**Table II.1: Reliability of Database Comparison as a Predictor of Closures and Layoffs by Industry**

Industry	Percent of establishments experiencing actual event
<b>Durable goods manufacturing:</b>	39
Nonelectrical machinery	39
Fabricated metal	51
Transportation equipment	38
Primary metal	33
Electrical machinery	37
Lumber and wood	33
<b>Nondurable goods manufacturing:</b>	35
Textile	43
Food	44
Chemicals	36
Rubber and plastics	31
Apparel	38
<b>Other goods producers:</b>	23
Mining, oil, and gas	32
<b>Construction</b>	19
<b>Wholesale and retail trade:</b>	20
Wholesale, durable goods	28
Wholesale, nondurable goods	18
Retail trade	16
<b>Service sector:</b>	17
Transportation	27
Finance	26
Business services	18
<b>Insurance and real estate</b>	17
<b>Consumer/personal services</b>	12
<b>Professional Services</b>	13
<b>All industries</b>	26

Similar differences in the reliability of the database comparison were found in our analysis by region. (See table II.2).

Because of the sizeable differences found in the reliability of the Dun and Bradstreet database as a predictor of closures and layoffs, particularly for some industries and regions, our analysis suggests that the use of this database without verification will not only result in the substantial overstatement of the number of closures and layoffs, but also misrepresent the actual distribution of closures and layoffs across industries and regions.

Appendix II  
 Analysis of Dun and Bradstreet  
 Database Comparison

**Table II.2: Reliability of Database Comparison as a Predictor of Closures and Layoffs by Region**

Region	Percent of establishment experiencing actual ever
New England	3
Middle Atlantic	2
East North Central	3
West North Central	2
South Atlantic	2
East South Central	1
West South Central	3
Mountain	2
Pacific	2
<b>All Regions</b>	<b>2</b>

# Comparison of GAO and BLS Dislocated Worker Estimates

As discussed in chapters 1 and 2, the GAO survey and the BLS<sup>1</sup> dislocated worker survey found that large numbers of workers lost their jobs because of business closures and permanent layoffs despite improvements in the nation's economy. Despite divergent time frames and population definitions,<sup>2</sup> both surveys found that: (1) most layoffs occurred in the manufacturing sector, particularly durable goods manufacturing; and (2) worker dislocation from business closures and permanent layoffs is a national problem, with large numbers of workers laid off in all regions of the country.

As shown in table III.1, both surveys found that over half of the dislocated workers lost jobs from the manufacturing sector (GAO—60 percent, BLS—52 percent) with over a third of the layoffs occurring in durable goods industries (GAO—40 percent, BLS—34 percent). Although large numbers of workers have been dislocated in all parts of the country, in the BLS survey the regional distribution of laid off workers ranged from 4 to 22 percent for the 9 Standard Federal Regions, with the range across regions of 5 to 19 percent for the GAO survey. (See table III.2.) In each of the surveys, the highest concentration of dislocated workers was in the East North Central region.

The similar findings of the two surveys indicate that industrial and regional concentrations of workers dislocated by business closures and permanent layoffs is a continuing phenomena, due more to long-term changes in the nation's economic structure than short-term business cycles.

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<sup>1</sup>See, Francis W. Horvath, "The Pulse of Economic Change: Displaced Workers of 1981-85", Monthly Labor Review, June 1987, U.S. Department of Labor, Bureau of Labor Statistics.

<sup>2</sup>The GAO study covered 1983 and 1984, a period of general economic growth, and recovery from recessions. The BLS survey covered 1981-1986 and included a severe recession. BLS estimated that 10.8 million workers, or 2.2 million annually, were dislocated from their jobs over the period January 1980 through January 1986. The BLS survey also found that nearly half (46 percent) of the 10.8 million dislocated workers had held their jobs for 3 years or more prior to their dislocation. The GAO study estimated that 16,200 business establishments with 50 or more employees, permanently laid off 1.3 million workers over the period January 1983 through December 1984.

The BLS estimates were based on responses from individual workers, obtained through the January 1986 supplement to the Bureau of Census' Current Population Survey. The workers reason for job loss was limited to the closing down or moving of an establishment, slack work, or the abolishment of their position or shift, excluding seasonal layoffs. Respondents were adult workers (20 years old or over) from all areas of the country and all types of industries, including government workers.

In contrast the GAO survey focused on closures and permanent layoffs at business establishments with 50 or more employees. The establishment employment reduction must have reduced the workforce by at least 20 percent, or 200 workers, and excluded seasonal and temporary layoffs. Respondents were company representatives from establishments throughout the country and from all types of industries, excluding government employees.

**Appendix III  
Comparison of GAO and BLS Dislocated  
Worker Estimates**

**Table III.1: Industry Distribution of  
Dislocated Workers**

Industry	Percent of dislocated workers	
	BLS (1980-85) 5.1 million workers	GAO (1983-84) 1.3 million workers
<b>Manufacturing:</b>		
Durable goods	34	4
Nondurable goods	18	2
<b>Total</b>	<b>52</b>	<b>6</b>
<b>Other goods producers:</b>		
Mining, oil, and gas	4	
Construction	6	
Agriculture	3	
<b>Total</b>	<b>13</b>	
<b>Wholesale/retail trade:</b>		
Wholesale trade	6	
Retail trade	8	
<b>Total</b>	<b>14</b>	
<b>Service:</b>		
Transportation, public utilities	8	
Finance, insurance, real estate	2	
Professional services	4	
Other services	7	
<b>Total</b>	<b>21</b>	<b>2</b>
<b>Summary Total</b>	<b>100</b>	<b>10</b>

**Table III.2: Regional Distribution of  
Dislocated Workers**

Region	Percent of dislocated workers	
	BLS (1980-85) 5.1 million workers	GAO (1983-84) 1.3 million workers
New England	4	
Middle Atlantic	14	1
East North Central	22	1
West North Central	7	
South Atlantic	15	
East South Central	8	
West South Central	12	
Mountain	5	
Pacific	13	
<b>Total</b>	<b>100</b>	<b>10</b>



# List of Specific Industries Within the Manufacturing, Trade, Service, and Other Industrial Sectors

SIC <sup>1</sup>	Industry
<b>Manufacturing</b>	
Durable goods:	
24	Lumber and wood products
25	Furniture and fixtures
32	Stone, clay, glass, and concrete products
33	Primary metal industries
34	Fabricated metal products
35	Machinery, except electrical
36	Electric and electronic machinery, equipment, and supplies
37	Transportation equipment
38	Measuring, analyzing, and controlling instruments
39	Miscellaneous manufacturing
Nondurable goods:	
20	Food and kindred products
21	Tobacco manufacturers
22	Textile mill products
23	Apparel and other finished products made from fabrics
26	Paper and allied products
27	Printing, publishing, and allied industries
28	Chemicals and allied products
29	Petroleum refining and related industries
30	Rubber and miscellaneous plastic products
31	Leather and leather products
<b>Other goods producers</b>	
Agriculture, forestry, fishing:	
1	Agriculture production-crops
2	Agriculture production-livestock
7	Agricultural services
8	Forestry
9	Fishing, hunting, and trapping
Mining, oil and gas:	
10	Metal mining
11	Anthracite mining
12	Bituminous coal and lignite mining
13	Oil and gas extraction
14	Mining and quarrying of nonmetallic minerals, except fuel

(continued)

<sup>1</sup>Standard Industrial Classification (SIC) codes based on the Standard Industrial Classification Manual 1972. Executive Office of the President, Office of Management and Budget, 1972.

**Appendix IV  
List of Specific Industries Within the  
Manufacturing, Trade, Service, and Other  
Industrial Sectors**

<b>SIC<sup>1</sup></b>	<b>Industry</b>
Construction:	
15	Building construction
16	Construction other than building construction
17	Construction, special trade contractors
<b>Wholesale and Retail Trade</b>	
Wholesale trade:	
50	Wholesale trade-durable goods
51	Wholesale trade-nondurable goods
Retail trade:	
52	Building materials, hardware, garden supply
53	General merchandise stores
54	Food stores
55	Automotive dealers and gasoline service stations
56	Apparel and accessory stores
57	Furniture, home furnishing, and equipment stores
58	Eating and drinking places
59	Miscellaneous retail
<b>Service Sector</b>	
Transportation:	
40	Railroad transportation
41	Local, suburban, and interurban highway transit
42	Motor freight transportation and warehousing
44	Water transportation
45	Air transportation
47	Transportation services
Public utilities:	
46	Pipe lines
48	Communication
49	Electric, gas and sanitary services
Finance:	
60	Banking
61	Credit agencies and other banks
62	Security and commodity brokers
Insurance and real estate:	
63	Insurance carriers
64	Insurance agents, brokers, and service
65	Real estate

(continued)

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**Appendix IV  
List of Specific Industries Within the  
Manufacturing, Trade, Service, and Other  
Industrial Sectors**

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<b>SIC<sup>1</sup></b>	<b>Industry</b>
66	Combinations of real estate, insurance offices, etc.
67	Holding and other investment offices
Professional services:	
80	Health services
81	Legal services
82	Educational services
83	Social services
Business services:	
73	Business services
89	Miscellaneous services
Consumer/personal services:	
70	Hotels and other lodging places
72	Personal services
75	Auto repair, services, and garages
76	Miscellaneous repair services
78	Motion pictures
79	Amusement and recreation services
84	Museums, art galleries, and gardens
86	Membership organizations

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# Definition of High Technology Industries

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Chapter 2 of this report discusses establishment closures and layoffs among high technology manufacturing industries. The identification of these industries was based on a research paper Glasmeier and others<sup>1</sup>. Their paper details the development of a systematic method to identify "high technology" industries using an industry's occupational profile. According to the researchers the percent of technical occupations (engineers, engineering technicians, computer scientists, life and physical scientists, and mathematicians) as a portion of the total workforce indicates the technical capacity of an industry to employ scientific and technical practices in the development of new products. Industries with a high proportion of workers in technical occupations, compared to the average across all industries, are defined as "high technology" industries, indicating an above average technical capacity to develop new products. Industry occupation information was based on the Department of Labor's 1980 Occupational Employment Statistics, which reports 1,678 occupational categories for 378 industries based on the 1972 3-digit Standard Industrial Classification (SIC) codes. Their definition of high technology identified 29 manufacturing industries that exceeded the manufacturing average (5.82 percent) of workers in technical occupations. (See table V.1.)

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<sup>1</sup>Amy K., Glasmeier, et al, Defining High Technology Industries, University of California at Berkeley, Institute of Urban and Regional Development, June 1983.

**Appendix V  
Definition of High Technology Industries**

**Table V.1: 29 High Technology Manufacturing Industries With Percent of Workforce in Technical Occupations**

<b>Percent of 1980 workforce in technical occupations</b>					
<b>SIC</b>	<b>Industry</b>	<b>Engineers, Engineering technicians, computer scientists</b>	<b>Life and physical scientists</b>	<b>Mathematicians</b>	<b>Total</b>
	Manufacturing	5.51	.26	.05	5.82
376	Missiles	40.90	.21	.08	41.19
357	Office computing machines	26.62	.05	.03	26.70
381	Engineering and scientific instruments	25.67	.73	.05	26.45
366	Communication equipment	21.30	.26	.30	21.86
383	Optical instruments and lenses	18.73	1.03	.04	19.80
286	Industrial organic chemicals	14.51	4.85	.24	19.60
372	Aircraft and parts	17.95	.24	.34	18.53
283	Drugs	8.86	8.59	.22	17.67
291	Petroleum refining	11.76	2.42	.44	14.62
382	Measuring and controlling instruments	13.93	.12	.09	14.14
367	Electronic components and accessories	12.72	.10	.02	12.84
281	Industrial organic chemicals	9.46	3.14	.05	12.65
282	Plastics and synthetic resins	9.38	1.81	.17	11.36
351	Engines and turbines	10.16	.48	.01	10.65
348	Ordnance	9.37	.99	.06	10.42
289	Miscellaneous chemicals	6.35	3.70	.05	10.10
386	Photographic equipment	8.67	.80	.01	9.48
362	Electrical industrial apparatus	9.24	.03	.03	9.30
361	Electrical transmission equipment	8.55	.03	.01	8.59
353	Construction equipment	8.34	.05	.04	8.43
285	Paints	3.22	4.97	.01	8.20
303	Reclaimed rubber	5.26	2.27	—	7.53
356	General industrial machinery	7.21	.04	.02	7.27
374	Railroads	6.58	.08	.09	6.75
365	Radio and television receiving equipment	6.62	.06	.04	6.72
287	Agricultural chemicals	4.58	1.79	.11	6.48
354	Metal working machinery and equipment	6.27	.01	—	6.28
384	Medical and dental supply	5.42	.57	.04	6.03
284	Soap	3.14	2.71	.06	5.91

# List of States in Nine Regions

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**New England**

Connecticut  
Maine  
Massachusetts  
New Hampshire  
Rhode Island  
Vermont

**Middle Atlantic**

New Jersey  
New York  
Pennsylvania

**South Atlantic**

Delaware  
District of Columbia  
Florida  
Georgia  
Maryland  
North Carolina  
South Carolina  
Virginia  
West Virginia

**East North Central**

Illinois  
Indiana  
Michigan  
Ohio  
Wisconsin

**West North Central**

Iowa  
Kansas  
Minnesota  
Missouri  
Nebraska  
North Dakota  
South Dakota

**West South Central**

Arkansas  
Louisiana  
Oklahoma  
Texas

**East South Central**

Alabama  
Kentucky  
Mississippi  
Tennessee

**Mountain**

Arizona  
Colorado  
Idaho  
Montana  
Nevada  
New Mexico  
Utah  
Wyoming

**Pacific**

California  
Hawaii  
Oregon  
Washington

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# Tables Supporting Bar Graphs in Report Text and Supplementary Tables

For all tables in Appendix VII levels of statistical significance are noted as follows:

<sup>a</sup> Significant at the 95-percent confidence level.

<sup>b</sup> Significant at the 90-percent confidence level.

**Table VII.1: Establishments Affected and Workers Dislocated in 1983 and 1984 by Size of Establishment** (Data for Fig. 2.1)

Size of establishment	Percent	
	Establishments	Workers dislocated
<b>Small</b> (50-99 employees)	54.2	24.2
<b>Larger</b> (100 or more employees)	45.8	75.8

**Table VII.2: Rate of Establishment Closure and Layoff by Industry** (Data for Fig. 2.2)

Industry	Percent
Manufacturing	12.7
Other goods producers	10.6
Service	4.2
Wholesale and retail trade	3.5

**Table VII.3: Comparison of Employment Growth to Worker Dislocation by Industry** (Data for Fig. 2.3)

Industry	Percent	
	Employment growth (1975-84)	Worker dislocation (1983-84)
Service	54.7	17.2
Wholesale and retail trade	31.9	7.5
Other goods producers	6.6	7.9
Manufacturing	6.9	67.4

**Table VII.4: Establishment Closures and Layoffs by Region** (Data for Fig. 2.4)

Region	Number of establishments
New England	650
Middle Atlantic	1,100
East North Central	1,600
West North Central	510
South Atlantic	880
East South Central	260
West South Central	1,290
Mountain	240
Pacific	870

**Appendix VII  
Tables Supporting Bar Graphs in Report Text  
and Supplementary Tables**

**Table VII.5: Rate of Establishment Closure and Layoff by Region** (Data for Fig. 2.5)

Region	Percent
West South Central	12
New England	9
East North Central	9
West North Central	7
Pacific	6
Middle Atlantic	6
Mountain	5
South Atlantic	5
East South Central	4

**Table VII.6: Length of Advance Notice Provided by Establishments to All Workers** (Data for Fig. 3.1)

Length of notice	Percent provided
No notice	1
1 to 14 days	1
15 to 30 days	1
31 to 90 days	1
91 days or more	1

**Table VII.7: Length of Advance Notice Provided to White-Collar and Blue-Collar Workers**

Length of notice	Percent	
	Blue-collar workers	White-collar workers
No notice	31	1
1 to 14 days	36	1
15 to 30 days	14	1
31 to 90 days	14	1
91 days or more	5	1

**Table VII.8: Length of Advance Notice Provided by the Presence or Absence of a Union**

Length of notice	Percent	
	Union present	No union present
No notice <sup>b</sup>	23	1
1 to 14 days	40	1
15 to 30 days	16	1
31 to 90 days	17	1
91 days or more	4	1



**Appendix VII  
Tables Supporting Bar Graphs in Report Text  
and Supplementary Tables**

**Table VII.9: Length of Advance Notice Provided by the Presence or Absence of a Union for Blue-Collar Workers** (Data for Fig. 3.2)

Length of notice	Percent	
	Union present	No union present
No notice <sup>a</sup>	19	42
1 to 14 days	40	31
15 to 30 days	18	13
31 to 90 days	18	10
91 days or more	5	4

**Table VII.10: Length of Advance Notice Provided by the Presence or Absence of a Union for White-Collar Workers**

Length of notice	Percent	
	Union present	No union present
No notice	21	31
1 to 14 days	37	26
15 to 30 days	19	20
31 to 90 days	17	16
91 days or more	6	7

**Table VII.11: Length of Advance Notice Provided for Closures and Permanent Layoffs** (Data for Fig. 3.3)

Length of notice	Percent	
	Permanent layoff	Closure
No notice	32	29
1 to 14 days <sup>a</sup>	38	20
15 to 30 days	15	16
31 to 90 days <sup>a</sup>	11	25
91 days or more	4	10

**Table VII.12: Length of Advance Notice Provided for Closures and Permanent Layoffs for Blue-Collar Workers**

Length of notice	Percent	
	Permanent layoff	Closure
No notice	32	29
1 to 14 days <sup>a</sup>	39	24
15 to 30 days	14	14
31 to 90 days	12	22
91 days or more	3	11

**Appendix VII  
Tables Supporting Bar Graphs in Report Text  
and Supplementary Tables**

**Table VII.13: Length of Advance Notice Provided for Closures and Permanent Layoffs for White-Collar Workers**

Length of notice	Percent	
	Permanent layoff	Closure
No notice	29	2
1 to 14 days <sup>a</sup>	36	7
15 to 30 days	18	2
31 to 90 days <sup>a</sup>	12	2
91 days or more	5	

**Table VII.14: Length of Advance Notice Provided by Industry (Data for Fig. 3.4)**

Length of notice	Percent	
	Manufacturing industries	Nonmanufacturing industries
No notice	35	2
1 to 14 days	37	2
15 to 30 days	12	
31 to 90 days	12	
91 days or more	4	

**Table VII.15: Length of Advance Notice Provided by Industry for Blue-Collar Workers**

Length of notice	Percent	
	Manufacturing industries	Nonmanufacturing industries
No notice	34	2
1 to 14 days	36	3
15 to 30 days	14	
31 to 90 days	12	1
91 days or more	4	

**Table VII.16: Length of Advance Notice Provided by Industry for White-Collar Workers**

Length of notice	Percent	
	Manufacturing industries	Nonmanufacturing industries
No notice	31	2
1 to 14 days	34	2
15 to 30 days	17	2
31 to 90 days	13	2
91 days or more	5	

**Appendix VII  
Tables Supporting Bar Graphs in Report Text  
and Supplementary Tables**

**Table VII.17: Length of Advance Notice Provided by Size of Establishment (Data for Fig. 3.5)**

Length of notice	Percent	
	Medium 100-249 employees	Large 250 + employees
No notice	35	24
1 to 14 days <sup>b</sup>	29	43
15 to 30 days	15	15
31 to 90 days	16	11
91 days or more	5	7

**Table VII.18: Length of Advance Notice Provided by Size of Establishment for Blue-Collar Workers**

Length of notice	Percent	
	Medium 100-249 employees	Large 250 + employees
No notice <sup>b</sup>	35	23
1 to 14 days	32	44
15 to 30 days	13	17
31 to 90 days	15	11
91 days or more	5	5

**Table VII.19: Length of Advance Notice Provided by Size of Establishment for White-Collar Workers**

Length of notice	Percent	
	Medium 100-249 employees	Large 250 + employees
No notice	31	21
1 to 14 days	29	35
15 to 30 days	17	21
31 to 90 days	17	15
91 days or more	6	8

**Appendix VII**  
**Tables Supporting Bar Graphs in Report Text**  
**and Supplementary Tables**

**Table VII.20: Establishments Offering Assistance** (Data for Fig. 4.1)

<b>Benefit</b>	<b>Percent of Establishments</b>
Income maintenance	
Continuation of health insurance coverage	
Continuation of life insurance coverage	
Early retirement	
Relocation assistance	
Counseling	
Occupational training	
Job search assistance	
Combination of income, health, counseling, and job search	

**Table VII.21: Establishments Offering Assistance to White-Collar and Blue-Collar Workers** (Data for Fig. 4.2)

<b>Benefit</b>	<b>Percent of Establishments</b>	
	<b>Blue-collar workers</b>	<b>White-collar workers</b>
Income maintenance <sup>a</sup>	44	
Continuation of health insurance coverage <sup>b</sup>	37	
Continuation of life insurance coverage	22	
Early retirement <sup>b</sup>	11	
Relocation assistance <sup>a</sup>	13	
Counseling	19	
Occupational training	5	
Job search assistance <sup>b</sup>	30	
Combination of income, health, counseling, and job search <sup>b</sup>	12	

**Table VII.22: Establishments Offering Assistance by Size of Establishment** (Data for Fig. 4.3)

<b>Benefit</b>	<b>Percent of Establishments</b>	
	<b>Medium 100-249 employees</b>	<b>Large 250+ employees</b>
Income maintenance <sup>b</sup>	40	
Continuation of health insurance coverage <sup>b</sup>	32	
Continuation of life insurance coverage <sup>b</sup>	18	
Early retirement <sup>a</sup>	9	
Relocation assistance	12	
Counseling <sup>a</sup>	15	
Occupational training	2	
Job search assistance <sup>b</sup>	27	
Combination of income, health, counseling, and job search <sup>a</sup>	8	

Appendix VII  
 Tables Supporting Bar Graphs in Report Text  
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**Table VII.23: Establishments Offering Assistance by Size of Establishment for Blue-Collar Workers**

Benefit	Percent of Establishments	
	Medium 100-249 employees	Large 250 + employees
Income maintenance	40	50
Continuation of health insurance coverage	34	45
Continuation of life insurance coverage <sup>b</sup>	18	30
Early retirement	9	16
Relocation assistance	12	17
Counseling <sup>a</sup>	15	28
Occupational training	3	7
Job search assistance <sup>b</sup>	26	39
Combination of income, health, counseling, and job search <sup>a</sup>	8	21

**Table VII.24: Establishments Offering Assistance by Size of Establishment for White-Collar Workers**

Benefit	Percent of Establishments	
	Medium 100-249 employees	Large 250 + employees
Income maintenance <sup>a</sup>	52	68
Continuation of health insurance coverage <sup>a</sup>	40	57
Continuation of life insurance coverage <sup>a</sup>	23	41
Early retirement <sup>a</sup>	12	29
Relocation assistance <sup>a</sup>	20	34
Counseling <sup>a</sup>	20	38
Occupational training	2	4
Job search assistance <sup>b</sup>	35	48
Combination of income, health, counseling, and job search <sup>a</sup>	14	48

**Table VII.25: Establishments Offering Assistance for Closures and Permanent Layoffs (Data for Fig. 4.4)**

Benefit	Percent of Establishments	
	Permanent layoff	Closure
Income maintenance <sup>a</sup>	40	62
Continuation of health insurance coverage	36	41
Continuation of life insurance coverage	22	21
Early retirement	11	17
Relocation assistance	14	19
Counseling	19	26
Occupational training	2	5
Job search assistance	30	36
Combination of income, health, counseling, and job search	11	20

**Appendix VII  
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**Table VII.26: Establishments Offering Assistance for Closures and Permanent Layoffs for Blue-Collar Workers**

Benefit	Percent of Establishmen	
	Permanent layoff	Closu
Income maintenance <sup>a</sup>	38	
Continuation of health insurance coverage	36	
Continuation of life insurance coverage	22	
Early retirement	9	
Relocation assistance	13	
Counseling	18	
Occupational training	4	
Job search assistance	29	
Combination of income, health, counseling, and job search	10	

**Table VII.27: Establishments Offering Assistance for Closures and Permanent Layoffs for White-Collar Workers**

Benefit	Percent of Establishmen	
	Permanent layoff	Closu
Income maintenance	54	
Continuation of health insurance coverage	46	
Continuation of life insurance coverage	30	
Early retirement	17	
Relocation assistance	21	
Counseling	24	
Occupational training	2	
Job search assistance	37	
Combination of income, health, counseling, and job search	17	

**Table VII.28: Establishments Offering Assistance by Length of Notice Provided (Data for Fig. 4.5)**

Benefit	Percent of Establishments	
	0-30 days	31 or more da
Income maintenance <sup>a</sup>	42	
Continuation of health insurance coverage	36	
Continuation of life insurance coverage <sup>a</sup>	18	
Early retirement <sup>a</sup>	10	
Relocation assistance <sup>a</sup>	10	
Counseling <sup>a</sup>	16	
Occupational training <sup>b</sup>	1	
Job search assistance <sup>a</sup>	28	
Combination of income, health, counseling, and job search <sup>b</sup>	11	

**Appendix VII  
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**Table VII.29: Establishments Offering Assistance by Length of Notice Provided for Blue-Collar Workers**

Benefit	Percent of Establishments	
	0-30 days	31 or more days
Income maintenance <sup>a</sup>	39	73
Continuation of health insurance coverage	36	47
Continuation of life insurance coverage <sup>b</sup>	19	35
Early retirement <sup>a</sup>	8	26
Relocation assistance <sup>a</sup>	9	28
Counseling <sup>b</sup>	17	33
Occupational training <sup>b</sup>	2	12
Job search assistance	29	42
Combination of income, health, counseling, and job search <sup>b</sup>	10	24

**Table VII.30: Establishments Offering Assistance by Length of Notice Provided for White-Collar Workers**

Benefit	Percent of Establishments	
	0-30 days	31 or more days
Income maintenance <sup>a</sup>	55	77
Continuation of health insurance coverage	45	59
Continuation of life insurance coverage <sup>a</sup>	25	48
Early retirement <sup>b</sup>	16	29
Relocation assistance <sup>a</sup>	17	49
Counseling <sup>a</sup>	20	51
Occupational training	1	6
Job search assistance <sup>a</sup>	35	62
Combination of income, health, counseling, and job search <sup>a</sup>	16	35

**Table VII.31: Establishments Offering Assistance by the Presence or Absence of a Union**

Benefit	Percent of Establishments	
	Union present	No union present
Income maintenance	41	46
Continuation of health insurance coverage	36	39
Continuation of life insurance coverage	21	24
Early retirement	15	10
Relocation assistance <sup>b</sup>	9	20
Counseling	18	23
Occupational training	4	2
Job search assistance	28	34
Combination of income, health, counseling, and job search	14	14

**Appendix VII  
Tables Supporting Bar Graphs in Report Text  
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**Table VII.32: Establishments Offering Assistance by the Presence or Absence of a Union for Blue-Collar Workers**

Benefit	Percent of Establishments	
	Union present	No union present
Income maintenance	45	
Continuation of health insurance coverage	39	
Continuation of life insurance coverage	22	
Early retirement <sup>b</sup>	16	
Relocation assistance	10	
Counseling	19	
Occupational training <sup>b</sup>	8	
Job search assistance	31	
Combination of income, health, counseling, and job search	15	

**Table VII.33: Establishments Offering Assistance by the Presence or Absence of a Union for White-Collar Workers**

Benefit	Percent of Establishments	
	Union present	No union present
Income maintenance	57	
Continuation of health insurance coverage	47	
Continuation of life insurance coverage	32	
Early retirement <sup>b</sup>	24	
Relocation assistance	24	
Counseling	25	
Occupational training	4	
Job search assistance	38	
Combination of income, health, counseling, and job search	20	



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