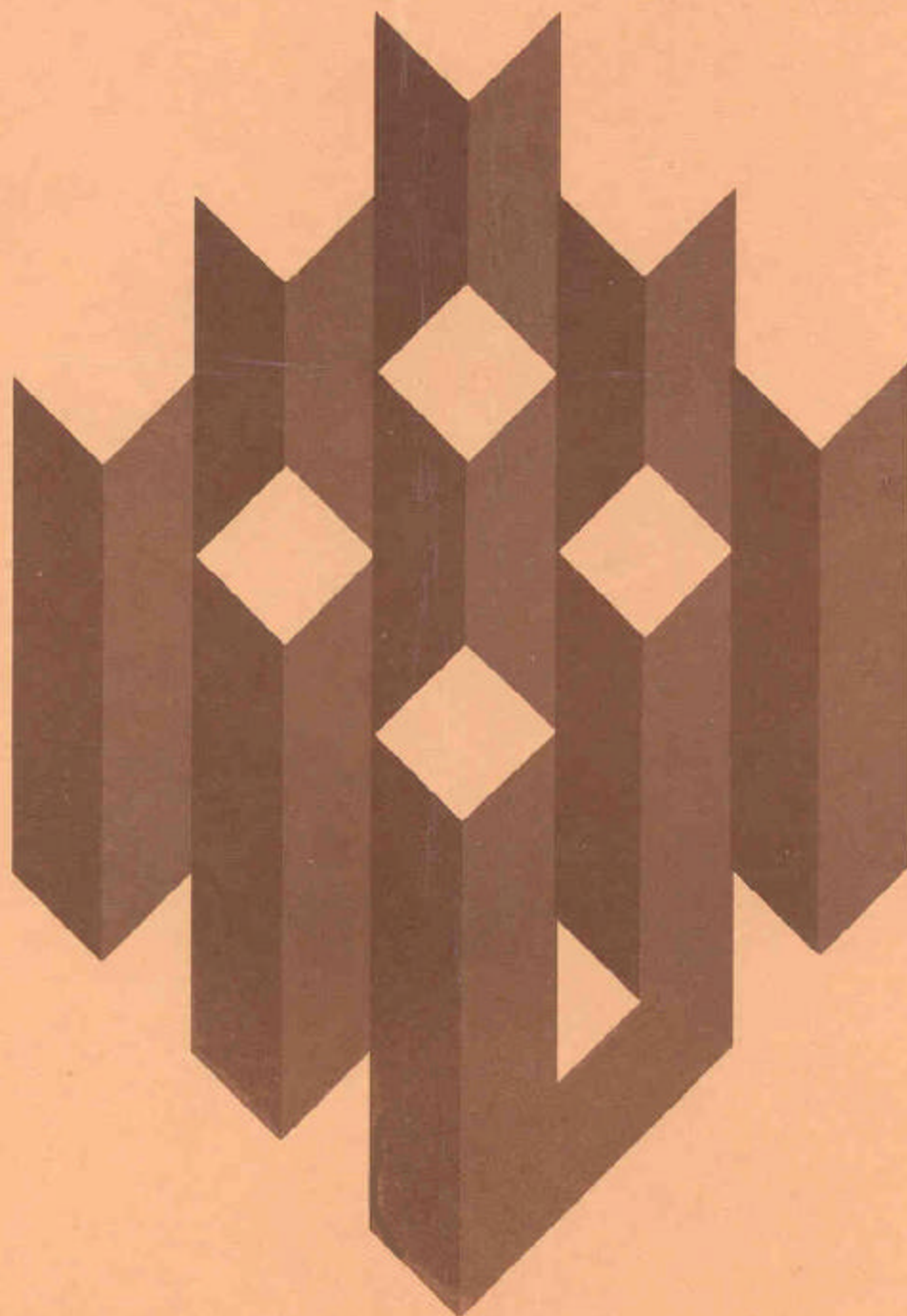


Measuring Structural Unemployment



Unemployment Insurance
Occasional Paper 86-6

Department of Labor
Employment and Training Administration



Measuring Structural Unemployment



Unemployment Insurance Service
Occasional Paper 86-6

U.S. Department of Labor
William E. Brock, Secretary

Employment and Training Administration
Roger D. Semerad, Assistant Secretary for
Employment and Training

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This compilation was edited by Stephen A. Wandner, Deputy Director of the Office of Legislation and Actuarial Services, Unemployment Insurance Service.

The UIOP Series presents research findings and analyses dealing with unemployment insurance issues. Papers are prepared by research contractors, staff members of the unemployment insurance system, or individual researchers. Manuscripts and comments from interested individuals are welcomed. All correspondence should be sent to UI Occasional Papers, Unemployment Insurance Service, Patrick Henry Building, Room 7422, 601 D Street N.W., Washington, D.C. 20213

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1. The first part of the report deals with the general situation of the country and the progress of the work during the year. It is followed by a detailed account of the work done in each of the various departments.

2. The second part of the report deals with the work done in each of the various departments. It is followed by a detailed account of the work done in each of the various departments.

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6. The sixth part of the report deals with the work done in each of the various departments. It is followed by a detailed account of the work done in each of the various departments.

7. The seventh part of the report deals with the work done in each of the various departments. It is followed by a detailed account of the work done in each of the various departments.

Acknowledgements

Many individuals have contributed to the production of this publication. In particular, special thanks goes to the authors and the discussants for their work in preparing and revising their papers. Esther Johnson provided valuable assistance in coordinating the effort. Tom Ambrose provided technical assistance in the reading and converting of the documents to word processing.

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Deputy Director
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INTRODUCTION

Stephen A. Wandner

This publication presents four papers and comments that were delivered at a session I chaired at the annual meeting of the Western Economic Association on July 4, 1986 in San Francisco. The session was titled "Measuring Structural Unemployment." The papers have been revised--in some cases substantially--from the earlier versions that were distributed at the meeting.

The papers reflect the interest of the U.S. Department of Labor, state governments, and private researchers in the issue of structural unemployment in the U.S. economy today. The papers represent research sponsored by three units of the U.S. Department of Labor--the Unemployment Insurance Service, the National Commission for Employment Policy and the Bureau of Labor Statistics--and a State employment security agency, the Nevada Employment Security Department.

Paul Flaim presents an overview of the structurally unemployed from the first Bureau of Labor Statistic survey from the January 1984 Current Population Survey (CPS). (Since the Western Economic Association meeting, the second survey based on the January 1986 CPS has become available.) The paper identifies the structurally unemployed by demographic characteristics, industry, occupation and region. It discusses the impact of structural unemployment on labor force status at the end of the period, on post unemployment wages, and on longer term adjustments.

The paper by Robert Crosslin, Jim Hanna and David Stevens reviews various definitions of unemployment and then selects a working definition. It develops a series of models and then tests them. Data from five states (Missouri, Nevada, Pennsylvania, South Carolina and Washington) are used to examine unemployment insurance claimants who filed claims to receive unemployment insurance (UI) benefits in 1979 or 1980. Key variables that are analyzed include post-unemployment wages and return rates to previous employers and industries. The paper attempts to answer two questions: 1) how permanent is the dislocation of unemployed persons defined as "displaced" based on local employment conditions and their previous industrial affiliation, and 2) what are the subsequent earning patterns for workers who do return to their previous employer or industry compared to those who do not return?

The James Hanna paper discusses the methods by which dislocated workers are presently identified by the state agencies administering Title III of the Job Training Partnership Act. It

discusses methods which could be used to identify dislocated workers: unemployment insurance administrative data, the Permanent Mass Layoff and Plant Closing report, and direct identification and referral by UI interviewers. It recommends the use of UI administrative data as the best source of data.

The paper by Jon Messenger and myself presents the design of the New Jersey Unemployment Insurance Reemployment Demonstration Project. It describes the screens that have been selected to attempt to identify workers who are likely to exhaust their UI benefits. It also reviews what types of outcomes are likely to occur from the demonstration project.

THE DISPLACED WORKERS' PROBLEM AS SEEN THROUGH A SPECIAL SURVEY

Paul O. Flaim

One of the most important components of structural unemployment is composed of workers who have lost jobs in declining industries. These are the workers generally referred to as "displaced" or "dislocated." To determine how many workers were displaced by the two back-to-back recessions that struck the American economy in the early 1980's--and to find out how they had fared since their displacement--the Bureau of Labor Statistics (BLS), with funding from the Employment and Training Administration (ETA), designed a special survey that was conducted in January 1984 and repeated in January 1986. Among the principal findings from the 1984 survey, were the following:

1. About 11.5 million persons were displaced from jobs over the 1979-83 period due to plant closings, companies' going out of business, or layoffs from which they had not been recalled.
2. Of the 11.5 million, 5.1 million had worked at least 3 years in the jobs they had lost. (The analysis of the survey's results by the BLS focused on this universe.)
3. Of these 5.1 million displaced workers, about 3.1 million (60 percent) were reemployed when interviewed, but often in different industries than the ones from which they had been displaced.
4. Of the 3.1 million who had returned to work, a little over one-half were earning at least as much as before. However, many others had taken lower-paying jobs. In fact, nearly one-third had taken pay cuts of 20 percent or more.
5. About 25 percent of the 5.1 million displaced workers were unemployed (that is, looking for work) when interviewed, and the remaining 15 percent had left the labor force.

We shall return to these numbers, but first let us examine briefly the events which led up to the January 1984 survey as well as the concepts and definitions used in the design of this survey and in the analysis of the data derived from it.

Paul O. Flaim is Chief of the Division of Data Development and Users' Services, Office of Employment and Unemployment Statistics, Bureau of Labor Statistics.

The concepts and the measurement

While the heightened concern over displaced workers might be a relatively new phenomenon, some displaced workers have always been with us. Witness, for example, the stream of displacements caused by the protracted historical decline in the number of agricultural jobs. Or, better to pinpoint the problem, think of the displacements caused long ago by the exodus of the textile mills from New England, or by the decline and restructuring of the coal industry in Appalachia. The reason concern over displaced workers has grown so much in recent years is, I believe, because their plight has been much more visible than in the past. After all, their displacements have been often associated with the closedowns of large industrial plants that were of vital importance to large metropolitan areas. Or they have stemmed from widely publicized reductions in employment in such industries as steel and autos which had formed the backbone of industrial America. The jobs from which many of these workers were being displaced--often without any hope of ever regaining them--had been among the best paid in the country. The demise of such jobs has also created considerable concern over the "de-industrialization of America" and the "shrinking (or alleged disappearance) of the middle class."¹

Given this atmosphere of concern, several heroic efforts were made in the early 1980's to estimate from the existing data on employment and unemployment how many workers had been truly "displaced" from their jobs. The problem is that, while there were some case studies and ample press accounts of what was happening in specific areas--Youngstown, Pittsburgh, and Detroit jump to the fore--there were not any comprehensive national data focusing on this phenomenon. Estimates of national scope had to be made by taking into account the employment trends in certain key industries, the duration of unemployment for the workers who had lost jobs in such industries, and whatever could be assumed about their reemployment prospects. This process resulted in estimates of the number of displaced workers which, as of early 1983, started as low as 200,000 and climbed into the millions.²

Given such a wide range of estimates, it was obviously difficult if not impossible for policymakers to make any substantive plans for remedial action. It was at this point--in mid-1983--that the Bureau of Labor Statistics was asked by the Employment and Training Administration to design a special survey with which one could better quantify the displacement problem.

The survey was designed to be carried out in January 1984 as a special supplement to that month's Current Population Survey (CPS), the survey of about 60,000 households that provides the basic monthly estimates of the labor force and of the unemployment rate

for the Nation. Because there still weren't any agreed-upon definitions as to who was or was not a displaced worker, the approach taken in designing the survey was to aim for data that would lend themselves to multiple definitions, from the most liberal to the most restrictive.

In brief, we decided to ask all persons 20 years of age and over in the CPS sample whether they had lost a job over the previous five years, that is, since January 1979, due to plant closings, companies' going out of business, or layoffs from which they had not been recalled. A "yes" answer to this question triggered another series of questions to determine the exact reason for the job loss, the year in which it had occurred, the nature of the job in terms of occupation, industry, the worker's tenure, the availability of health coverage, and the average weekly earnings. Other questions focused on the readjustment process that the worker went through after the displacement, that is, the length of the period of unemployment, the receipt and possible exhaustion of unemployment insurance benefits, and the possible loss of group health insurance. Finally, if the person was currently employed, a question was asked on current earnings, so that they could be compared with those on the job from which the worker had been displaced.

From the data gathered through these questions, it was theoretically possible to construct a range of estimates of the size of the displaced workers' universe. One could, for example, include only the workers who had worked a certain number of years on the jobs they had lost, or restrict the number to only those workers who had been attached to declining industries, a procedure that might be advisable if one wants to focus solely on the structurally displaced. In the case of workers who had subsequently taken new jobs, one might consider as still "displaced" only those whose current earnings were a specific percentage below those in the jobs from which they had been displaced. In other words, the data lend themselves to a variety of definitions.

In analyzing and presenting the data, however, the BLS applied only those exclusions that seemed necessary in order not to stray too far from the consensus--however nebulous it may have been--as to who was and was not a displaced worker. Thus, we excluded first of all those workers whose job losses could not, on the basis of the information obtained in the survey, be ascribed to structural factors. These were the workers who, in answer to the special probing questions, explained their job loss in terms of seasonal factors, the termination of a self-employment activity, or a variety of reasons which could not be easily classified. We then decided--somewhat arbitrarily, I admit--to focus only on those with at least 3 years of work on the job they had lost.

Recapitulating the survey, nearly 14 million workers were initially identified as having lost a job over the 1979-83 period because of "plants closing, companies' going out of business, layoffs from which they had not been recalled, and similar reasons." This universe was reduced to 11.5 million through the exclusion from it of those workers whose job losses turned out to be due to seasonal problems, the end of self-employment activities, and other reasons which could not be classified as legitimate displacements. The further exclusion of the workers with less than 3 years of work in the jobs they had lost reduced the universe on which we focused to 5.1 million.³

There is certainly nothing sacred about this number. It is merely the number one obtains through the application of what we thought were sensible concepts and definitions. But we do not have a monopoly over such concepts and definitions, and I could not argue with those who choose to apply--and have, indeed, applied--different cutoffs, particularly in terms of the job-tenure question. My only objection to a very liberal approach in the use of the data from this survey is that it may take us out of the realm of structural job losses and leave us dealing in many cases with what I might even call "frictional displacements."

But let us now look at the data and see what they tell us about the extent of displacements, their severity, and the readjustment process that workers undergo in the aftermath.

Who was displaced and why

A majority of the 5.1 million workers identified through this process as having been displaced from a job over the 1979-83 period fit the conventional description of such persons. That is, they were most often men of prime working age, many of whom had lost typical factory jobs, and they were heavily concentrated in the Midwest and other areas with heavy industry. If reemployed, they were likely to have shifted to other industries, and had often done so by accepting wages that were considerably lower than those in the jobs they had lost. However, it should be emphasized that the 5.1 million universe included workers from all demographic groups, and that many of them had been able to find new jobs that paid as well or better than the ones from which they had been displaced. So, we should not indulge in generalizations.

Looking at some key numbers, we found that of the 5.1 million workers who had been displaced over the period in question, about 2.6 million (or a little over one-half) were men in the 25 to 54 age group, 200,000 were men 20 to 24, and another 550,000 were men 55 and over. Overall, men accounted for about 3.3 million of the displaced and women for about 1.8 million. Blacks accounted

for about 600,000 of the displaced, or a little over one tenth. (See Table 1.)

How had these persons become displaced? Well, about one-half reported that their plant or business had either closed down or moved. In addition, about two-fifths had apparently been laid off because of insufficient demand for the company's products or services, and the remainder reported simply that their individual job or entire shift had been eliminated. The older the displaced worker, the most likely was he or she to have been the victim of the closedown of a plant or the folding of some company. The younger displaced workers, having less seniority and thus less protection against job losses, were just as likely to have lost their jobs due to partial employment cutbacks as to complete plant shutdowns. (See Table 2.)

About one-half of the 5.1 million workers had been displaced from manufacturing jobs. Some of the key durable-goods industries affected by the cyclical declines in demand as well as by more fundamental structural problems figured most prominently as the sources of displacements. There were over 200,000 workers who had been displaced from jobs in the primary-metals industry, 400,000 who had worked in the machinery industry, and 350,000 who had been in the transportation-equipment industry, with the auto industry accounting for the majority of this latter group. These generally highly paid workers may be regarded as the core of the structurally displaced. (See Table 3.)

Occupationally speaking, about 1.8 million of the displaced workers had lost typical factory jobs as operators, fabricators, and laborers. While these formed the largest group of displaced, there were also many from the managerial, professional, technical, crafts, and other groups. One interesting--although perhaps not surprising--finding was that the higher the occupational skill the most likely was the worker to have become reemployed. For example, the reemployment rate was about 75 percent for workers who had been displaced from professional and managerial jobs, but only around 40 percent for those who had lost jobs as laborers, operators, cleaners, and so forth. (See Table 4.)

Since the Midwest has traditionally had the largest concentration of heavy industries, particularly of those with serious structural problems in recent years, it also has had an unusually large concentration of displaced workers. Another large concentration was found in the industrial States of the Middle-Atlantic region (New York, New Jersey, and Pennsylvania). Displaced workers were not only evident in large concentrations in these regions; since some of the key local industries were still having serious problems as of January 1984, many of these persons were still out of work when surveyed. (See Table 5.)

The aftermath of displacement

How did the displaced workers readjust after the loss of their jobs? First of all, only few of them moved to new areas to take a new job or search for work. Of the 5.1 million workers in our study, only about 680,000 (or about 13 percent) had moved to a new area. While those who had moved were more likely to have become reemployed than those who had not moved, migration had clearly not been a major factor. Not surprisingly, the older the workers the least likely were they to have moved. For example, of those age 55 years and over, a group with typically firm community and family roots, only about 5 percent had moved after being displaced from their jobs. (See Table 6.)

A little over two thirds of our 5.1 million workers had collected unemployment insurance benefits following the loss of their jobs. Of the 3.5 million who had collected such benefits, almost one-half reported that they had exhausted them--that is, they had collected all the benefits to which they had been entitled.

While the availability of unemployment insurance benefits had obviously served to cushion the earnings loss associated with displacements, the possible loss of health insurance coverage imposed another economic burden on many of the displaced. Of the 5.1 million workers studied, 4.0 million were reported as having been covered by employer-sponsored health insurance plans on the jobs from which they had been displaced. By January 1984, over one-third of these reported they were no longer covered under any plan. So, the loss of "cash" earnings was clearly not the only economic loss associated with these displacements.

Employment status in January 1984

By the time the 5.1 million workers were surveyed in January 1984, about 3.1 million (60 percent) of them were back at work, although often in jobs differing considerably from the ones they had lost. About 25 percent were unemployed--that is, looking for work. The balance, about 15 percent, had left the labor force. The latter group included many elderly workers, and while many of these might have preferred to continue working, some would no doubt have left the labor force regardless of the conditions of the labor market. The rate of reemployment was somewhat higher for men than for women. If not reemployed, women were much more likely to drop out of the labor force than were men.

Among the 3.1 million workers who had managed to become reemployed by January 1984, many had done quite well relative to their previous jobs. Of those with full-time jobs both before and after displacement, about 55 percent were earning as much or

more (in nominal dollars) than they had earned in the jobs from which they had been displaced. On the other hand, about 45 percent had taken pay cuts of varying magnitude in order to get back to work. (See Table 7.) For about one-third, such cuts exceeded 20 percent, and were even larger if one takes into account the loss of purchasing power of the dollar. So, while many workers readjusted quite well, another large proportion suffered considerable losses. This was particularly the case for those who had been displaced from high-paying jobs in such industries as steel and autos. While some of these workers have probably been recalled to their old jobs since January 1984, many others have probably resigned themselves to a permanent separation.

Status a year later

Given the design of the Current Population Survey, one-half of the households interviewed in any given month are also interviewed the following year. Thus, for many of the persons classified as having been displaced on the basis of the data collected in January 1984, the labor force status could also be determined in January 1985. It was thus possible to determine whether these workers had made further progress in readjusting their lives. On the basis of work done by Richard Devens of the Bureau of Labor Statistics, there was, indeed, some further progress.⁴

As noted above, about 60 percent of the displaced workers had become reemployed by January 1984. Devens found that a year later, in January 1985, about 67 percent were employed. At the same time, the proportion classified as unemployed--that is, as either looking for work or as being on layoff and awaiting a possible recall--declined from about 25 percent in January 1984 to only 12 percent a year later. However, while some had obviously obtained jobs, some had simply left the job market. The proportion no longer in the labor force had grown from about 15 percent in January 1984 to about 20 percent a year later.

Overall, these data would indicate that the readjustment process continued at what is probably a fairly normal pace in the year following the initial survey. Given the continued recovery of the economy, during 1984 it was certainly to be expected that some of the displaced who were jobless at the time of the initial interview would manage to find jobs in the ensuing year. And the fact that some of these workers left the labor force is also not too surprising. After all, there is generally a heavy flow of persons into and out of the labor force regardless of the employment situation.

Perhaps a more important question with regard to displaced workers is whether, for those who had to take lower-paying jobs, earnings increased significantly with time. In this regard, the findings are more tentative. Devens did find some improvement in earnings over the January 1984-January 1985 period, but this had been generally limited to those workers whose displacement, as recorded in the initial survey, had been rather recent.

A more recent look at the problem

Given the continued interest in displaced workers in general and in the data collected in January 1984 in particular, a decision was made in mid-1985 to conduct a similar survey in January 1986, again with funding from the Employment and Training Administration. The questionnaire utilized in the January 1986 survey was, for all practical purposes, the same as the one used in January 1984. The only significant change is that a question was added to determine how many different jobs the displaced might have held since their displacement.

The data from the 1986 version of the survey should be available very shortly, and we will try to publish the principal findings as soon as possible. For those who are interested in doing their own research--and drawing their own conclusions--on the topic, BLS will again make the data available on computer tape (at a very modest cost). In addition, as we did with the results from the 1984 survey, we will again download the most relevant microdata from the 1986 survey on diskettes that may be fed into personal computers.

The 1984 data created considerable interest and have been widely used both in government reports and academic research. For example, they formed the foundations for recent reports by the Office of Technology Assessment and the General Accounting Office, both arms of Congress.⁵ Meanwhile, the data are being studied by various academic researchers who have obtained our tapes, and some of them have already published their findings.⁶ It is our hope that the availability of the data from the January 1986 survey will spur on such research.

Conclusions

The January 1984 survey of displaced workers--the first to quantify the displacement problem at the national level--found that many of the original victims of displacement had recovered quite well. About 60 percent were reemployed, and half of these were in jobs that paid as well or better than the ones they had lost. Many others had clearly not done as well. About 25 percent of the total were still unemployed, and even among those with jobs a large proportion had taken large cuts in pay relative to their earnings on the jobs they had lost.

A limited follow-up of these workers in January 1985 found some further improvement in their situation, with an increase in the proportion with jobs and some indications of an improvement in earnings, particularly among those whose displacement, as reported in the January 1984 survey, had been rather recent. A new survey of displaced workers, conducted in January 1986, should shed further light on their situation.

Table 1. Employment status of displaced workers by age, sex, race, and Hispanic origin, January 1984

(Percent)

Age, sex, race, and Hispanic origin	Total ^{1/} (thousands)	Total	Employed	Unemployed	Not in the labor force
TOTAL					
Total, 20 years and over.....	5,091	100.0	60.1	25.5	14.4
20 to 24 years.....	342	100.0	70.4	20.2	9.4
25 to 54 years.....	3,809	100.0	64.9	25.4	9.6
55 to 64 years.....	748	100.0	40.8	31.8	27.4
65 years and over.....	191	100.0	20.8	12.1	67.1
Men					
Total, 20 years and over.....	3,328	100.0	63.6	27.1	9.2
20 to 24 years.....	204	100.0	72.2	21.7	6.1
25 to 54 years.....	2,570	100.0	68.2	26.8	5.0
55 to 64 years.....	461	100.0	43.6	34.1	22.3
65 years and over.....	92	100.0	16.8	12.9	70.3
Women					
Total, 20 years and over.....	1,763	100.0	53.4	22.5	24.2
20 to 24 years.....	138	100.0	67.8	18.0	14.2
25 to 54 years.....	1,239	100.0	58.0	22.6	19.4
55 to 64 years.....	287	100.0	36.3	28.0	35.7
65 years and over.....	99	100.0	24.6	11.3	64.1
WHITE					
Total, 20 years and over.....	4,397	100.0	62.6	23.4	13.9
Men.....	2,913	100.0	66.1	25.1	8.8
Women.....	1,484	100.0	55.8	20.2	24.1
BLACK					
Total, 20 years and over.....	602	100.0	41.8	41.0	17.1
Men.....	358	100.0	43.9	44.7	11.4
Women.....	244	100.0	38.8	35.6	25.6
HISPANIC ORIGIN					
Total, 20 years and over.....	282	100.0	52.2	33.7	14.1
Men.....	189	100.0	55.2	35.5	9.3
Women.....	93	100.0	46.3	30.0	23.6

^{1/} Data refer to person with tenure of 3 years or more who lost or left a job between January 1979 and January 1984 because of plant closings or moves, slack work, or the abolishment of their positions or shifts.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

Table 2. Workers who were displaced from jobs between January 1979 and January 1984 by age, sex, race, Hispanic origin, and reason for job loss

(Percent)

Age, sex, race, and Hispanic origin	Total ^{1/} (thousands)	Total	Plant or company closed down or moved	Slack work	Position or shift abolished
TOTAL					
Total, 20 years and over.....	5,091	100.0	49.0	38.7	12.4
20 to 24 years.....	342	100.0	47.1	47.1	5.8
25 to 54 years.....	3,809	100.0	46.3	41.0	12.7
55 to 65 years.....	748	100.0	57.8	28.2	14.0
65 years and over.....	191	100.0	70.8	18.1	11.1
MEN					
Total, 20 years and over.....	3,328	100.0	46.0	42.9	11.1
20 to 24 years.....	204	100.0	39.5	59.6	.9
25 to 54 years.....	2,570	100.0	43.9	44.8	11.3
55 to 64 years.....	461	100.0	55.6	30.5	14.0
65 years and over.....	92	100.0	68.7	15.7	15.5
WOMEN					
Total, 20 years and over.....	1,763	100.0	54.6	30.8	14.6
20 to 24 years.....	138	100.0	58.3	28.7	12.9
25 to 54 years.....	1,239	100.0	51.1	33.3	15.6
55 to 64 years.....	287	100.0	61.4	24.5	14.1
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Men.....	358	100.0	44.9	46.4	8.8
Women.....	244	100.0	42.2	42.2	15.7
HISPANIC ORIGIN					
Total, 20 years and over.....	282	100.0	47.4	45.2	7.3
Men.....	189	100.0	48.1	43.8	8.1
Women.....	93	100.0	46.2	48.1	5.7

^{1/} Data refer to persons with tenure of 3 years or more who lost or left a job between January 1979 and January 1984 because of plant closings or moves, slack work, or the abolishment of their positions or shifts.

NOTE: Detail for the above race and Hispanic-origin groups will not sum to totals because data for the "other races" group are not presented and Hispanics are included in both the white and black population groups.

Table 3. Employment status of displaced workers by industry and class of worker of lost job, January 1984

(Percent)

Industry and class of worker of lost job	Total ^{1/} (thousands)	Total	Employed	Unemployed	Not in the labor force
Total, 20 years and over ^{2/}	5,091	100.0	60.1	25.5	14.4
Nonagricultural private wage and salary workers.....	4,700	100.0	59.8	25.8	14.4
Mining.....	150	100.0	60.4	31.0	8.6
Construction.....	401	100.0	55.0	30.7	14.3
Manufacturing.....	2,483	100.0	58.5	27.4	14.1
Durable goods.....	1,675	100.0	58.2	28.9	12.9
Lumber and wood products.....	81	100.0	67.9	19.1	13.0
Furniture and fixtures.....	65	100.0	(3)	(3)	(3)
Stone, clay, and glass products	75	100.0	47.5	30.5	22.0
Primary metal industries.....	219	100.0	45.7	38.7	15.6
Fabricated metal products....	173	100.0	62.0	32.2	5.8
Machinery, except electrical.	396	100.0	62.3	27.4	10.3
Electrical machinery.....	195	100.0	48.2	34.5	17.3
Transportation equipment.....	354	100.0	62.6	26.0	11.4
Automobiles.....	224	100.0	62.9	24.0	13.1
Other transportation equipment.....	130	100.0	62.1	29.4	8.5
Professional and photographic equipment.....	54	100.0	(3)	(3)	(3)
Other durable goods industries	62	100.0	(3)	(3)	(3)
Nondurable goods.....	808	100.0	59.1	24.2	16.7
Food and kindred products....	175	100.0	52.5	32.6	15.0
Textile mill products.....	80	100.0	59.8	26.2	13.9
Apparel and other finished textile products.....	132	100.0	63.0	14.2	22.8
Paper and allied products....	60	100.0	(3)	(3)	(3)
Printing and publishing.....	103	100.0	58.0	22.9	19.1
Chemical and allied products.	110	100.0	64.0	27.3	8.7
Rubber and miscellaneous plastic products.....	100	100.0	62.8	18.3	18.8
Other nondurable goods industries.....	49	100.0	(3)	(3)	(3)
Transportation and public utilities	336	100.0	57.9	26.8	15.3
Transportation.....	280	100.0	58.8	30.5	10.7
Communication and other public utilities.....	56	100.0	(3)	(3)	(3)

Table 3. Employment status of displaced workers by industry and class of workers of lost job, January 1984 continued

(Percent)

Industry and class of worker of lost center job	Total ^{1/} (thousands)	Total	Employed	Unemployed	Not in labor force
Wholesale and retail trade.....	732	100.0	61.4	21.6	16.9
Wholesale trade.....	234	100.0	69.6	22.0	8.4
Retail trade.....	498	100.0	57.6	21.5	20.9
Finance, insurance, and real estate.....	93	100.0	78.5	12.4	9.1
Services.....	516	100.0	65.0	20.5	14.5
Professional services.....	187	100.0	64.0	19.8	16.1
Other service industries.....	318	100.0	65.6	20.9	13.5
Agricultural wage and salary workers	100	100.0	69.9	22.9	7.2
Government wage and salary workers.	248	100.0	63.3	18.7	18.0
Self-employed and unpaid family workers.....	25	100.0	(3)	(3)	(3)

^{1/} Data refer to persons with tenure of 3 years or more who lost or left a job between January 1979 and January 1984 because of plant closings or moves, slack work, or the abolishment of their positions or shifts.

^{2/} Total includes a small number who did not report industry or class of worker.

^{3/} Data not shown where base is less than 75,000.

Table 4. Employment status of displaced workers by occupation of lost job, January 1984

(Percent)

Occupation of lost job	Total ^{1/} (thousands)	Total	Employed	Unemployed	Not in the labor force
Total, 20 years and over ^{2/} ..	5,019	100.0	60.1	25.5	14.4
Managerial and professional specialty.....	703	100.0	74.7	16.6	8.8
Executive, administrative, and managerial.....	444	100.0	75.7	15.6	8.7
Professional specialty.....	260	100.0	72.9	18.2	8.9
Technical, sales, and administra- tive support.....	1,162	100.0	60.6	21.1	18.3
Technicians and related support..	122	100.0	67.9	25.3	6.8
Sales occupations.....	468	100.0	66.7	14.6	18.7
Administrative support, including clerical.....	572	100.0	54.1	25.5	20.5
Service occupations.....	275	100.0	51.0	24.1	24.9
Protective service.....	32	100.0	(3)	(3)	(3)
Service, except private house- hold and protective.....	243	100.0	53.0	23.6	23.4
Precision production, craft and repair.....	1,042	100.0	61.6	26.1	12.3
Mechanics and repairers.....	261	100.0	61.3	29.3	9.4
Construction trades.....	315	100.0	63.2	23.8	13.0
Other precision production, craft, and repair.....	467	100.0	60.8	25.8	13.4
Operators, fabricators, and laborers	1,823	100.0	54.6	31.6	13.7
Machine operators, assemblers, and inspectors.....	1,144	100.0	56.0	27.5	16.5
Transportation and material moving occupations.....	324	100.0	63.8	28.7	7.5
Handlers, equipment cleaners, helpers, and laborers.....	355	100.0	41.8	47.6	10.6
Construction laborers.....	55	100.0	(3)	(3)	(3)
Other handlers, equipment clean- ers, helpers, and laborers...	300	100.0	42.0	47.0	11.0
Farming, forestry, and fishing.....	68	100.0	(3)	(3)	(3)

^{1/} Data refer to persons with tenure of 3 years or more who lost or left a job between January 1979 and January 1984 because of plant closings or moves, slack work, or the abolishment of their positions or shifts.

^{2/} Total includes a small number who did not report occupation.

^{3/} Data not shown where base is less than 75,000.

Table 5. Employment status and area of residence in January 1984 of displaced workers by selected characteristics

(Numbers in thousands)

	Total ^{1/}	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
WORKERS WHO LOST JOBS										
Total.....	5,091	260	794	1,206	426	664	378	484	211	667
Men.....	3,328	155	530	772	282	428	236	347	152	427
Women.....	1,763	105	264	434	145	236	143	137	59	241
REASON FOR JOB LOSS										
Plant or company closed down or moved.....	2,492	118	410	556	208	339	204	231	103	323
Slack work.....	1,970	106	269	513	164	236	132	211	83	256
Positions or shift abolished	629	36	115	138	54	89	42	42	26	88
INDUSTRY OF LOST JOB										
Construction.....	481	16	68	88	36	81	34	63	30	63
Manufacturing.....	2,514	158	414	658	210	296	189	215	58	315
Durable goods.....	1,686	94	260	514	137	175	107	142	40	218
Nondurable goods.....	828	64	154	145	73	122	82	73	18	97
Transportation and public utilities.....	352	14	61	83	34	34	33	41	19	32
Wholesale and retail trade	740	41	100	182	68	132	40	54	32	90
Finance and service industries.....	648	22	122	133	45	70	32	54	39	132
Public administration....	84	2	10	22	5	13	4	8	5	16
Other industries ^{2/}	272	5	20	40	28	38	45	49	27	19
EMPLOYMENT STATUS IN JANUARY 1984										
Employed.....	3,058	171	428	621	276	461	209	344	148	399
Unemployed.....	1,299	48	225	400	96	117	113	85	33	181
Percent less than 5 weeks	22.1	(3)	24.1	21.2	13.0	29.4	17.3	25.4	(3)	18.4
Not in the labor force.....	733	41	141	185	54	85	56	55	30	86

^{1/} Data refer to persons with tenure of 3 years of more who lost or left a job between January 1979 and January 1984 because of plant closings or moves, slack work, or the abolishment of their positions or shifts.

^{2/} Includes a small number who did not report industry.

^{3/} Data not shown where base is less than 75,000.

NOTE: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont compose the New England Division; New Jersey, New York, and Pennsylvania compose the Middle Atlantic Division;

Illinois, Indiana, Michigan, Ohio, and Wisconsin compose the East North Central Division; Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota compose the West North Central Division; Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, and West Virginia compose the South Atlantic Division; Alabama, compose the South Atlantic Division; Alabama, Kentucky, Mississippi, and Tennessee compose the East South Central Division; Arkansas, Louisiana, Oklahoma, and Texas compose the West South Central Division; Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, and Wyoming compose the Mountain Division; Alaska, California, Hawaii, Oregon, and Washington compose the Pacific Division.

Table 6. Workers who were displaced from jobs between January 1979 and January 1984 by age, sex, whether they subsequently moved to a new area, and proportion employed in January 1984

(Numbers in thousands)

Age and sex	Total ¹	Had Moved		Had not moved	
		Number	Percent (in em- ployed)	Number	Percent (in em- ployed)
Total, 20 years and over ² ...	5,091	682	73.3	4,374	58.0
25 to 54 years.....	3,809	556	74.3	3,234	63.2
25 to 34 years.....	1,692	318	69.5	1,370	63.1
35 to 44 years.....	1,218	158	79.1	1,055	66.9
45 to 54 years.....	900	80	83.8	809	58.5
55 years and over.....	939	53	3/	880	35.5
Men, 20 years and over.....	3,328	519	77.3	2,784	61.1
25 to 54 years.....	2,570	440	77.7	2,114	66.2
55 years and over.....	553	38	3/	510	37.5
Woman, 20 years and over.....	1,763	163	60.7	1,590	52.6
25 to 54 years.....	1,239	116	61.2	1,120	57.6
55 years and over.....	386	14	3/	369	32.8

¹Data refer to persons with tenure of 3 or more years who lost or left a job between January 1979 and January 1984 because of plant closings or moves, slack work, or the abolishment of their positions or shifts.

²Includes a small number who did not report whether they had moved since their displacement.

³Data not shown where base is less than 75,000.

Table 7. Characteristics of new job of displaced workers who lost full-time wage and salary jobs and were reemployed in January 1984 by industry of lost job

(In thousands)

Industry of lost job		Full-time wage and salary job						
		Earnings relative to those of lost						
Total reemployed January 1984	Part-time job	Total ^{1/}	20	Below	Equal or	20	Self-	
			percent or more below	but within 20 percent	above, but within 20 percent	percent or more above	employment or other full-time job	
Total who lost full-time wage and salary jobs ^{2/}								
2,841	357	2,266	621	320	571	553	218	
Construction.....	26	199	48	30	47	61	28	
Manufacturing.....	1,418	1,200	366	171	286	247	67	
Durable goods.....	954	797	281	102	181	155	51	
Primary metal industries.....	98	77	40	5	22	5	7	
Steel ^{3/}	78	59	33	3	14	5	4	
Other primary metals.....	20	18	7	2	9	-	2	
Fabricated metal products.....	102	81	30	6	21	16	9	
Machinery, except electrical.....	244	215	77	34	39	40	12	
Electrical machinery.....	94	84	26	12	14	22	-	
Transportation equipment.....	219	174	66	22	42	34	14	
Automobiles.....	141	115	43	16	21	26	7	
Other transportation equipment.....	77	59	23	6	21	8	7	
Nondurable goods.....	464	403	85	69	105	92	16	
Transportation and public utilities.....	191	154	40	22	44	27	22	
Wholesale and retail trade.....	399	296	61	41	79	85	31	
Finance and service industries.....	378	270	59	35	83	74	50	
Public administration.....	48	42	11	5	7	18	2	
Other industries ^{4/}	153	104	36	16	24	22	18	

^{1/} Includes 221,000 persons who did not report earnings on lost job.

^{2/} Data refer to persons with tenure of 3 years or more who lost or left a full-time wage and salary job between January 1979 and January 1984 because of plant closings or moves, slack work, or their positions or shifts were abolished.

^{3/} Includes blast furnaces, steelworks, rolling and finishing mills, and iron and steel foundries.

^{4/} Includes a small number who did not report industry.

NOTES

¹See, for example, Barry Bluestone and Bennett Harrison, The Deindustrialization of America (New York: Basic Books, Inc., 1982). For a study of the alleged shrinking of the middle class, see Neal H. Rosenthal, "The Shrinking Middle Class: Myth or Reality?" Monthly Labor Review (March 1985): 3-16.

²A study by the Congressional Budget Office was among the first to attempt to quantify the displacement problem. Using a range of alternative definitions, it contained estimates which, as of January 1983, ranged from 100,000 to 2.1 million. See Congressional Budget Office, "Dislocated Workers: Issues and Federal Options" (Washington, D. C.: n.p., July 1982).

³Had a 2-year tenure cutoff been used, the number of displaced workers in our universe would have been 6.9 million. On the other hand, a more restrictive cutoff of 5 years would have lowered the total to 3.2 million. See Paul O. Flaim and Ellen Sehgal, "Displaced Workers of 1979-83: How Well Have They Fared?" Monthly Labor Review (June 1985): 1-14.

⁴Richard M. Devens, Jr., "How Permanent is Job Displacement: Some Preliminary Findings," paper presented at the December 1985 New York meetings of the Allied Social Sciences Association.

⁵U. S., Congress, Office of Technology Assessment, Technology and Structural Unemployment: Reemploying Displaced Workers, OTA-ITE-250 (Washington, D. C.: U. S. Government Printing Office, February 1986). See also "The Job Training and Partnership Act, Title III Dislocated Worker Program," a report by William J. Gainer, Associate Director, Human Resources Division, U. S. General Accounting Office, released on November 8, 1985.

⁶See Michael Podgursky and Paul Swaim, "Labor Market Adjustment and Job Displacement: Evidence from the January 1984 Displaced Worker Survey" (Amherst, Massachusetts: University of Massachusetts, January 1986). Report prepared for the Bureau of International Labor Affairs.
Table 6.

EARNINGS LOSSES AND THE PERMANENCE OF DISLOCATION:
1979-83 EVIDENCE

Robert L. Crosslin
James S. Hanna
David W. Stevens

I. INTRODUCTION

The United States economy is undergoing a significant readjustment in the structure and technology of goods and services production. This transformation is believed to be having a major impact on some workers--those dislocated by permanent job elimination. Are these workers structurally unemployed in the sense that similar or other job openings demanding their skills do not exist in the labor market?

Structural unemployment typically carries with it a connotation of permanent job loss. However, the definition, and particularly the measurement, of the permanency of the event yields problems in measuring structural unemployment. These problems in turn lead to additional problems in formulating public and private remedial labor market policies to deal with ill-defined and ill-measured consequences of worker dislocation. The purposes of this paper are to suggest relevant and measurable definitions of dislocation and to demonstrate the importance of considering the time dimension in measuring worker dislocation and resulting labor market hardship.

We believe that concentrated permanent job elimination is the key determinant of labor market hardship from dislocation. The paper utilizes the following criteria to classify unemployed workers as dislocated:

- o involuntary job termination;
- o absolute decline in employment in the individual's industry of last employment, within the individual's county (or SMSA) of employment; and
- o Unemployment Insurance benefit entitlement exhaustee.

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This paper was prepared under contract with the National Commission for Employment Policy.

Personal and economic characteristics of unemployed workers, derived from UI administrative data, are combined with the above criteria of dislocation status to measure the labor market hardship experienced by dislocated workers. The paper capitalizes on the longitudinal nature of the database to measure the permanence of job elimination by examining the time path of return to an employer, industry or other job.

In the remainder of this section we briefly summarize the results of previous research on dislocated workers, focusing on those few studies which have attempted to develop methods for identifying dislocated workers and to estimate their numbers among the unemployed. The next section presents the methodology we employ to identify dislocated workers, and those dislocated workers most in need of readjustment assistance. The UI administrative data used to carry out our methodology are described in the third section. Section four summarizes the results of our statistical analyses of losses from dislocation. Section five reports our findings on the permanence of dislocation, based on an examination of workers' time paths of return to employers, industry, and other employment. The final section draws conclusions, and makes recommendations, from our analysis.

Previous Research on Dislocated Workers

A recent Congressional Budget Office (CBO) report estimated that the number of dislocated workers in 1983 could have been as low as 100,000 (or 1 percent of the unemployed), or as high as 2.1 million (or 20 percent of the unemployed).¹ The lower estimate considers only workers displaced from declining industries who are also unemployed at least 26 weeks, while the higher estimate also includes all workers unemployed in a declining geographic area. The lower estimate uses a measure similar to, but less precise than, the measure of dislocation utilized in this paper.

The CBO paper indicates that using a single identification criterion usually does not target on dislocated workers very well, but that multiple criteria run the risk of excluding persons who are in need of assistance. The CBO paper does not attempt to estimate the impact of dislocation on workers in terms of post-dislocation earnings or other outcome measures.

A second paper which attempted to determine the magnitude of the dislocation problem obtained similar findings to the CBO paper.² Marc Bendick and Judith Razlinski Devine utilize similar definitions for the U.S., such as declining industry and

age, and conclude that dislocated workers constitute less than 14 percent of the unemployed labor force at any given time. They also conclude that the designation of "dislocated worker" by itself is not a good predictor of whether a person will be severely impacted by unemployment.

Bendick and Devine draw an interesting inference from their analysis: "To the extent that dislocated workers do experience unusually long periods of unemployment, the causes of this long duration generally reflect past and present affluences rather than past or present distress." Factors include such things as geographic immobility from home ownership; high pre-wages and fringes, which cause longer waits/hopes for recall; transfer payments; and the presence of other household earners. This implies that the impacts of dislocation are either not great or are somehow "self-inflicted" by negative work incentives associated with the amenities afforded by previously well-paying jobs.

There have been numerous studies, particularly of the single plant case study variety, of the effects of displacement on workers over the past twenty years. Jeanne Gordus, Paul Jarley and Louis Ferman recently summarized the findings of 27 plant closings reported on in 20 studies.³ The authors conclude that these studies tend to show that dislocated workers from plant closings are usually older, have lower educational attainment, and are male and white dominated. Reverse seniority of layoff is hypothesized to account for the older age phenomenon (average age of 40 to 54 in the studies), which may in turn cause the low educational attainment result.

Gordus, Jarley and Ferman conclude that the condition of a local labor market and age are of prime importance in determining the reemployment success (usually measured in weeks of unemployment) of workers displaced by plant closings. In particular, the concentration of the displacement is stressed: "In many cases the closing of a large employer in a relatively small labor market may mean that the number of displaced workers far exceeds the number of available local jobs." Age is established to have the strongest association with reemployability among all demographic factors examined in the studies. The over 45 years-of-age group seemed to be the most impacted in almost all of the studies. A summary of the other worker demographics associated with longer durations of unemployment indicates that marital status, and presence of a working spouse, are also significant determinants.

The Gordus, Jarley and Ferman review cites several conceptual and empirical difficulties with the previous studies of plant closings:

There is no framework for such study that permits an estimate of extensiveness of the problem; there is no adequate longitudinal base from which studies are made; and usually only a single phase of the shutdown process is scrutinized. All of these problems are intertwined with program and policy issues which have served to limit the general field of plant-closing studies to the point where reality may very well be severely distorted (p. 153).

Another summary by Louis Jacobsen, then of the Public Research Institute (PRI), focuses on the post-displacement earnings of dislocated workers from 17 studies conducted between 1955 and 1975.⁴ The variables most consistently associated with reemployment experiences in the 17 studies were age, sex and skill level (industry was not a factor, since all but one of the studies focused on a single industry).

Jacobsen drew two important implications for further research on the subject of earnings losses due to displacement. First, studies should use "longitudinal" databases (i.e., several years of individual earnings records), and administrative records (e.g., unemployment insurance or social security). Second, research methodologies should include adequate control/comparison groups, and account for the variation in time between layoff and interview date, and the problem of distinguishing between unemployment and time out of the labor force.

II. ECONOMIC MODELS OF LABOR MARKET HARDSHIP

Our first objective is to identify dislocated workers, particularly those likely to suffer reduced reemployment prospects compared to other unemployed workers. We utilize an index of labor market hardship, following involuntary termination from a job, of post-displacement earnings (postwage). Postwage provides an index of absolute purchasing power derived from wages earned in a job(s) subsequent to the one from which the worker was permanently displaced.

We employ an analytical model of post-displacement earnings specified as:

$$\text{Postwage} = a + b(D) + c(\text{PRE}) + d(C) + e(I)$$

where, Postwage = earnings following involuntary unemployment
D = a measure of dislocation status
PRE = pre-unemployment earnings
C = economic and personal characteristics
I = work incentive factors.

In other words, post-displacement earnings are expected to be a function of the permanence and concentration of job elimination (i.e., the degree of dislocation), pre-unemployment earnings, local economic forces, personal characteristics, and incentive factors associated with an individual's need to renew the earnings flow.

We measure dislocation status (D), or concentrated permanent job elimination, indirectly with two variables available from UI administrative records:

- o declining employment within the claimant's previous industry affiliation, in his county of employment, in the past year, and
- o exhaustion of UI benefit eligibility

The personal characteristics utilized are: age, education, sex, and ethnicity. The work incentive factors used are: presence of a working spouse, and the UI benefit as a proportion of previous earnings (the replacement rate). Local industry identification and employment levels are measured at the 2-digit Standard Industrial Classification (SIC) level of aggregation.

The Importance of Disaggregated Data

National, regional, and even state, data on employment levels in various industries cover up most occurrences of concentrated permanent job elimination. The simultaneous births and deaths of enterprises at these levels make it appear that dislocation is either not occurring or is extremely small. For example, in two of the five states examined in this study, there were no employment declines in any 2-digit SIC industry during the period analyzed at the statewide level. However, disaggregation to the Standard Metropolitan Statistical Area (SMSA) and county level revealed many small and large employment declines within the same 2-digit SIC industry groupings.

Even at the SMSA and county level, disaggregation of industry classifications is important. One-digit SIC groupings only give ten broad industry classifications which are too heterogeneous to identify concentrations of permanent job elimination. Two-digit SIC breakdowns of the 85 industry classifications begin to reveal the actual dynamics of job growth and decline at the local level. As we show in our later data analysis section, SIC data were available at the 2-digit level within SMSA's and counties for four states, and at only the one-digit level in one state. The state with only one-digit SIC detail yielded considerably less significant results than the other four states with more disaggregated industry detail.

III. LONGITUDINAL EMPLOYMENT AND EARNINGS DATA FROM UNEMPLOYMENT INSURANCE ADMINISTRATIVE RECORDS

The previous section emphasized the need to use disaggregated data to identify dislocated workers and to estimate models of labor market hardship from dislocation. We have combined two UI administrative data sources into a data base for five states which meets this need--the ES-202 Report (of Employment, Wages, and Contributions) data, and files from the Department of Labor's Continuous Wage and Benefit History (CWBH) program data base.

The CWBH program was a project run by the Unemployment Insurance Service in the Employment and Training Administration. Begun in 1977, fourteen participating states submitted detailed employment and claims data on a large sample of workers in their states. Earnings and employment information were updated quarterly, while the claims information was updated bimonthly. The data files for each state are capable of merging into longitudinal files since the same social security numbers were sampled in succeeding months.

The employment data on individual CWBH sampled workers contains quarterly earnings for each employer in the quarter, and the employer's 4-digit SIC code. The claims data on those CWBH sampled workers who filed a claim for benefits include the reason for unemployment (e.g., laid-off, quit, etc.), the separating employer's 3-digit SIC code, weekly benefit amount and duration data, and personal characteristics such as age. CWBH claimants also filled out a supplemental questionnaire which obtained other pertinent personal and economic characteristics such as number of dependents, marital status, other earners in the household, and education. We took the combined data tapes for five states--Pennsylvania, South Carolina, Missouri, Nevada and Washington--and created longitudinal files for workers in each state.

The ES-202 Report of Employment, Wages and Contributions in each state contains quarterly information on employment levels for each 4-digit SIC group within each county of the state. From these data for the five states, we analyzed employment fluctuations in each 2-digit SIC within SMSA's and counties in each state, and categorized them into declining and non-declining industries in the 1979-1980 period. We combined this information with the CWBH data on individuals to determine the dislocation or non-dislocation status of workers in these states.

IV. ESTIMATES OF EARNINGS LOSS FROM DISLOCATION

The approach we take in this section is to focus on the sources of stability and instability in the statistical estimates across labor market areas. It is important to note the following information about the time periods covered when interpreting the estimates of earnings loss:

- o The reference period for measuring local industry employment decline is calendar year 1979 in Missouri, and calendar year 1980 in Nevada, Pennsylvania, South Carolina and Washington.
- o Pre-unemployment wages for Missouri are measured from 1977-qtr. 1 through 1978-qtr. 4. The comparable period for Nevada, Pennsylvania and South Carolina is 1978-qtr. 1 through 1979-qtr. 4. And, for Washington it is 1979-qtr. 1 through 1979-qtr. 4.
- o The UI benefit year, from which all of the claimants were drawn on the basis of their having established a new benefit year during that period, is calendar year 1980 for Nevada, Pennsylvania, South Carolina and Washington; it is calendar year 1979 for Missouri.
- o The post-benefit period is 1981-qtr. 1 through 1982-qtr. 4 for Pennsylvania, South Carolina and Washington; 1981-qtr. 1 through 1982-qtr. 2 for Nevada; and 1980-qtr. 1 through 1982-qtr. 1 for Missouri. Post-unemployment wages are measured during these time periods.

Two observations are: First, since the post-benefit year reference period ends in 1982 for all five states, it has been impossible to assess the possibly beneficial effects of economic recovery on the economic fortunes of the claimants. (The CWBH data series offers the potential to conduct an updated analysis

of this type in the future; however, the program ended in fiscal year 1983). And second, the Washington POSTWAGE analysis produced sufficiently different estimates, when compared with the other four states' estimates, that the limited one year pre-wage period available for Washington might have introduced an undiscovered distortion of the PREWAGE measure for that state.

Our estimates of labor market hardship due to dislocation, and the separate importance of personal characteristics, are presented below.

Model 1: Postwage Model:

The purpose of analyzing POSTWAGES is to attempt to isolate the influence of local industry employment decline on claimants' earnings. The initial measure of industry employment decline used was the 2-digit SIC county-specific decline during the reference period, analyzed in a classification form of: no decline, small decline (less than five-percent), or large decline (five or more percent).

The summary statistics presented in the appendix reveal the consistency of results for Missouri, Nevada, Pennsylvania and South Carolina, and the sixteen substate areas within these states--excluding the balance of state. In all cases, the equation estimated revealed statistically and substantively significant relationships between potential predictors that would be available for routine administrative adoption, and the POSTWAGE measure of labor market hardship.

Table 1 presents the state and substate market area estimates for the POSTWAGE equation. Except for Washington, the adjusted R-squared values, representing the proportion of POSTWAGE variation explained by the model, ranged between .26 (for Reno, Nevada) and .57 (for Reading, Pennsylvania).

The results for the dislocation indicators are the most revealing and important for our purposes. The estimates for these variables are in the first five columns of Table 1. The statewide figures are the first line for each state and yield our first important finding: the greater the local employment deterioration in the claimant's prior industry affiliation, the lower the individual's post-unemployment earnings (POSTWAGE).

TABLE 1
COEFFICIENT ESTIMATES FOR MODEL OF POST-DISPLACEMENT EARNINGS
(POSTWAGE)

POSTWAGE	EXHAUSTEE NO DECLINE	EXHAUSTEE SM DECLINE	EXHAUSTEE LG DECLINE	NOT EXHAUST SM DECLINE	NOT EXHAUST LG DECLINE	PREWAGE	PERCENT REPAY	SEX	ETHNIC	AGE 25-44	AGE 45-54	AGE 55-67	SOME COLLEGE	COLLEGE DEGREE	POTENTIAL DURATION
MISSOURI	-614A	-768A	-1833A	-22	-564A	.725A	-.32	165B	51	-16	45	-291B	194B	826A	NA
ST. LOUIS	-637A	-1084A	-2269A	-157	-1072A	.780A	.86	253B	93	-136	66	-472A	178	1124A	NA
KANSAS CITY	-438B	-548A	-707	-7	-117	.667A	-1.39	141	-302B	212	203	-295	169	266	NA
BOS	-551B	-620B	-324	93	70	.603A	-4.63B	39	294B	-58	-36	-178	369B	746	NA
NEVADA	-404A	-761A	-706A	-233B	-29	.749A	-2.38	117	-6	-37	-10	-82	NA	NA	NA
LAS VEGAS	-459A	-377B	-1271A	110	-793A	.824A	-2.87	48	-29	30	161	-3	NA	NA	NA
RENO	-257	-709B	-854B	-27	190	.458A	-5.84	255	-422	-190	-209	-246	NA	NA	NA
BOS	-351	-667	-569	559	150	.564A	-6.62	365B	65	76	-95	76	NA	NA	NA
PENNSYLVANIA	-806A	-763A	-763A	363B	23	.71A	2.63	224A	-242A	-136	-14	-386A	-135	876A	NA
PITTSBURGH	-161	-119	-495B	609B	319	.62A	4.54	422A	-188	138	186	-214	-281	785	NA
READING	-792	NA	-1190A	NA	210	1.11A	9.90	60	-950A	215	-283	-665	77	3347A	NA
JOHNSTOWN	-992A	156	-398	602	1108A	.63A	1.84	-246	NA	-443	-378	-609	-549	NA	NA
PHILADELPHIA	-1051A	-1498A	-902A	246	-185	.58A	1.42	362A	-223	392A	291	-68	-149	1380A	NA
BOS	-477A	NA	NA	NA	NA	.82A	2.64	72	-606A	-87	-159	-545A	-26	-357	NA
SOUTH CAROLINA	-607A	-509A	-667A	44	-15	.84A	2.82A	72B	-89A	172	-167A	-409A	172A	NA	-70.19
ANDERSON	-277A	-646	-688A	-68	-103	.73A	-2.87	-72	27	-71	62	-222	-57	NA	-4.30
CHARLESTON	-535B	-433	-692B	-798A	203	.94A	2.72	459A	-246	-19	-385	-382	413	NA	-39.12
COLUMBIA	-1194A	-565B	-546	328B	169	.32B	-29.97B	212	-455A	59	-88	-894A	10	NA	-155.56B
GREENVILLE	-793A	-716B	-689A	149	9	.58A	-25.74A	34	-156B	-245A	-315A	-502A	-30	NA	-135.18A
BOS	-477A	-498A	-621A	90	-68	.816	-7.25B	38	-39	-3	-118	-350A	211A	NA	-75.05A
WASHINGTON	-832A	-1424A	-1001A	265	1226A	.09A	-12.33A	637A	-354	1749A	2732A	1311A	0	138	85.09
SEA-TAC-BRE	-1119A	-706	-1245B	78	1427A	.09A	-5.49B	745A	-566	2051A	2543A	1569A	-26	-1048	88.63A
SPOKANE	-1233	-357	-239	1154	1580	.02	-7.94	-445	-429	876	3563A	-131	314	2236	35.07
OLYMPIA	1042	899	-871	-1099	1672	.41A	1.24	-1219	-3672B	1630	-59	1135	-584	-2977	-83.37
YAKIMA	-1036	NA	995	NA	1205	-.01	-23.06	294	-112	1118	755	-610	758	1235	-41.31
BOS	-257	-618	-66	973B	1779A	.08A	-40.00A	328	121	1587A	3246A	1382A	-132	2964A	3.81

A - SIGNIFICANT AT THE .01% CONFIDENCE INTERVAL.

B - SIGNIFICANT AT THE .05% CONFIDENCE INTERVAL.

NA - NOT APPLICABLE

COEFFICIENTS NOT FOLLOWED BY A LETTER ARE NOT SIGNIFICANT.

Compared to those claimants who neither exhausted their UI benefit eligibility nor had been affiliated with an industry that exhibited employment decline during the reference period:

- o In all five states, UI benefit exhaustees with a prior industry affiliation that did not exhibit an overall decline in employment during the reference period still incurred a statistically significant "loss" of subsequent earnings, ranging from \$404 per quarter in Nevada to \$832 in Washington.
- o Similarly, in all five states UI benefit exhaustees with a prior industry affiliation that exhibited a small decline in overall employment during the reference period also exhibit a statistically significant earnings "loss", ranging from \$509 in South Carolina to \$1,424 in Washington.
- o In all five states UI benefit exhaustees with prior industry affiliations that exhibited a large decline in overall employment during the reference period show a statistically significant earnings "loss" ranging from a quarterly average of \$667 in South Carolina to \$1,833 in Missouri.

These comparative results demonstrate the importance of conducting replications, using different units of analysis (i.e., states and localities) and different time periods.

The group averages reported above are not adjusted for interstate differences in the average annual level of earnings. The POSTWAGE quarterly averages for the five states reveal an interstate range from a low of \$2,217 in South Carolina to a high of \$5,780 in Washington; and a substate labor market area range from a low of \$1,923 in "the rest of the state" Missouri to a high of \$6,631 in the Seattle-Tacoma-Bremerton area.

At the substate labor market area a lesser, although still consistent, degree of uniformity of earnings loss estimates is observed. All of the sixty relevant coefficients are still negative, but only 24 of the 60 are statistically significant (at the .05 level or better). Again this pattern illustrates the importance of conducting tests at different levels of observation. While all five statewide estimates indicated labor market hardship due to dislocation, less than half of the substate areas indicated hardship in terms of earnings. The use of disaggregated data on dislocation therefore yields important differences in results. An additional indicator of the importance of disaggregated data on dislocation is that 16 of the

36 non-significant area dislocation coefficients are in the state of Washington. For Washington, we were only able to obtain 1-digit SIC detail on local industry employment, compared to 2-digits in the other four states.

It has been alleged that UI benefit exhaustees include at least two quite dissimilar groups: those who have a weak labor force attachment and little incentive to return to work, on the one hand, and those who have the greatest relative difficulty reestablishing themselves in the labor market, on the other hand. It is therefore instructive to look at the statistical estimates for the exhaustee-decline interaction categories that include those who did not exhaust their UI benefit eligibility, but who did exhibit a prior affiliation with a declining industry.

At the statewide level, as shown in Table 1, nonexhaustees whose prior industry affiliation exhibited a small overall employment decline during the pertinent reference period were found only in Nevada to have significantly lower average quarterly earnings during the post-benefit period than their nonexhaustee-nondeclining industry counterparts. This indicates that the exhaustee status portion of the interaction term reflects either work-incentive forces or personal characteristics that are major contributors to the subsequent earnings deficiency that is observed.

Also, when nonexhaustee-large decline is examined, two states exhibit significant coefficients. The Missouri coefficient is $-\$564$ and the Washington coefficient is $+\$1,226$. At the substate level, five out of the twenty possible cases are significant; but, two are negative and three are positive. It is apparent that just knowing that the industry of prior affiliation has experienced declining overall employment is not sufficient to predict subsequent labor market hardship. Other characteristics, related to the exhaustion of UI benefits, are extremely important in predicting labor market hardship due to dislocation. Predicting exhaustion of UI benefits, or at least relatively long term unemployment, is also important for identifying dislocated workers who will need assistance.

The PREWAGE coefficient in the POSTWAGE estimates presented in Table 1 is interesting because it offers a single indicator of the relative level of pre- and post-unemployment average quarterly earnings. A coefficient value of 1.00 would indicate no loss or gain on average. In fact, all five statewide

coefficients are statistically significant, with the following values:

o Missouri	.73
o Nevada	.75
o Pennsylvania	.71
o South Carolina	.84
o Washington	.09

Washington aside, the relative deterioration of covered earnings during the post-benefit year period, compared to quarterly averages for the pre-benefit year reference period, is uniform and of similar magnitude. At the substate level, 17 out of 20 possible PREWAGE coefficients are statistically significant, all but one having a value of less than 1.00.

The PREWAGE coefficient values indicate how important it is to consider earnings flows over time, rather than comparing hourly wage rates. Both the regularity of employment and the value placed on each time unit of that employment contribute to the ultimate flow of earnings that accrues to the individual. The PREWAGE variables cited above, and the entire array of coefficients presented in Table 1, suggest that many UI claimants do not (quickly, at least) renew their previous earnings flow, especially workers dislocated under our definition.

The PERCENT REPAY (UI wage replacement rate) variable is seen in Table 1 to behave in a very uneven manner with respect to POSTWAGE. There is no important relationship between REPAY and POSTWAGE. This should come as no surprise, since most of the work incentive effect of the UI benefit level should appear in the length of compensated unemployment, rather than in subsequent earnings.

The demographic variables in Table 1 again demonstrate the importance of generating estimates for different units of analysis. Men, for example, are seen to have received higher POSTWAGES than women, in four of the five states. The magnitude of the average quarterly difference between men and women, as well as the absence of a statistically significant difference between them in South Carolina, can be traced to the industrial structures in the respective states. In other words, where there is an opportunity for sex-based separation (i.e., where durable goods manufacturing is prevalent) an earnings differential appears.

Blacks fared less well than whites in POSTWAGES in only Pennsylvania and South Carolina, and in eight out of the 20 substate labor market areas. Again, the industrial structure appears to be a causal agent here, because the earnings deficiency is lower in South Carolina, which is less heavily industrialized. One of the main reasons for these rather small earnings differentials for race is that the effects of education and age have also been controlled separately.

The AGE coefficients in Table 1 reflect the specified age group in comparison with those aged 20-24. In other words, a positive coefficient is interpreted as a positive age advantage, and a negative coefficient is understood to reflect a disadvantage. At the statewide level, Washington stands out as a different case than the other states. In each of the three age categories examined, a positive coefficient is observed for Washington, while either nonsignificance or a significant negative coefficient is estimated in the other states. As expected, the consistency of the age factor as a negative influence on earnings increases at the older age levels. This could be an important consideration for possibly targeting readjustment programs at older workers..

The EDUC variables (some college, or a college degree) behave as expected. At the statewide level, the EDUC variable coefficients are significant, and positive, in three of the four states, indicating that greater education may very well lessen the impact of dislocation.

Table 1, then, offers important summary information. The interaction of UI benefit exhaustion and industry employment decline offers reliable predictive power with respect to subsequent earnings patterns. Our measure of dislocation performs well in identifying claimants likely to experience labor market hardship.

Model 2: Postwage by Age Group

Table 2 presents separate POSTWAGE estimates for the four age groups. All of the statistically significant coefficients associated with the three UI benefit exhaustee classifications, across all three of the age groupings, are negative, with one exception. The major finding in Table 2 is that it shows the increasing disadvantage experienced by older workers who exhaust their UI benefits. For each state, we observe the size of the negative coefficient associated with each exhaustee-decline variable as the age category is advanced. For example, the respective Missouri coefficients for the UI benefit exhaustee-no industry employment decline category are: ages 20-24: -\$292; ages 25-44: -\$595; ages 45-54: -\$1,057; and ages 55-67: -\$719. Older displaced workers fare worse in terms of reemployment earnings.

TABLE 2
COEFFICIENT ESTIMATES FOR MODEL OF POST-DISPLACEMENT EARNINGS
(POSTWAGE BY AGE GROUP)

POSTWAGE BY AGE	EXHAUSTEE NO DECLINE	EXHAUSTEE SM DECLINE	EXHAUSTEE LG DECLINE	NOT EXHAUST SM DECLINE	NOT EXHAUST LG DECLINE	PREWAGE	PERCENT REPAY	SEX	ETHNIC	SOME COLLEGE	COLLEGE DEGREE	POTENTIAL DURATION
MISSOURI												
AGE 20-24	-292B	-349	-1496A	139	-100	.43A	-1.86	218B	-131	354A	318B	NA
AGE 25-44	-595A	-782A	-2003A	-82	-1019A	.77	-.49	158	29	168	771A	NA
AGE 45-54	-1057A	-1551A	-2051A	-307	-192	.93A	4.56	50	9	-235	654	NA
AGE 55-67	-719B	-842	-839	147	-136	.68A	-3.51	216	190	-415	-1046	NA
NEVADA												
AGE 20-24	-312	-275	-740	262	471B	.50A	-4.63	288B	-152	NA	NA	NA
AGE 25-44	-495A	-853A	-1045A	-286B	-121	.79A	-1.80	79	96	NA	NA	NA
AGE 45-54	-277	-906	-335	-281	6	.82A	-2.26	1	-28	NA	NA	NA
AGE 55-67	-262	-1406B	652	-846B	-552	.62A	-17.40A	55	205	NA	NA	NA
PENNSYLVANIA												
AGE 20-24	-382A	-939	-469B	-74	-204	.58A	.39	193	-458A	-2	1667A	NA
AGE 25-44	-805A	-432	-797A	378	50	.65A	1.28	364A	-251A	-201	651A	NA
AGE 45-54	-1011A	-1438A	-760A	721B	220	.74A	2.78	233	-180	-429	2309A	NA
AGE 55-67	-1304A	-715	-1538A	809	-260	.81A	2.29	-106	-183	769	852	NA
SOUTH CAROLINA												
AGE 20-24	-653A	-587A	-76A	-4	-42	.70A	-13.00A	277A	180A	75	NA	-86A
AGE 25-44	-515A	-488A	-695A	45	-12	.90A	4.62A	44	-62	192A	NA	-46A
AGE 45-54	-679A	-387	-286	202	24	.86A	3.06	-97	-127	207	NA	-93B
AGE 55-67	-1067A	-722B	-813B	-63	-9	.47A	-36.43	-1	-26	55	NA	-318A
WASHINGTON												
AGE 20-24	-903A	-1125A	-591	39	825A	.02	-3.82	694A	-357	448	752	77A
AGE 25-44	-790B	-1992A	-1276A	63	1032A	.09A	-23.34A	567B	-427	-370	8	49
AGE 45-43	-963	-88	-2346	1236	1607B	.38A	-37.74A	-205	-383	-29	1135	84
AGE 55-67	-3426	4204	9066B	-86	861	.53	-64.64	2863	-1757	1596	163	-292

A - SIGNIFICANT AT THE .01% CONFIDENCE INTERVAL.

B - SIGNIFICANT AT THE .05% CONFIDENCE INTERVAL.

NA - NOT APPLICABLE

COEFFICIENTS NOT FOLLOWED BY A LETTER ARE NOT SIGNIFICANT

Similarly, it is instructive to compare the PREWAGE coefficients across the four age groupings, both within each of the states and then across the states themselves. Here, the youngest and oldest age groups are seen to suffer the greatest deterioration of average quarterly earnings flow, with a lesser impact being observed for the two middle age groups. Of course, there are complex "opportunity" and "incentive" forces operating here. At this time, we cannot distinguish between the proportion of time committed to employment, on the one hand, and the rate of compensation accruing to this time on the other hand. One would expect, for example, that the youngest age group would be constrained by minimum wage floors from experiencing a substantial reduction in hourly pay; so the low PREWAGE coefficient would be expected to arise largely from a lesser commitment to employment per se. Conversely, the .93 coefficient observed for the age group 45-54 in Missouri would be expected to reflect greater "life-cycle" dependency responsibilities, which would be expected to sustain, or even increase, the time committed to employment.

Model 3: Postwage in "Rebound" Industries

There is a "pulsation" phenomenon in cyclical employment patterns, in which the big losers on the downside are frequently observed to be the big gainers on the upside. This poses an important analytical question: How sensitive are the POSTWAGE estimates to the time period chosen for analysis? Specifically, does it make any difference if an industry that is characterized as declining, based on one year's record, subsequently rebounds--will the workers dislocated from these industries in the declining year be helped by the industry's rebound in the following year? The answer according to our data analysis is no--the rebound doesn't help those workers already out on the street from the earlier dislocation, an important contrast to our expectations. The fruits of the rebound apparently accrue mainly to new workers in the industry, or the previous workers are working for lower pay and/or reduced hours.

For this "rebound" analysis we selected only those terminees whose local industry experienced an employment decline in the reference year. Table 3 presents the results of estimating the POSTWAGE specification with this new "rebound" variable replacing the earlier industry employment decline variable. Now, UI benefit exhaustee status is combined with the dichotomous "rebound" variable to form four groupings:

- Group I: Nonexhaustees whose prior industry affiliation exhibited a small employment decline during the reference period and any employment decline during the subsequent year.

- Group II: Nonexhaustees whose prior industry affiliation exhibited a large employment decline during the reference period and any employment decline during the subsequent year.
- Group III: Exhaustees whose prior industry affiliation exhibited a small employment decline during the reference period and any employment decline during the subsequent year.
- Group IV: Exhaustees whose prior industry affiliation exhibited a large employment decline during the reference period and any employment decline during the subsequent year.

The comparison in Table 3, then, is between those whose industries continued to decline, on the one hand, and those whose industries were not declining (rebounded) in the subsequent year. (We have not yet updated the Missouri and Nevada data to conduct this analysis for those two states. Therefore, Table 3 is a three state comparison).

Only two of the twelve TWO-YEAR DECLINE coefficients are statistically significant (Group IV, Pennsylvania and Group I, South Carolina). In all other cases dislocated workers whose industry rebounded the second year had the same earnings as dislocated workers in industries that did not rebound. These results suggest that the rebound of a previously declining local industry does not aid workers dislocated during the industry's downturn. These dislocated workers still experienced the same degrees of subsequent earnings "loss" as dislocated workers in continuously declining industries.

The analysis reported in Table 3 offers the first limited information we have seen that sheds light on the effect of the "rebound" phenomenon on dislocated workers.

This completes our interpretation of the POSTWAGE estimates for the five states and associated substate labor market areas. The diversity of state and local economic structures and conditions represented in the CWBH data sets utilized here offer a sound basis upon which to draw generalizations about stable relationships between routinely available UI administrative information and subsequent labor market hardship. The combined presence of UI benefit exhaustion and industry employment decline have been shown to be quite reliable indicators of subsequent hardship--as measured by relatively low average quarterly earnings. In addition, age, ethnicity, and education have been

TABLE 3
 COEFFICIENT ESTIMATES FOR MODEL OF POST-DISPLACEMENT EARNINGS
 (POSTWAGE - WORKERS FROM DECLINING INDUSTRIES ONLY, INDUSTRY DECLINED OR REBOUNDED FOLLOWING YEAR)

2 YR. POSTWAGE	TWO YEAR DECLINE	PREMAGE	PERCENT REPAY	SEX	ETHNIC	AGE 25-44	AGE 45-54	AGE 55-67	SOME COLLEGE	COLLEGE DEGREE	POTENTIAL DURATION
PENNSYLVANIA											
GROUP I	201	.67A	-2.71	574	175	441	701	320	-404	625	NA
GROUP II	-195	.71A	6.39	415A	-340B	337B	449B	-111	-388B	-225	NA
GROUP III	-670A	.81	7.27	-1755B	-916	-1168	-1168	-1873	-374	1876	NA
GROUP IV	785A	.38A	5.83	137	-156	-303	-303	-1065B	-190	NA	NA
SOUTH CAROLINA											
GROUP I	120B	.89A	4.47A	66	-50	-38	-69	-427A	173	NA	-40A
GROUP II	-97	.81A	-2.11	35	-145	-90	-267	-410A	253	NA	-22
GROUP III	-148	.53A	4.18	137	122	73	30	-227	232	NA	-229A
GROUP IV	-300	.65A	2.04	36	30	-3	260	-262	305	NA	-155B
WASHINGTON											
GROUP I	-156	.19A	-11.60	782B	-141	1714A	3142A	1173	-733	-1787	44
GROUP II	-61	.37A	-67.11A	-1208B	-493	1179A	2083A	-51	-103	1371	-150
GROUP III	-168	.44A	-15.71	-227	-18	313	2028	1754	-18	911	-63
GROUP IV	-565	.05	5.25	1625	-1348	747	376	3323A	1413	-4685	27

GROUP I - NONEXHAUSTESS AND SMALL DECLINE, INDUSTRY GROWTH FOLLOWING YEAR.
 GROUP II - NONEXHAUSTEES AND LARGE DECLINE, INDUSTRY DECLINE FOLLOWING YEAR.
 GROUP III - EXHAUSTEES AND SMALL DECLINE, INDUSTRY GROWTH FOLLOWING YEAR.
 GROUP IV - EXHAUSTEES AND LARGE DECLINE, INDUSTRY DECLINE FOLLOWING YEAR.

A - SIGNIFICANT AT THE .01% CONFIDENCE INTERVAL.
 B - SIGNIFICANT AT THE .05% CONFIDENCE INTERVAL.
 NA - NOT APPLICABLE

COEFFICIENTS NOT FOLLOWED BY A LETTER AND NOT SIGNIFICANT.

shown to influence subsequent earnings, albeit in more complex patterns than those found in the exhaustee-industry decline interaction variable.

V. THE PERMANENCE OF DISLOCATION: TIME PATH OF RETURN TO FORMER EMPLOYER, INDUSTRY OR OTHER EMPLOYMENT

The following assertion appears in Michael L. Wachter and William L. Wascher, "Labor Market Policies in Response to Structural Changes in Labor Demand," Industrial Change and Public Policy, A Symposium Sponsored By The Federal Reserve Bank of Kansas City, August 24-26, 1983:

...At the time that workers are dismissed, the workers, the policymakers, even the firms do not know which workers might eventually be recalled and which are, in fact, permanently displaced. Thus, from an economic vantage point, the unemployment and related income loss of those who eventually regain their jobs are difficult to distinguish from other temporary bouts of cyclical unemployment.

The analysis reported in this section distinguishes between dislocated workers who eventually regain their jobs, and those who do not, over a three to five year post-dislocation period during which the local, state and national economies experienced some degree of recovery. The importance of being able to make this distinction stems directly from the need of policymakers to know what proportion of workers, initially believed to be permanently displaced from their jobs, eventually regain their former jobs, or a similar job in the same industry, or a different job in a different industry. These reemployment proportions, and the speed with which they accumulate, help to determine the type and amount of readjustment assistance actually needed by dislocated workers.

The approach taken was to begin with the statewide random samples of involuntarily unemployed workers and divide them into two groups--those affiliated with a declining local industry at the time of unemployment, and those affiliated with a non-declining industry at the time of unemployment. Beginning with the first quarter after displacement, we then calculated the cumulative proportions of workers who:

- (1) returned to their previous employer
 - (a) without intervening employment
 - (b) with intervening employment.

- (2) obtained work with a different employer in the same 2-digit SIC industry
 - (a) without intervening employment
 - (b) with intervening employment.
- (3) obtained work with a different employer in a different industry.
- (4) remained continuously unemployed.

These four groups are subsequently referred to as (1) Employer Match, (2) Industry Match, (3) Employed, No Match, (4) Not Employed, and form the basis for presentation findings.

We also compared pre- and post-dislocation earnings for these various return status classifications, with the expectation that we would find a monotonically declining relationship between pre-/post-dislocation earnings and return to a former employer, industry or other job, respectively. Finally, we compared the rates of return to former employers and industries between groups of dislocated workers who worked in rebounding, and non-rebounding industries.

The analysis reported in this section was limited to three of the five states--Missouri, Pennsylvania and South Carolina. The detailed data necessary to make the employer and industry matches was unavailable for Nevada and Washington.

The following time interval information pertains to the analysis:

- (1) Average quarterly earnings prior to UI claim filing during the reference year: 1977:1-1978:4 for Missouri and 1978:1-1979:4 for Pennsylvania and South Carolina.
- (2) The UI claim filing reference year: calendar year 1979 for Missouri; calendar year 1980 for Pennsylvania; and 1980:2-1980:4 for South Carolina.
- (3) Average quarterly earnings subsequent to UI claim filing during the reference year: 1980:1-1983:4 for Missouri and 1981:1-1983:4 for Pennsylvania and South Carolina.

- (4) Maximum number of calendar quarters during which return status classifications have been monitored: 19 for Missouri (1979:2-1983:4); 15 for Pennsylvania (1980:2-1983:4); and 14 for South Carolina (1980:3-1983:4).

Analytical Results: Total Three-State CWBH Samples

Return Status

The total statewide samples of involuntarily unemployed workers in each state, during the reference year, serve as benchmarks for comparing the time path of cumulative reemployment rates of various dislocated and non-dislocated worker subgroups.

Table 4 shows that by the end of the measurement period, six out of every ten sample members had returned to their last employer of record immediately prior to dislocation (filing of a UI claim). The highest return rate occurred in South Carolina, which has the greatest single industry (textiles) concentration of employment among the three states.

Another ten percent of the sample members had returned to the two-digit SIC industrial affiliation of the last employer of record immediately prior to dislocation, but not to the specific enterprise. This means that 30 percent of the sample members in Missouri can be said to have been permanently displaced or dislocated, based on the reference period UI claim and subsequent reported covered employment through 1983:4. The proportions of permanently displaced workers in Pennsylvania and South Carolina are 28 and 25 percent, respectively. (It is important to note here that no occupational information is included in the CWBH data set. This means that "displacement" from the performance of routine tasks cannot be detected. Here we define displacement solely on the basis of failure to return to covered employment in a two-digit SIC.)

Greater variability is observed in Table 4 between the other two return status classifications. Both Pennsylvania and South Carolina report substantial numbers of sample members for whom no post-reference UI claim covered employment is recorded. (This only permits us to conclude that these individuals have not worked in "mainstream" employment in the pertinent state since the reference UI claim. Nothing can be said about whether these people have sought work in that state, have sought or secured employment in another state, have accepted non-UI-covered employment, or have withdrawn from the labor force.) The remaining return status classification includes those for whom

TABLE 4
 RETURN STATUS OF STATEWIDE
 CWBH SAMPLE POPULATIONS

	Missouri		Pennsylvania		South Carolina	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Employer Match (1)	3500	(58)	3087	(59)	3861	(66)
Industry Match Only (2)	733	(12)	650	(13)	518	(9)
Employed But No Match (3)	1822	(30)	1095	(21)	1077	(19)
Not Employed (4)	<u>4</u>	<u>(-)</u>	<u>365</u>	<u>(7)</u>	<u>359</u>	<u>(6)</u>
TOTALS	<u>6059</u>	<u>(100)</u>	<u>5197</u>	<u>(100)</u>	<u>5815</u>	<u>(100)</u>

FOOTNOTES.

- (1) Reemployed by the last employer of record prior to dislocation (UI claim filing).
- (2) Employed in the same two-digit SIC as that of the last employer of record prior to dislocation.
- (3) Covered employment reported, but not in the same two-digit SIC as that of the last employer.
- (4) No covered employment reported.

covered employment has been reported, but not in the same industry as the last employment of record prior to dislocation. Here, between 19 and 30 percent of the cases are found.

Based on the figures presented in Table 4, we conclude that a substantial proportion of those who were involuntarily unemployed during the reference years of 1979 and 1980 in Missouri, Pennsylvania and South Carolina cannot be said to have been displaced in the common sense of that term. Having said this, we also conclude that the 23 percent of the sample members who did return to covered employment, but not in their previous industrial affiliation, warrant further examination.

Return Status in Growing,
Stable and Declining Industries

Does the 70 percent (Missouri, employer or industry) return rate reported above mask a substantial difference between the experience of those who had been affiliated with a declining industry, on the one hand, and those who had been employed in a stable or growing industry, on the other hand?

Table 5 mirrors the format of Table 4, except that each of the three state samples is split into "declining industry" and "not declining industry" subgroups. (Recall that the declining industry designation is made on the basis of a comparison of fourth quarter two-digit SIC employment during the UI claim reference year and the preceding year, measured at the individual county level.)

The most striking finding reported in Table 5 is that the return rate to the last employer of record prior to dislocation is higher for those who had been affiliated with a declining industry than for those who had not been employed in a declining industry.

If the observed decline of industry employment was a cyclical event, not a structural phenomenon, then economic recovery would have been expected to renew the opportunity for previous employees to return to their former employer. This would explain why return rates would be higher for (cyclically) declining industries than for stable or growing industries. However, data presented in Table 6 contradict this interpretation. There it will be seen that industry employment "rebound" is not associated with a higher rate of return.

The most important conclusion that is drawn from the figures presented in Table 5 is that between 18 and 25 percent of the

TABLE 5
 RETURN STATUS OF STATEWIDE
 ONEH SAMPLE POPULATIONS
 BY INDUSTRY DECLINE OR STABILITY/GROWTH

	Missouri				Pennsylvania				South Carolina			
	Declining Industry		Not Declining Industry		Declining Industry		Not Declining Industry		Declining Industry		Not Declining Industry	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Employer Match	1862	(68)	1638	(49)	1027	(61)	2060	(59)	2922	(74)	939	(51)
Industry Match Only	270	(10)	463	(14)	245	(14)	405	(12)	323	(8)	195	(11)
Employer But No Match	584	(22)	1238	(37)	304	(18)	791	(22)	538	(13)	539	(29)
Not Employed	<u>4</u>	<u>(-)</u>	<u>-</u>	<u>(-)</u>	<u>112</u>	<u>(7)</u>	<u>253</u>	<u>(7)</u>	<u>185</u>	<u>(5)</u>	<u>174</u>	<u>(9)</u>
TOTALS	<u>2720</u>	<u>(100)</u>	<u>3339</u>	<u>(100)</u>	<u>1688</u>	<u>(100)</u>	<u>3509</u>	<u>(100)</u>	<u>3968</u>	<u>(100)</u>	<u>1847</u>	<u>(100)</u>

sample members previously affiliated with a declining industry had not returned to work in the same two-digit SIC within the post-UI claim period monitored. This conclusion, by itself, has no well-being connotations, because no earnings data have been presented up to this point. However, it does say that one-fourth to one-fifth of the workers from declining industries can be said to have been permanently displaced.

Tables 6 through 9 explore return status comparisons within the declining industry population only. Those for whom no post-reference UI claim covered employment was reported, and those who had been affiliated with an industry that experienced stable or growing employment in the local labor market area, are no longer included in the analysis.

Return Status By Industry "Rebound":
Declining Industry Sample

Up to this point we have documented the return status of CWBH sample members in the three states and we have focused attention on those individuals who had been affiliated with a declining industry. Earlier we stated that the rate of employer or industry "match" does not appear to be related to cyclical recovery of the industry with which they had been affiliated. Table 6 contains the data upon which this statement was based.

Three "rebound" categories have been defined:

- (1) No rebound means that 1981:4, 1982:4 and 1983:4 (plus 1980:4 for Missouri) employment totals in the two-digit SIC, and at the county level, were all less than the 1979:4 (1978:4 for Missouri) employment figure.
- (2) Continuous rebound means that each of these annual fourth quarter totals was greater than the reference employment level. It does not, however, mean that each succeeding year's level is higher than the preceding year's total; i.e., continuous growth cannot be inferred.
- (3) Mixed rebound means that the reference year employment level is higher than some of the subsequent fourth quarter figures, but lower than others.

A striking pattern found in Table 6 is the difference among the states in the distribution of cases among the three rebound

classifications: The respective "no rebound" percentages for Missouri, Pennsylvania and South Carolina are 46 percent, 21 percent, and 81 percent (the N of the state's "no rebound" total divided by the sum of the state's totals for no rebound, continuous rebound, and mixed rebound). This is a powerful indicator of the diversity of economic conditions that exist within these United States at any chosen time.

The diversity cited above appears to have been of little importance with respect to the distribution of cases among the three return status categories. Table 6 exhibits no clear relationship between return status and rebound classification. Indeed, in six of the twelve possible comparisons of employer or industry match figures, the return rates are lower for the continuous rebound cases than for either the no rebound or mixed rebound cases. This is an unexpected finding that warrants future examination. Which two-digit SICs fall in each of the three "rebound" classifications? What are the demographic characteristics of workers who exhibit affiliations with each of the three categories? Does "continuous rebound" serve as a proxy for a sellers market, in which one firm finds itself competing with counterparts for the services of its former employees? These remain unanswered questions which should be addressed in future research.

Return Status by Local Labor Market: Total CWBH Sample

Table 7 displays return rates for both those sample members who had been affiliated with a declining industry and those who had not, for each of the SMSAs in the three states.

Here again we see the importance of choosing an appropriate unit of analysis (industry employment data disaggregated to the local labor market level.) The twenty-six employer match rates shown range from a low of 33 percent to a high of 86 percent. In only two of the twenty-six comparisons is the declining industry employer match rate found to be lower than its not declining industry counterpart. Again, this is an unexpected finding. Return rates do not appear to be responsive to traditional measures of economic vitality. Does this mean that employment stability and growth, and "rebounds" from previous declines, signal lesser opportunity for some previous employees? Is economic viability of local industries achieved, in part, at the expense of some former employees? If so, how can these individuals be identified in a reliable manner, so that appropriate redirection can be facilitated? These persistent questions take on even greater importance in the context of the findings reported here. Obviously, not all laid off workers

TABLE 6

RETURN STATUS OF STATEWIDE
DECLINING INDUSTRY OWB SAMPLE
POPULATION BY REVERSAL OF INDUSTRY
EMPLOYMENT DECLINE

	No Rebound						Continuous Rebound						Mixed Rebound					
	Missouri		Penn- sylvania		South Carolina		Missouri		Penn- sylvania		South Carolina		Missouri		Penn- sylvania		South Carolina	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
Employer Match	883	(71)	222	(66)	2409	(78)	623	(70)	575	(70)	249	(72)	356	(62)	230	(54)	264	(73)
Industry Match Only	95	(8)	39	(12)	234	(8)	98	(11)	136	(17)	40	(12)	77	(13)	70	(17)	49	(14)
Employer But No Match	<u>267</u>	<u>(21)</u>	<u>76</u>	<u>(22)</u>	<u>435</u>	<u>(14)</u>	<u>170</u>	<u>(19)</u>	<u>107</u>	<u>(13)</u>	<u>56</u>	<u>(16)</u>	<u>147</u>	<u>(25)</u>	<u>121</u>	<u>(29)</u>	<u>47</u>	<u>(13)</u>
TOTALS	<u>1245</u>	<u>(100)</u>	<u>337</u>	<u>(100)</u>	<u>3078</u>	<u>(100)</u>	<u>891</u>	<u>(100)</u>	<u>818</u>	<u>(100)</u>	<u>345</u>	<u>(100)</u>	<u>580</u>	<u>(100)</u>	<u>421</u>	<u>(100)</u>	<u>360</u>	<u>(100)</u>

TABLE 7
RETURN STATUS OF LOCAL LABOR MARKET
CWBH SAMPLE POPULATIONS BY INDUSTRY
DECLINE OR STABILITY/GROWTH

	Employer Match		SIC Match		Employed But No Match	
	Not a Declining Industry	Declining Industry	Not a Declining Industry	Declining Industry	Not a Declining Industry	Declining Industry
MISSOURI						

KANSAS CITY	128 (33)*	345 (65)	71 (18)	44 (8)	188 (49)	146 (27)
ST. LOUIS	713 (46)	526 (72)	224 (14)	64 (9)	620 (40)	139 (19)
PENNSYLVANIA						

PITTSBURG	128 (49)	460 (67)	49 (19)	115 (17)	84 (32)	108 (16)
READING	62 (59)	77 (74)	12 (11)	12 (12)	31 (30)	15 (14)
JOHNSTOWN	73 (73)	45 (72)	9 (9)	7 (11)	16 (16)	11 (17)
PHILADELPHIA	277 (51)	445 (61)	67 (12)	111 (15)	205 (37)	170 (24)
SOUTH CAROLINA						

ANDERSON	67 (75)	261 (86)	3 (3)	14 (5)	19 (22)	28 (9)
AKIN	55 (70)	24 (55)	5 (6)	4 (9)	19 (24)	16 (36)
CHALESTON	75 (39)	102 (55)	29 (15)	31 (17)	87 (46)	51 (28)
COLUMBIA	90 (53)	119 (67)	25 (15)	15 (8)	54 (32)	45 (25)
FLORENCE	35 (52)	76 (73)	8 (12)	10 (10)	24 (36)	17 (17)
GREENVILLE	228 (57)	610 (83)	43 (11)	43 (6)	129 (32)	84 (11)
YORK	13 (41)	106 (78)	7 (23)	10 (7)	11 (36)	20 (15)

*Figures in parentheses are row percentages within category. For example, 33 percent of Kansas City sample members who had not been affiliated with a declining industry returned to their former employer; 18 percent returned to the two-digit SIC of previous affiliation but not to the same employee; and 49 percent returned to covered employment, but not in the same two-digit SIC.

should be buoyed by announcements of employment growth in their former industry, even when that growth is occurring locally. These data suggest that many workers originally displaced from a declining industry will not be rehired if the industry recovers; they will remain displaced. The individual worker problems of displacement are not solved by an unexpected turnaround of the industry.

Up to this point, we have stressed that return status classification offers no direct information about the duration of unemployment or pre-post earnings relationships. These are the remaining two questions to be explored in this paper.

Return Status by Unemployment Duration: Declining Industry Sample

We would expect return status classification to be consistently related to unemployment duration. In particular, we hypothesize that the return to the former employer class would have the shortest unemployment duration, followed in ascending order by return to former 2-digit SIC industry, and return to employment outside the industry. Diagrams 1, 2 and 3 display information confirming this hypothesis.

Each diagram is for one state. Five cumulative percentage graphs are shown for each state. Each cumulative percentage graph answers the following question: How many calendar quarters elapsed between UI claim filing and return to a specified type of employment? Two types of employment have been identified. First, "WHEN 1" on the accompanying diagrams refers to when the CWBH sample members returned to any type of covered employment. And second, "WHEN 2" refers to when they returned to their former employer or industry. The following five cumulative percentage graphs are displayed in each diagram:

- (1) Employer Match "When 1"--shows how long it took those who ultimately returned to their former employer to accept any type of reported covered employment.
- (2) Employer Match "When 2"--shows how long it took those who ultimately returned to their former employer to do so.
- (3) SIC Match "When 1"--shows how long it took those who ultimately returned to their former two-digit SIC, but not to their former employer, to accept any type of reported covered employment.

- (4) SIC Match "When 2"--shows how long it took those who ultimately returned to their former two-digit SIC, but not to their former employer, to do so.
- (5) No Match--shows how long it took those who returned to covered employment, but not in the same two-digit SIC as before, to do so. (Here "When 1" = "When 2" since there is no distinction between return to covered employment and return to a former employer or industry.)

The individual state diagrams are to be read in the following way: Cumulative percentage of a specified population is found in the left margin, and elapsed calendar quarters from the time of UI claim filing are found along the top margin. Looking at Diagram 1, for Missouri, we see that 89 percent of those who ultimately returned to their former employer had accepted some type of covered employment during the first quarter following UI claim filing. All of this group had returned to covered employment within 8 calendar quarters. Looking at the Employer Match "When 2" graph in this same diagram we find that 97 percent of those who were ultimately going to return to a former employer had done so within 4 quarters. A similar pattern is found for Employer Match "When 1" and Employer Match "When 2" on the Pennsylvania and South Carolina diagrams.

The Industry Match Only population exhibits a very different graph. Here it took the UI claimants longer to return to any type of covered employment (SIC Match "When 1"), and substantially longer to renew their former industrial affiliation (SIC Match "When 2"). This pattern is consistent among the three states.

Finally, the No Match graph identifies those who did return to covered employment, but not to a former employer or two-digit SIC. It took this group the longest amount of time to reestablish themselves in covered employment.

Several important conclusions are based on the information presented in Diagrams 1, 2 and 3. First, there is strong evidence that the UI claimants were willing to accept covered employment within one quarter, other than with their previous enterprise or industrial affiliation, even when they ultimately returned to that affiliation. They did not "wait it out". Second, substantial numbers of both the SIC Match and No Match groups experienced long periods of unemployment. Third, virtually all of those who ultimately return to their former employer do so within one year. And fourth, over half of all

DIAGRAM 1

TIME OF RETURN TO WORK

MISSOURI

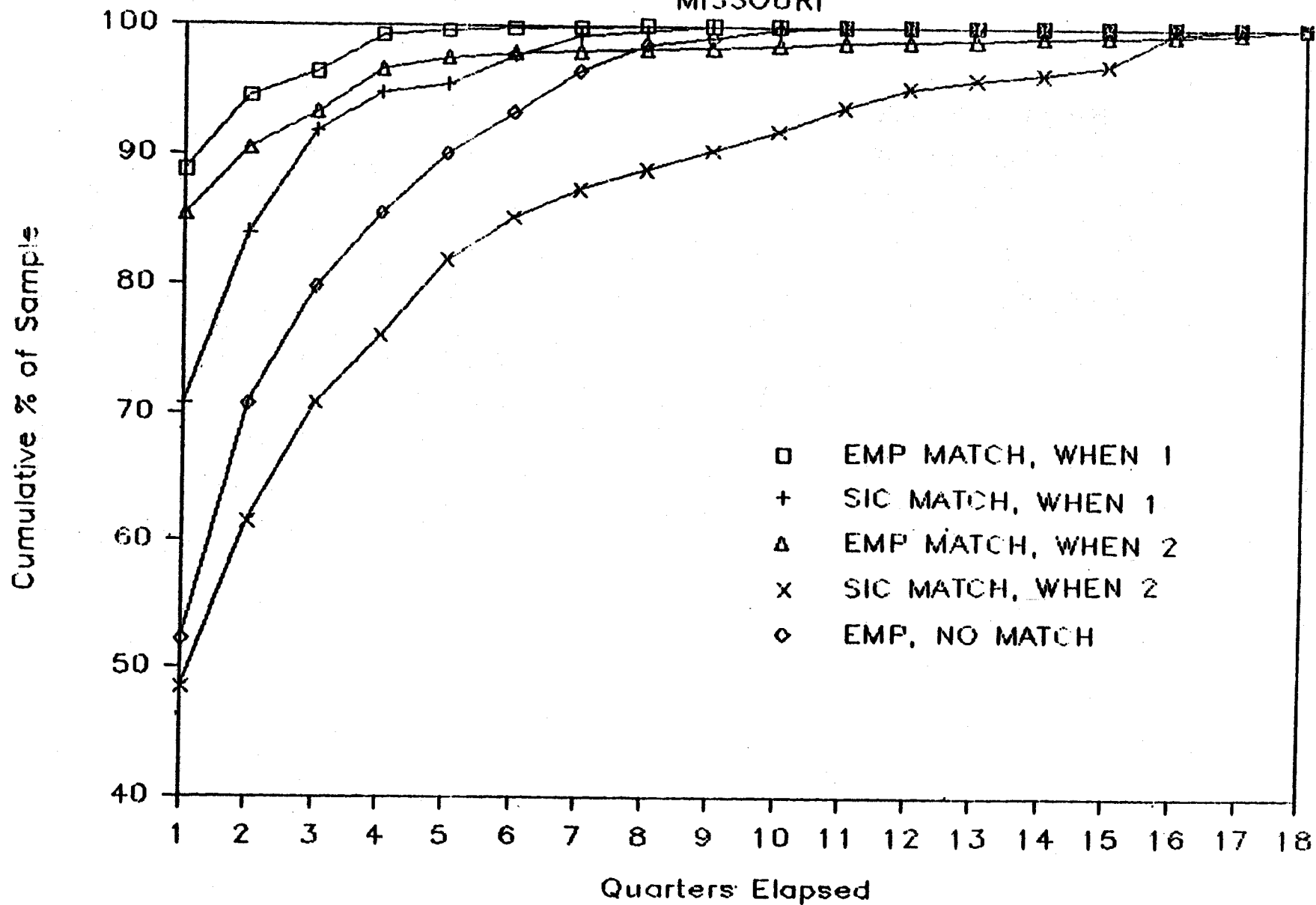


DIAGRAM 2

TIME OF RETURN TO WORK

SOUTH CAROLINA

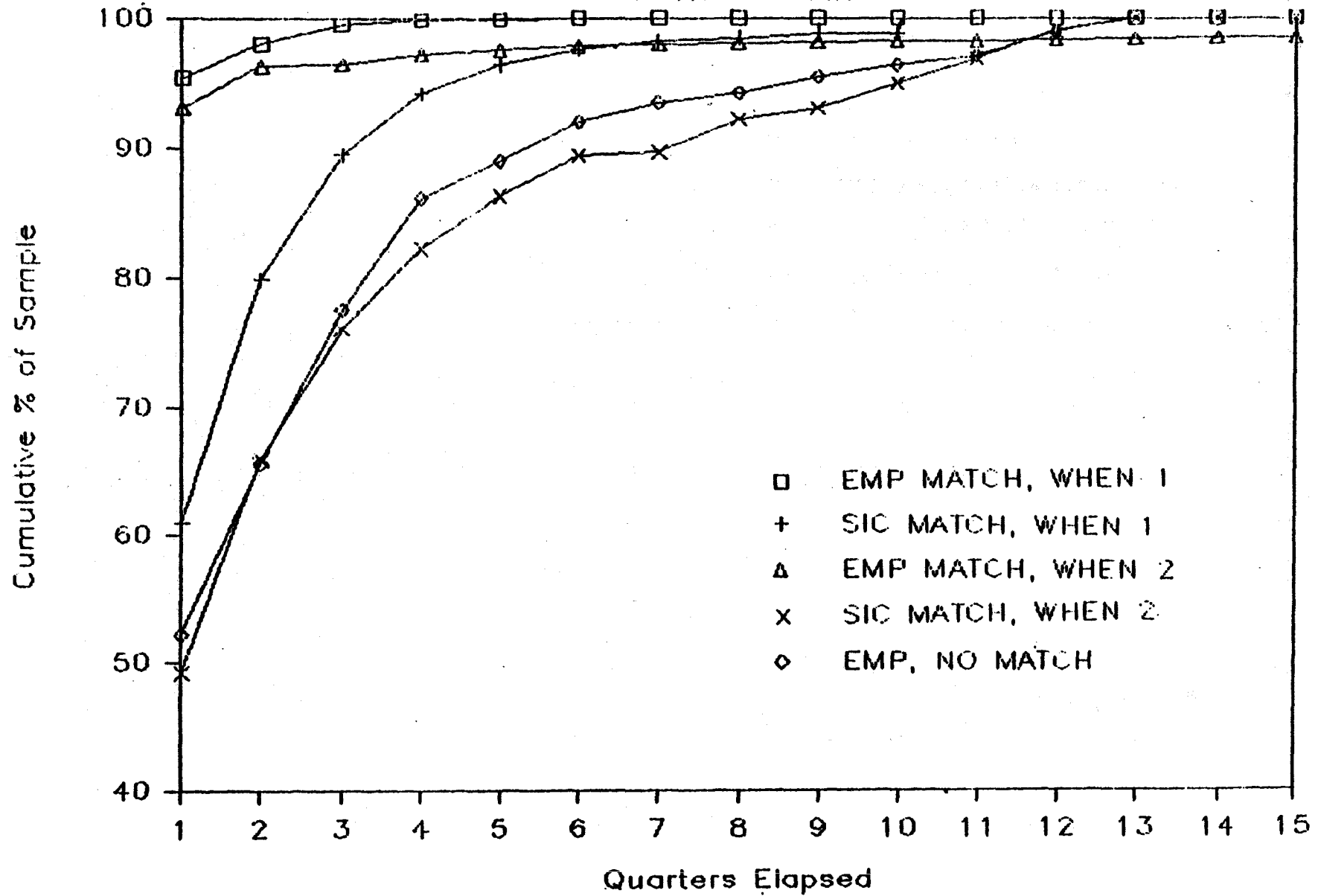
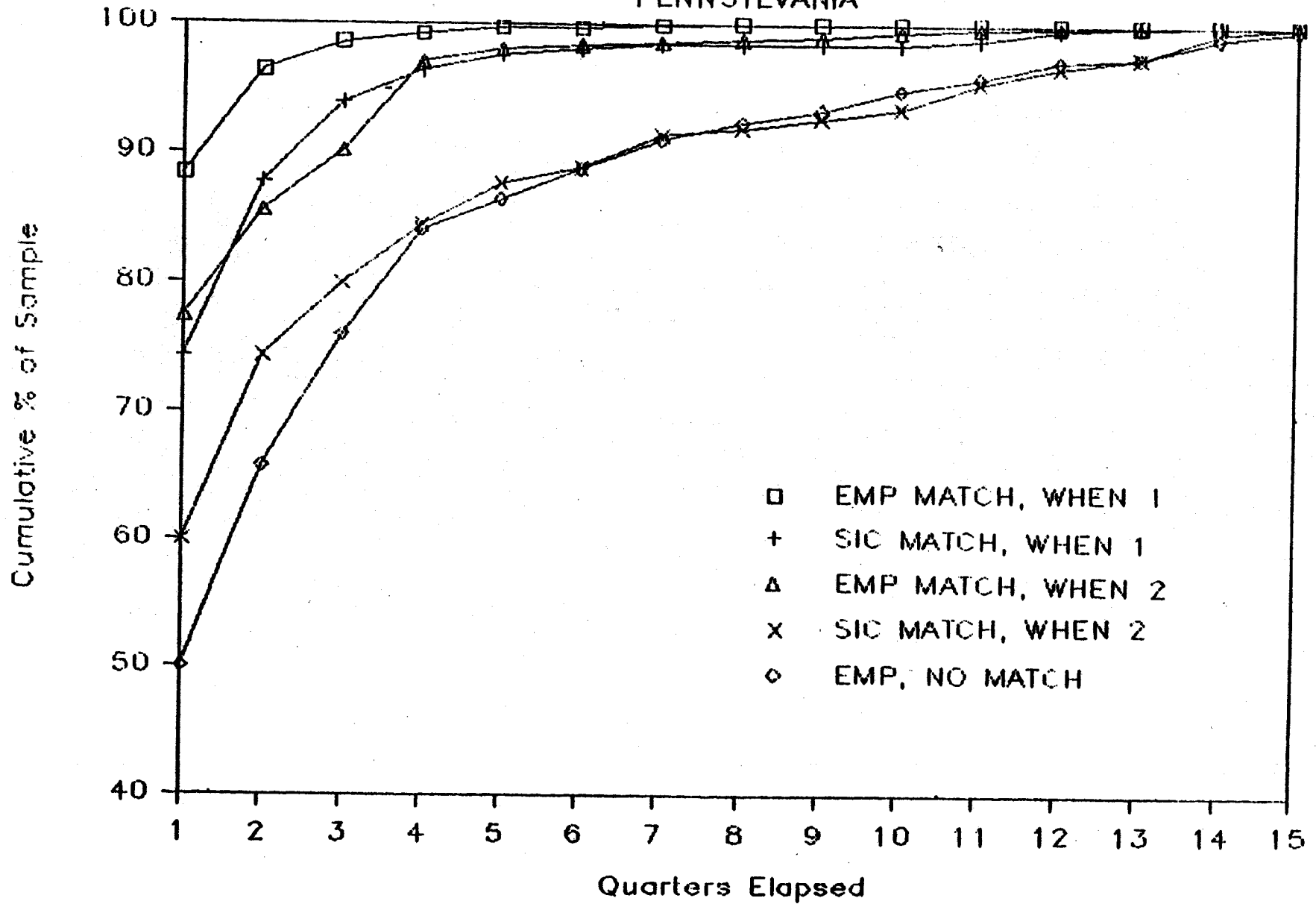


DIAGRAM 3.

TIME OF RETURN TO WORK

PENNSYLVANIA



workers separated from declining industries will return to their former employer or industry within one quarter, if they return at all.

Table 8 complements Diagrams 1, 2 and 3. Here, mean elapsed times between UI claim filing and return to covered employment ("WHEN 1") or return to a former employer or two-digit SIC ("WHEN 2") are presented by return status for each of the three states. The industry match classification of return status exhibits the greatest difference between "WHEN 1" and "WHEN 2" means, which is simply another way of emphasizing the fact that, on the average, the UI claimants did not "wait out" an opportunity to return to their former industry.

Return Sample by Earnings Loss or Gain:
Declining Industry Sample

Similar to our expectations with respect to unemployment duration, we hypothesize that the return to former employer class would have the smallest earnings loss (or largest earnings gain), followed in order by return to former 2-digit SIC industry, and return to employment outside the industry. Table 9 confirms this hypothesis for South Carolina, but rejects the hypothesis for Missouri and Pennsylvania.

Mean PREWAGE and POSTWAGE figures, and median WAGE LOSS/GAIN numbers are exhibited in Table 9. The PREWAGE mean is calculated by first recording reported covered earnings for each CWBH sample member for the four calendar quarters immediately preceding the filing of the reference UI claim. The sum of these covered earnings was then divided by the number of calendar quarters including and subsequent to the earliest record of covered earnings. This procedure was necessary because some CWBH sample members may have entered covered employment during the calendar year preceding the filing of the reference UI claim. In such cases it would be inappropriate to use a denominator value of four to calculate average covered earnings.

A similar procedure was followed in computing the value of POSTWAGE. Here, reported covered earnings for the entire period following the reference UI Benefit Year were recorded (three years for both Pennsylvania and South Carolina sample members, and four years for those from Missouri.) Again, "trailing" zero-earnings quarters were subtracted from the denominator, because some of the sample members left covered employment in the designated state during the observation period and did not return before the end of that interval. While we think these procedures offer a clearer understanding of covered earnings flows than

TABLE 8
 MEAN NUMBER OF CALENDAR QUARTERS
 ELAPSED BETWEEN CLAIM FILING AND
 RETURN TO COVERED EMPLOYMENT (WHEN 1)
 OR RETURN TO PREVIOUS EMPLOYER/INDUSTRY
 (WHEN 2), STATEWIDE DECLINING INDUSTRY CWBH SAMPLE
 POPULATIONS

	When 1 Return to Covered Employment			When 2 Return to Previous Employer/Indus		
	Missouri	Pennsylvania	South Carolina	Missouri	Pennsylvania	South Carolina
	-----	-----	-----	-----	-----	-----
TOTAL STATEWIDE DECLINING INDUSTRY CWBH SAMPLE POPULATION -----						
MEAN NUMBER OF CALENDAR QUARTERS ELAPSED	1.5	1.5	1.3	1.9	1.9	1.5
STANDARD ERROR	(.02)	(.04)	(.02)	(.04)	(.05)	(.03)
EMPLOYER MATCH -----						
MEAN NUMBER OF CALENDAR QUARTERS ELAPSED	1.2	1.2	1.1	1.5	1.6	1.2
STANDARD ERROR	(.02)	(.02)	(.01)	(.04)	(.05)	(.02)
INDUSTRY MATCH -----						
MEAN NUMBER OF CALENDAR QUARTERS ELAPSED	1.7	1.6	1.9	3.4	2.7	2.8
STANDARD ERROR	(.08)	(.10)	(.09)	(.23)	(.20)	(.16)
EMPLOYED BUT NO MATCH -----						
MEAN NUMBER OF CALENDAR QUARTERS ELAPSED	2.3	2.9	2.6	2.3*	2.9*	2.6*
STANDARD ERROR	(.08)	(.18)	(.11)	(.08)	(.18)	(.11)

*When 2 = When 1 by definition.

would otherwise be possible, the approach can be challenged. For example, movements in and out of covered employment in a given state that occurred during the observation periods, lower the mean PREWAGE and POSTWAGE figures.

The median wage gain figures offer further evidence that complex interdependencies exist among local labor market forces, industrial structure, and demographic characteristics. Notice, for example, that in Missouri and Pennsylvania the rank order of wage gain from low to high is Employer Match, Industry Match, and Employed But No Match. However, in South Carolina this rank order is reversed, with Employed But No Match exhibiting the lowest wage gain.

The PRE- and POSTWAGE comparisons in Table 9 suggest that wage loss from displacement may be influenced more by factors other than recall to a former employer or the ability to find a job in the same industry. A possible explanation for the results appearing in Table 9 may be that job or union tenure in an industry played a strong role. For example, a large proportion of the dislocated workers in South Carolina were from the textile trades. The percentages returning to the same employer or industry were highest in South Carolina, and these two return status groups had the largest wage gain. By contrast, dislocated workers in Missouri and Pennsylvania, less concentrated industrially, tended to fare better if they found employment outside the industry. Unfortunately, job tenure was not available in the CWBH database; we could not test this hypothesis.

Of course, it is possible that, although the severe downturn in textiles in South Carolina may have been expected to be permanent, it was in fact more cyclical in nature. These findings demonstrate the difficulty in identifying workers who are permanently displaced and who are likely to suffer substantial earnings loss.

VI. A SUMMARY OF FINDINGS AND CONCLUSIONS

Our objective has been twofold. First, we have attempted to estimate the differences in PRE- and POSTWAGES associated with economic dislocation, when dislocation is defined in terms of job separation from locally declining industries. Second, we have attempted to determine the relative permanence of these dislocated workers by examining the time path of their return to former employers, former industries, and other employment.

TABLE 9
 MEAN QUARTERLY COVERED EARNINGS FOR
 ONE YEAR PRIOR TO CLAIM FILING (PREWAGE),
 THREE YEARS* FOLLOWING CLAIM FILING
 (POSTWAGED, AND MEDIAN LOSS/GAIN IN AVERAGE
 QUARTERLY COVERED EARNINGS PRE- AND POST-CLAIM
 FILING, STATEWIDE DECLINING INDUSTRY CWBH SAMPLE POPULATIONS

	PREWAGE			POSTWAGE			WAGE LOSS/GAIN		
	Missouri	Pennsyl- vania	South Carolina	Missouri	Pennsyl- vania	South Carolina	Missouri	Pennsyl- vania	South Carolin
	-----	-----	-----	-----	-----	-----	-----	-----	-----
TOTAL STATEWIDE DECLINING INDUSTRY CWBH SAMPLE POPULATION -----									
		MEANS		MEANS		MEDIANS			
		-----		-----		-----			
MEAN QUARTERLY COVERED EARNINGS	\$2,500	\$3,056	\$2,196	\$2,786	\$3,082	\$2,368	+ .18	+ .07	+ .12
STANDARD ERROR	(30)	(40)	(17)	(32)	(48)	(22)	(04)	(02)	(04)
EMPLOYER MATCH -----									
MEAN QUARTERLY COVERED EARNINGS	\$2,791	\$3,327	\$2,317	\$3,023	\$3,486	\$2,635	+ .16	+ .09	+ .15
STANDARD ERROR	(32)	(52)	(19)	(39)	(57)	(23)	(02)	(02)	(01)
INDUSTRY MATCH -----									
MEAN QUARTERLY COVERED EARNINGS	\$2,017	\$3,129	\$2,039	\$2,496	\$3,446	\$2,154	+ .24	+ .13	+ .04
STANDARD ERROR	(78)	(101)	(64)	(97)	(124)	(71)	(06)	(04)	(07)
EMPLOYED BUT NO MATCH -----									
MEAN QUARTERLY COVERED EARNINGS	\$1,797	\$2,298	\$1,797	\$2,181	\$2,561	\$1,858	+ .26	+ .17	+ .01
STANDARD ERROR	(51)	(80)	(52)	(58)	(97)	(61)	(16)	(09)	(25)

*Four year post claim filing period for Missouri

While our findings with respect to pre- and post-earnings comparisons were as expected, our findings with respect to permanence to dislocation were more often different from our expectations. A brief summary of the major findings is presented below.

The major findings reported for the pre- and post-earnings comparisons were:

- o Compared to those workers who neither exhausted their UI benefits nor were terminated from a declining industry:

UI benefit exhaustees from non-declining industries earned from \$400 to \$800 less per quarter in their subsequent job.

UI benefit exhaustees from small-employment-decline (less than 5 percent) industries earned from \$500 to \$1,400 less per quarter.

UI benefit exhaustees from large-employment-decline (5 percent or more) industries earned from \$660 to \$1,800 less per quarter.

Non-exhaustees from small- and large-decline industries earned about the same per quarter.

- o Separate analyses within age groups revealed that workers over 44 fared worst, by about \$1,000 less per quarter.
- o Dislocatees whose local industry declined the first year, and then "rebounded" the second year, did no better in terms of quarterly earnings in their next job, than dislocatees whose industry continued to decline in the second year.

The major findings reported for the examination of the permanence of dislocation were:

- o Over a three to four year period, about sixty-one percent of the total three-state CWBH sample member population analyzed had returned to their previous employer; approximately another eleven percent had returned to the same two-digit SIC industry, but not to the specific employer; about twenty-three percent had returned to covered employment in the same state, but

not in the same industry; and about five percent had not returned to covered employment in the state.

- o A positive relationship between local area industry employment decline and proportion returning to a former employer or industry is observed for these three states' CWBH samples. In each of the three states return rates are higher for those who had previously been affiliated with an industry that had experienced an absolute decline in local employment during the year prior to filing of the reference UI claim, compared to return rates for those who had previously been affiliated with an industry that exhibited local employment stability or growth during this one year period.
- o about ninety percent of dislocated workers who will eventually go back to their same employer did so within one quarter of filing a UI claim. About 50 percent of dislocated workers who will eventually go back to the same industry, but not to the same employer, also returned within the first quarter.
- o A consistent pattern exists between the timing of initial return to covered employment, the timing of return to a specific former employer or industry, and return status. Those who ultimately return to their previous employer return to covered employment the soonest, followed by those who return to the previous industrial affiliation, with those who return to covered employment in a different industrial affiliation exhibiting the longest interval between UI claim filing and initial return to covered employment.
- o Those who ultimately returned to a previous employer or industrial affiliation do not "wait it out." Instead, they accept other covered employment in sufficient numbers to create a noticeable difference between the respective average time intervals between UI claim filing and return to work.

We believe that several conclusions may be made based on these findings; the conclusions have relevance for public employment and training policy.

The importance of using disaggregated micro-level data to study worker dislocation cannot be overemphasized. The findings clearly demonstrate that disaggregated data uncover different, and usually more volatile, impacts of economic dislocation.

Continued development and use of micro-level data, such as CWBH (regretably discontinued by the Department of Labor) will facilitate our understanding of local employment dynamics and the need for employment and training programs to address local employer and worker needs.

Routinely available administrative data from state UI and employment service functions can be used as a starting point by local program administrators in screening for dislocated workers most likely to need adjustment assistance. Local industry employment declines, age, elapsed duration of employment, and other administrative data may be combined with program administrators' specific knowledge of other local economic situations to target readjustment resources on workers most in need of assistance.

The intervals between UI claim filing and return to covered employment, which are exhibited in Diagrams 1, 2 and 3 offer important new evidence about the relationship between employer or industry "attachment" and the length of time it takes to reestablish oneself after involuntary interruption of employment. Of particular importance is the evidence that those who (in retrospect) are "attached" don't simply await an opportunity to return; many accept other covered employment until the opportunity to return occurs.

However, dislocation may not be as "permanent" as we initially expected. Although we screened out voluntarily unemployed workers, and those awaiting recall, the majority of unemployed workers from locally declining industries returned to their former employer, or to another employer in the same industry, within several years. On the other hand, there are still significant proportions of dislocated workers who either do not find work in the same industry from which they were displaced, or do not find work at all. These are the dislocated workers in need of adjustment assistance; the problem is one of effective and timely identification. Predicting long-term unemployment remains an elusive objective, and should be high on the list of employment and training research priorities.

A final important conclusion, of practical usefulness to program administrators, may be made from examining the time paths of return to unemployment. Program administrators should wait about three months after persons file claims for UI benefits before attempting to identify workers to be recruited into dislocated worker adjustment assistance programs. By the time one quarter has elapsed, ninety percent of those who will eventually go back to their former employer will have already

done so, and fifty percent of those who will eventually go to work for a different employer in the same industry, will have done so. While there may be arguments for trying to identify dislocated workers as soon after job separation as possible on the one hand, or to wait until UI benefit exhaustion on the other hand (e.g., six months), our results suggest that three months may be a prudent compromise.

FOOTNOTES

¹United States, Congressional Budget Office, "Dislocated Workers: Issues and Federal Options," (Washington, D.C.: July 1982).

²Marc Benedick and Judith Razlinski Devine, "Workers Dislocated by Economic Change: Is There a Need for Federal Employment and Assistance?," (Washington, D.C.: National Commission for Employment Policy August 1981).

³Paul O. Flaim and Ellen Sehgal, "Dislocated Workers of 1979-83: How Well Have They Fared?," Monthly Labor Review 108:6 (June 1985): 3-16.

⁴Arlene Holen, "Losses to Workers Displaced by Plant Closure or Layoff: A Survey of the Literature," (Arlington Va: The Public Research Institute, Center for Naval Analyses 1976).

1945

1. The first part of the report deals with the general situation of the country and the progress of the war.

2. The second part deals with the economic situation and the measures taken to improve it.

3. The third part deals with the social situation and the measures taken to improve it.

4. The fourth part deals with the political situation and the measures taken to improve it.

5. The fifth part deals with the cultural situation and the measures taken to improve it.

6. The sixth part deals with the international situation and the measures taken to improve it.

7. The seventh part deals with the military situation and the measures taken to improve it.

8. The eighth part deals with the naval situation and the measures taken to improve it.

9. The ninth part deals with the air situation and the measures taken to improve it.

10. The tenth part deals with the atomic situation and the measures taken to improve it.

11. The eleventh part deals with the space situation and the measures taken to improve it.

12. The twelfth part deals with the future of the country and the measures taken to improve it.

13. The thirteenth part deals with the conclusion of the report and the measures taken to improve it.

14. The fourteenth part deals with the appendix and the measures taken to improve it.

15. The fifteenth part deals with the index and the measures taken to improve it.

16. The sixteenth part deals with the bibliography and the measures taken to improve it.

17. The seventeenth part deals with the list of figures and the measures taken to improve it.

18. The eighteenth part deals with the list of tables and the measures taken to improve it.

BIBLIOGRAPHY

- Armington, Catherine, and Odle, Marjorie. "Small Business--How Many Jobs?" The Brookings Review (Winter 1982): 14-17.
- Baldwin, Stephen E., and Donahue, Ann. "Displaced Workers: New Options for a Changing Economy." Washington, D. C.: The National Commission for Employment Policy, February 1983.
- Bendick, Marc, and Devine, Judith Razlinski. "Workers Dislocated by Economic Change: Is There a Need for Federal Employment and Training Assistance?" Washington, D. C.: The Urban Institute, for the National Commission for Employment Policy, August 1981.
- Bendick, Marc. "Workers Dislocated by Economic Change: Toward New Institutions for Midcareer Worker Transformation." Washington, D. C.: The Urban Institute, February 1982.
- Congressional Budget Office. "Dislocated Workers: Issues and Federal Options." Washington, D. C.: n.p., July 1982.
- Crosslin, Robert L.; Hanna, James S.; and Stevens, David W. "Economic Dislocation: Toward a Practical Conceptual Approach." Prepared for the Nevada Department of Economic Security, Carson City, Nevada, September 1983.
- Crosslin, Robert L.; Reed, Gary B.; and Wandner, Stephen A. "Economic Dislocation Among American Workers." Washington, D. C.: U. S. Department of Labor, Office of the Assistant Secretary for Policy, n.d. Paper presented at the Southern Economic Association Meeting, November 1981.
- Crosslin, Robert L., and Wandner, Stephen A. "Using the Continuous Wage and Benefit History to Locate Dislocated Workers." Washington, D. C.: U. S. Department of Labor, Unemployment Insurance Service, March 1980.
- Flaim, Paul O., and Sehgal, Ellen. "Displaced Workers of 1979-83: How Well Have They Fared?" Monthly Labor Review 108/6 (June 1985): 3-16.
- Gordus, Jeanne; Jarley, Paul; and Ferman, Louis. Plant Closings and Economic Dislocation. Kalamazoo, Mich.: The Upjohn Institute for Employment Research, 1981.
- Greene, Richard. "Tracking Job Growth in Private Industry." Monthly Labor Review 105/9 (September 1982): 3-9.

BIBLIOGRAPHY

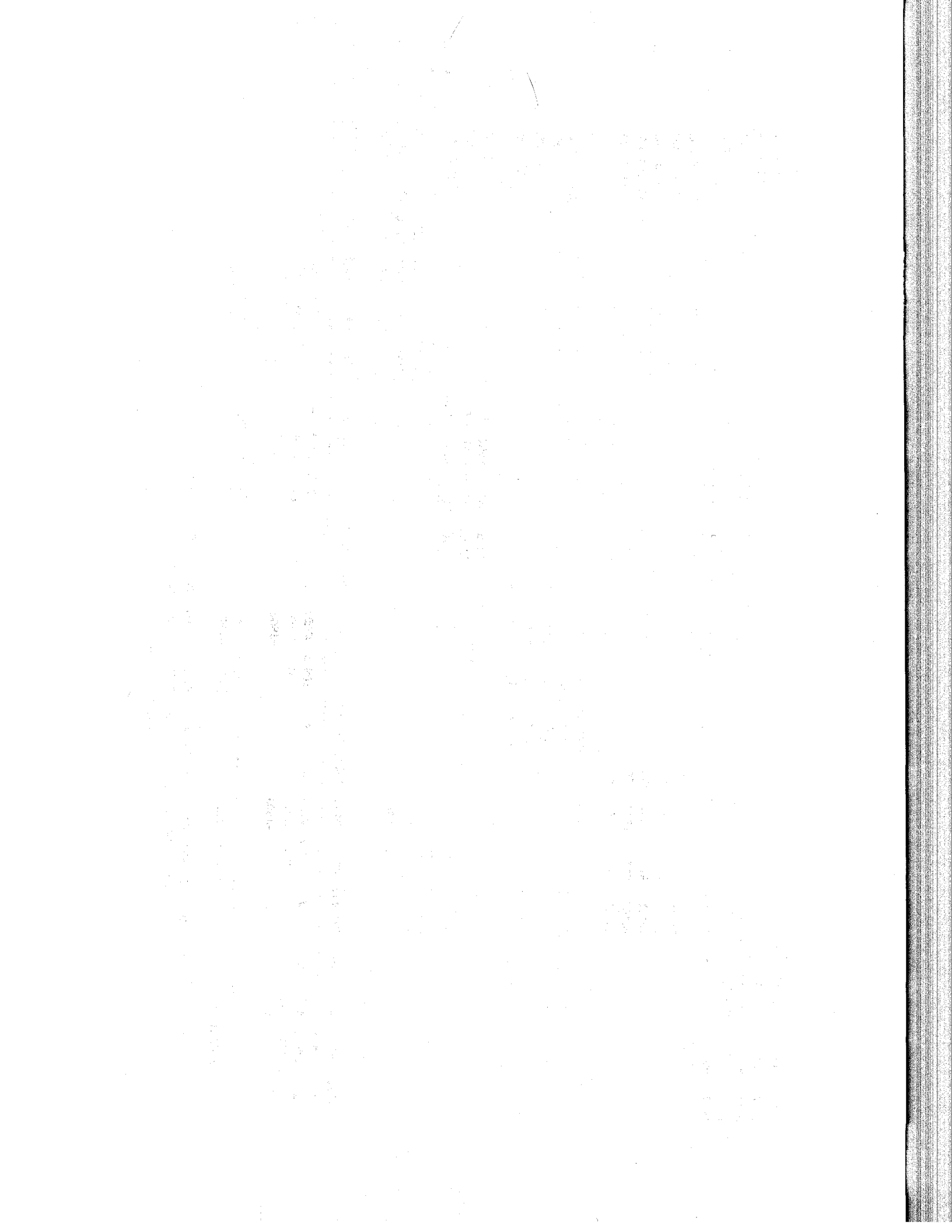
- Armington, Catherine, and Odle, Marjorie. "Small Business--How Many Jobs?" The Brookings Review (Winter 1982): 14-17.
- Baldwin, Stephen E., and Donahue, Ann. "Displaced Workers: New Options for a Changing Economy." Washington, D. C.: The National Commission for Employment Policy, February 1983.
- Bendick, Marc, and Devine, Judith Razlinski. "Workers Dislocated by Economic Change: Is There a Need for Federal Employment and Training Assistance?" Washington, D. C.: The Urban Institute, for the National Commission for Employment Policy, August 1981.
- Bendick, Marc. "Workers Dislocated by Economic Change: Toward New Institutions for Midcareer Worker Transformation." Washington, D. C.: The Urban Institute, February 1982.
- Congressional Budget Office. "Dislocated Workers: Issues and Federal Options." Washington, D. C.: n.p., July 1982.
- Crosslin, Robert L.; Hanna, James S.; and Stevens, David W. "Economic Dislocation: Toward a Practical Conceptual Approach." Prepared for the Nevada Department of Economic Security, Carson City, Nevada, September 1983.
- Crosslin, Robert L.; Reed, Gary B.; and Wandner, Stephen A. "Economic Dislocation Among American Workers." Washington, D. C.: U. S. Department of Labor, Office of the Assistant Secretary for Policy, n.d. Paper presented at the Southern Economic Association Meeting, November 1981.
- Crosslin, Robert L., and Wandner, Stephen A. "Using the Continuous Wage and Benefit History to Locate Dislocated Workers." Washington, D. C.: U. S. Department of Labor, Unemployment Insurance Service, March 1980.
- Flaim, Paul O., and Sehgal, Ellen. "Displaced Workers of 1979-83: How Well Have They Fared?" Monthly Labor Review 108/6 (June 1985): 3-16.
- Gordus, Jeanne; Jarley, Paul; and Ferman, Louis. Plant Closings and Economic Dislocation. Kalamazoo, Mich.: The Upjohn Institute for Employment Research, 1981.
- Greene, Richard. "Tracking Job Growth in Private Industry." Monthly Labor Review 105/9 (September 1982): 3-9.

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APPENDIX

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APPENDIX TABLE 1
 STATISTICS FOR MODEL OF POST-DISPLACEMENT EARNINGS,
 SAMPLE SIZES, MEANS, COEFFICIENTS OF DETERMINATION (R SQUARES), AND SIGNIFICANCE VALUES

STATE	MISSOURI				NEVADA				PENNSYLVANIA				SOUTH CAROLINA				WASHINGTON			
	N	POST- WAGE	ADJ	F	N	POST- WAGE	ADJ	F	N	POST- WAGE	ADJ	F	N	POST- WAGE	ADJ	F	N	POST- WAGE	ADJ	F
		MEAN	R			SQR	MEAN			R	SQR			MEAN	R			SQR	MEAN	
STATE	3596	2291	.43	88.88	3467	2718	.38	98.47	3650	2730	.42	188.29	4894	2216	.40	294.64	3933	5779	.09	28.40
ST. LOUIS	2444	2400	.43	47.58																
KANSAS CITY	2536	2422	.56	36.33																
BOS MO	1923	1871	.37	15.13																
LAS VEGAS					2232	2825	.43	7964												
RENO					797	2515	.26	14.18												
BOS NV					438	2544	.30	10.21												
PITTSBURGH									725	3142	.37	28.92								
REASING									187	2735	.57	20.30								
JOHNSTOWN									132	2829	.37	6.99								
PHILADELPHIA									830	2630	.35	30.90								
BOS PA									1772	2600	.47	144.72								
ANDERSON													357	2205	.39	17.53				
CHARLESTON													323	2421	.45	20.84				
COLUMBIA													299	2208	.36	13.01				
GREENVILLE													1035	2295	.36	42.37				
BOS SC													884	2156	.45	171.18				
SEA-TAC-BRE																	1796	5943	.09	12.61
SPOKANE																	285	4715	.06	2.15
OLYMPIA																	115	6067	.14	2.20
YAKIMA																	220	4997	.03	1.47
BOS WA																	1513	5878	.13	15.93

APPENDIX TABLE 2
 STATISTICS FOR MODEL OF POST-DISPLACEMENT EARNINGS BY AGE GROUP
 SAMPLE SIZES, MEANS, COEFFICIENTS OF DETERMINATION (R SQUARES), AND SIGNIFICANCE VALUES

	MISSOURI				NEVADA				PENNSYLVANIA				SOUTH CAROLINA				WASHINGTON			
	N	POST- WAGE MEAN	ADJ R SQR	F	N	POST- WAGE MEAN	ADJ R SQR	F	N	POST- WAGE MEAN	ADJ R SQR	F	N	POST- WAGE MEAN	ADJ R SQR	F	N	POST- WAGE MEAN	ADJ R SQR	F
STATE	3596	2291	.43	11.88	3467	2718	.38	98.47	3650	2730	.42	188.29	4894	2216	.40	294.64	3933	5779	.09	28.40
AGE 20-24	986	1743	.21	10.08																
AGE 25-44	1848	2484	.45	54.08																
AGE 45-54	486	2815	.54	23.71																
AGE 55-67	276	2233	.45	9.70																
AGE 20-24					748	2203	.18	9.98												
AGE 25-44					1868	2784	.21	67.50												
AGE 45-54					501	3020	.42	20.66												
AGE 55-67					350	3031	.37	11.81												
AGE 20-24									718	2251	.29	14.66								
AGE 25-44									1779	2939	.39	102.56								
AGE 45-54									657	2903	.50	54.94								
AGE 55-67									435	2435	.50	37.84								
AGE 20-24													1008	1881	.28	40.51				
AGE 25-44													2685	2315	.44	208.31				
AGE 45-54													722	2383	.46	62.34				
AGE 55-67													140	1851	.35	7.93				
AGE 20-24																	980	4274	.04	5.07
AGE 25-44																	2176	6145	.07	16.91
AGE 45-54																	442	7228	.13	6.89
AGE 55-67																	62	6322	.16	2.08

APPENDIX TABLE 3
 STATISTICS FOR MODEL OF POST-DISPLACEMENT EARNINGS (WORKERS FROM DECLINING
 INDUSTRIES ONLY, INDUSTRY DECLINED OR REBOUNDED THE FOLLOWING YEAR):
 SAMPLE SIZES, MEANS, COEFFICIENTS OF DETERMINATION (R SQUARES), AND SIGNIFICANCE VALUES

	PENNSYLVANIA				SOUTH CAROLINA				WASHINGTON			
	N	POST- WAGE MEAN	ADJ R SQR	F	N	POST- WAGE MEAN	ADJ R SQR	F	N	POST- WAGE MEAN	ADJ R SQR	F
STATE	3650	2730	.42	188.29	4894	2216	.40	294.64	3933	5779	.09	28.40
GROUP I	101	3216	.42	8.29								
GROUP II	875	3237	.41	63.20								
GROUP III	28	2012	.53	4.15								
GROUP IV	181	2221	.11	3.50								
GROUP I					1780	2375	.48	186.56				
GROUP II					1257	2444	.35	78.08				
GROUP III					205	1343	.09	3.32				
GROUP IV					196	1529	.20	6.47				
GROUP I									699	5814	.09	8.05
GROUP II									969	7255	.15	18.25
GROUP III									216	3940	.07	2.63
GROUP IV									257	4642	.04	2.12

GROUP I - NO EXHAUST, SMALL DECLINE FOLLOWING YEAR.
 GROUP II - NO EXHAUST, LARGE DECLINE FOLLOWING YEAR.
 GROUP III - EXHAUST, SMALL DECLINE FOLLOWING YEAR.
 GROUP IV - EXHAUST, LARGE DECLINE FOLLOWING YEAR.

THE IDENTIFICATION OF DISLOCATED WORKERS: ACTUAL PRACTICE AND
RECOMMENDATIONS FOR IMPROVED PROCEDURES

James S. Hanna

The American economy has undergone a number of structural changes in recent years in response to a variety of forces including rapidly changing technologies and increasing global competition. While the overall result of these changes has been positive, they have not been without cost. The negative aspects have manifested themselves in industries that have been forced to shut down or cut back significantly, and in the employees laid off from those industries. For many of these individuals with a long history of employment, finding comparable work has proven to be difficult.

Estimates of the number of such individuals throughout the United States vary anywhere from one to twenty percent of the unemployed (Bendick and Devine, 1981; Congressional Budget Office, 1982; Crosslin et al, 1983, 1984; BLS, 1984). In perhaps the most definitive study, the U.S. Bureau of Labor Statistics estimated that between 1979 and 1984, 11.5 million American workers lost their jobs because of plant shutdowns or relocations, rising productivity, or shrinking output. Of these 11.5 million workers, 5.1 million had an employment attachment for at least three years and by BLS's definition, were classified as displaced workers. In 1984, 1.3 million of these individuals were still unemployed, while another 730,000 had dropped out of the labor force and were no longer counted as unemployed. Of those who found new jobs, at least half took cuts in earnings.

While there have been a variety of programs in place for some time to assist these individuals (e.g., unemployment insurance, employment services, special trade adjustment programs, etc.), none have specifically focused on the particular problems and needs of those displaced due to trade or technological factors to the degree necessary to provide major adjustment services. In an attempt to fill this void, Congress created a special title (Title III) within the Job Training Partnership Act of 1982 (JTPA) to deal with what was termed Dislocated Workers (DW). In FY 1984, the first year of JTPA implementation, almost 10 percent of the total JTPA allotment or \$240 million was allocated for this purpose.

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Title III calls for the program to be operated by the state JTPA entities and their Service Delivery Areas (SDAs). The states and SDAs may in turn contract with nonprofit, public, or private for-profit organizations to operate the program, or they may opt to operate it themselves. Using monies that are allocated on the basis of a formula, program operators are given the responsibility for identifying dislocated workers and providing adjustment services based on the following guidelines:

Each State is authorized to establish procedures to identify substantial groups of eligible individuals who (1) have been terminated or laid off or who have received a notice of termination or layoff from employment and are eligible for or have exhausted their entitlement to unemployment compensation and are unlikely to return to their previous industry or occupation; (2) have been terminated or have received a notice of termination of employment as a result of any permanent closures of a plant or facility; or (3) are long-term unemployed and have limited opportunities for employment or re-employment in the same or a similar occupation in the area in which such individuals reside, including any older individual who may have substantial barriers to employment by reason of age.

In spite of the magnitude of the problem and the latitude the states have in defining dislocated workers, there have been problems in spending allotted monies. In Program Year 1984, the first year of operation, \$187 million went unexpended and was carried over into the following program year. Low spending was behind an unsuccessful White House move to rescind \$100 million of the \$224 million FY 1985 allocation and the fact that the Labor appropriation bill signed by the President for FY 1986 calls for only \$100 million for Title III (Employment and Training Reporter, January 15, 1986).

More recently, the administration's budget for 1987 recommended dropping the direct funding of state programs using a formula and instead proposes providing these monies to the Secretary of Labor for distribution at his discretion. (Presently, Title III allows for up to 25 percent to be allocated by this means.) While speculation, it seems obvious that there is some dissatisfaction in the Administration as to the manner in which the states are running DW programs.

In addition to the spending problem, another possible concern may be the methods program operators are using to identify dislocated workers. While some data are available on

program outcomes, there is a dearth of information on how program operators are making the crucial decisions as to who qualifies for inclusion in a DW program. Considering the fact that it has been estimated that no more than five percent of the dislocated workers are currently being served by the DW program ("Technology and Structural Unemployment," Office of Technology Assessment, 1986), it would seem appropriate that the identification process select only the most needy.

The purpose of this paper is to address the identification issue, with particular emphasis on the use of the unemployment insurance system and its administrative data bases. This emphasis stems from the obvious connection the dislocated worker program has with the UI program not only being explicitly mentioned in Title III, but also in view of the important role the UI system plays in dealing with unemployed workers.

The Identification Issue

When most people think of dislocated workers, they probably have a vision of individuals unemployed as a result of such things as the closing of a major steel mill or the shutting down of a mine in the rural west. While such events garner considerable media attention, limited evidence indicates that the rate of job dissolution due to plant closing is relatively small (Robert Meyer, "Structural Change and Job Dislocation," The Brookings Institution, 1984). A more important source stems from such things as layoffs and phased reductions wherein the firm in question remains in business. While most of these probably occur when the firm is experiencing an overall employment decline, they can certainly occur during employment expansions as well.

The fact that there is considerable job dissolution in the American economy is not surprising when one considers its openness and vitality. To survive economic competition, both from within our borders and from foreign economies, firms must constantly adapt or incorporate new technologies and production techniques, eliminate unprofitable ventures, etc. Unfortunately, this process sometimes results in unemployment and the individuals affected, as a result of a particular set of individual and labor market characteristics, sometimes find themselves in a situation where their skills are no longer in demand. While not denying the economic hardships created by major plant closing, it should be recognized that economic dislocation occurs throughout the economy and major plant closings are only a more visible manifestation of the problem.

Lastly, it should be noted that not all the victims of a major plant closing are dislocated in the Title III sense. As

with normal unemployment, a certain proportion of those affected are able to manage without any additional public assistance (i.e., over and above such things as unemployment insurance, etc.). In past studies, other researchers have concluded that classification as a "dislocated worker," based on such things as age and being from an industry in decline, by itself is not a good indicator of whether a person will be severely impacted by unemployment (Marc Bendick and Judith Razlinski Devine, "Workers Dislocated by Economic Change: Is there A Need For Federal Employment and Training Assistance?", Urban Institute, 1980). The Meyer study came to a similar conclusion that it is probably infeasible to target aid toward dislocated workers as soon as they become unemployed. He (Meyer) concluded that our ability to predict who will experience large financial losses is too weak to allow reliable predictions.¹

Personal and Economic Characteristic

As noted by Meyer in a review of various studies of economic dislocation, age and job tenure are major factors that increase the financial costs of a permanent layoff. In a summary of the findings of 27 plant closings reported in 20 studies, Gordus, Jarley and Ferman concluded that these studies tend to show that dislocated workers from plant closings are usually older, have lower educational attainment, and are white and male dominated ("Plant Closings and Economic Dislocation," The Upjohn Institute for Employment Research, 1981). The authors suggested that the findings with regard to minorities probably resulted from the tendency of researchers to focus on heavy manufacturing industries.

Using unemployment insurance records for two states, Crosslin, Hanna and Stevens found that industry decline (industry of the unemployed) and the rate of such decline was also a factor in explaining the financial costs of a permanent layoff. Compared to non-exhaustees from non-declining industries, the study found the following with respect to post-UI-benefit-year earnings:

¹This observation does not discount the need for developing a means of early identification. While past research has not been overly successful in this area, the case is not closed. In fact, research is presently underway in New Jersey in the form of a large scale demonstration project funded by the Employment and Training Administration in which part of the the research agenda is directed at this particular problem.

UI benefit exhaustees from non-declining industries earned between \$300 and \$400 less per quarter.

UI benefit exhaustees from industries exhibiting from zero to four percent employment decline earned from \$500 to \$1000 less per quarter.

UI benefit exhaustees from industries exhibiting a five percent or greater employment decline earned between \$1,700 and \$2,200 less per quarter.

Non-exhaustees from industries experiencing a zero to four percent employment decline earned wages of about the same magnitude.

Non-exhaustees from industries experiencing a five percent or greater employment decline earned between \$500 and \$1,000 less per quarter.

Separate analyses within age groups produced similar results, with workers over 45 years of age faring worst.

UI exhaustion status also proved to be a highly significant factor in explaining postlayoff declines in earnings in the above study. This finding supports earlier comments regarding the ability to determine the severity of dislocation at the time of the layoff.

Tenure on the job has also been shown to be a significant factor in explaining the degree of wage loss following dislocation. ("Dislocated Workers: Issues and Federal Options," Congressional Budget Office, 1982). Related to the tenure issue is the "affluence" factor. As noted in the previously mentioned study by Bendick and Devine: "to the extent that dislocated workers do experience unusually long periods of unemployment, the causes of this long duration generally reflect past and present affluences rather than past or present distress". At work here are such things as home ownership, family ties, severance payment, etc., which tie the unemployed individual to a particular locale and restrict his job search.

What the above studies indicate is that the severity of dislocation, as determined by postlayoff hardships, is largely the result of a combination of personal characteristics and industrial attachment. Personal characteristics that continue to show up in the various studies are such things as age and educational level. Exacerbating these individual characteristics are tenure on the job and prior attachment to an industry that is declining. Geographic isolation combined with the relative size

of the industry in decline is undoubtedly also an important factor. In addition, while all of these factors play a role, the evidence seems to support the notion that some confirmation of postlayoff difficulty (e.g., a prolonged period of unemployment) be required before an individual can be classified as a dislocated worker and limited resources are expended.

Overview of UI System

While perhaps diverse in the variety of factors that result in unemployed individuals' being classified as dislocated workers, the one commonality that nearly all of these individuals share is some association with the federal-state unemployment insurance system (UI). Created in 1935 with the passage of the Social Security Act for the purpose of providing temporary income support to individuals who are unemployed through no fault of their own, the system has gradually evolved to where today 97 percent of the nation's workers are employed by employers covered under an approved program.² The program is operated as a federal-state system, whereby the federal government provides the funding and overall direction, and the states operate the programs.

Coverage and Eligibility

While coverage is nearly universal, not all unemployed individuals receive benefits. In fact, the percentage has dropped significantly in recent years and is now in the neighborhood of one-third. Behind this drop are such things as the demise of federally funded extensions in benefit duration, plus the severe financial difficulties states experienced in the Seventies and Eighties. The first factor left many of the long-term unemployed without financial support once their state-funded benefits expired (generally 26 weeks), while the second resulted in tougher qualification and disqualification measures.

In spite of the downward trend in the above percentage, it appears the vast majority of the dislocated, especially when one incorporates some measure of job tenure, are at one time or another involved with a state unemployment insurance program.

To qualify for benefits under a federal-state UI program, an individual must meet what are termed "monetary and nonmonetary"

²The major areas excluded from coverage are the self employed, unpaid family workers, most domestics, and individuals employed in small agricultural concerns.

conditions. While no two state UI programs are identical, they all require a certain level in earnings in what is referred to as the individual's base year. This is generally defined as the first four of the prior five calendar quarters. Using the State of Nevada as an example, an individual is monetarily eligible if the following condition is met:

He has within his base period been paid wages from employers equal to or exceeding one and one-half times his total wages for employment by employers during the quarter of his base period in which his total wages were highest.

If dislocation is defined along the lines requiring some long-term attachment to the labor force, then nearly all dislocated workers would be eligible from a monetary standpoint.

While the monetary conditions described above are designed to ensure that the claimant has some attachment to the work force, the nonmonetary effects are there to make sure that claimants are unemployed "through no fault of their own." Part of the initial claim process requires the claimant to specify the reason for unemployment. Reasons usually considered are such things as layoffs, quits, firings, etc. Dislocated workers would fall into the layoff category and as such would be eligible from a nonmonetary standpoint as well.

Electronic Data Capture

An important aspect of state UI systems that impacts on the identification of dislocated workers is the electronic capture of substantial data during the application process and subsequent benefit period. Individual data elements typically captured include the following:

- Name
- Address
- Social Security number
- County of residence identifier
- Base period earnings (also included here would be a breakdown of the amount of earnings by employer, quarter, and area)
- High quarter earnings within the base year
- Date of birth
- Sex
- Dictionary of Occupational Title code (designating the claimant's occupation)
- Eligibility status
- Potential duration of UI benefits
- Date of initial claim
- Date and amount of all subsequent benefit payments

In addition to the claimant data, the UI automated files contain a wealth of information on employers. Resulting from the taxing systems and complemented by supplemental data collection efforts (the BLS funded labor market information programs), detailed quarterly data on employment and payrolls down to the four digit Standard Industrial Code (SIC) is available at the county level.³

Data is produced for individual employers, though confidentiality becomes an issue if this data is used outside the employment security system.

Potential Uses of the UI System

There are three basic means by which the UI system can potentially assist in the identification of dislocated workers. These are (1) direct identification and referral by UI interviewers, (2) the use of the Bureau of Labor Statistics' Permanent Mass Layoff and Plant Closing (PMLPC) report, and (3) the development of screens and the subsequent running of these screens against the UI administrative data bases.

UI Interviewers

The "unemployment office" is normally the first stop for most of the unemployed wherein the process of determining eligibility generally reveals the nature of the job separation and whether or not the claimant has any hope of returning to his prior job. In addition to the characteristic data that is captured on the claim form itself (i.e., age, education, occupation, etc.), the UI interviewers informally pick up considerable information regarding the local economy and status of particular firms. Combined with information on the number of weeks of benefits received since layoff (a confirmation of postlayoff difficulty), the UI interviewers potentially have the necessary information with which to make an objective determination as to dislocation status. The problem with this approach, however, is that of human limitations in keeping track of the various variables and operational difficulties in obtaining factual information on such things as the employment trends of particular industries.

³The hard copy report of this information is called the Report on Employment, Wages and Contributions or more commonly, the ES 202.

Permanent Mass Layoff and Plant Closing (PMLPC) Report

The PMLPC had its genesis during the height of concern over the dislocated worker issue. In response to the absence of information on plant closing and layoffs, Congress required, through the JTPA Act, that the Secretary of Labor develop and maintain statistical data relating to permanent mass layoffs and plant closings. The program is just coming on line and it is anticipated that 41 states will be operational at the end of FY 1987.

What PMLPC requires is that state employment security agencies develop a process which captures both initial and additional (subsequent claims) by last employer. A permanent mass layoff or plant closing is defined as one in which at least 50 individuals have filed claims against an establishment in a three-week period, with the separation expected to last more than 30 days. To determine the expected duration of the layoff, state agency staff contact the employer by phone. The results of this process are reported quarterly to the Bureau of Labor Statistics and include, among other things, the names of the establishments meeting the criteria for a permanent layoff or plant closing, addresses, SIC codes, and separation information obtained through employer contact.

While the PMLPC is designed to provide input into a national reporting system, it can be modified at the state level to provide a more useful operational tool for the identification of plant closings and mass layoffs. As it now stands, funding is only provided for the personal contact of firms when the number of individuals filing against a specific firm is 50 or more. However, most states, especially smaller ones, will probably want to reduce the level below 50.

While not denying the value of the PMLPC program as an economic indicator and as a means of targeting various resources in the hopes of minimizing the impact of plant closings and major layoffs, it appears to have several limitations as a means to identify dislocated workers. Its primary focus on plant closings and layoffs of larger firms would automatically exclude those individuals formerly employed in concerns that did not meet the eligibility level (i.e., 50 or more). In addition, attention to the firm may result in an overlooking of the various personal and industrial characteristics that past research has shown to be associated with postlayoff difficulties. While it is certainly possible to build these factors into an identification strategy tied to the PMLPC program, it is difficult to visualize any advantage of such an approach over a systematic use of the UI administrative data bases. At best, PMLPC could be modified to

provide a subset of the target population identified through the use of a comprehensive set of screens applied to the UI administrative data bases as discussed in the following section.

Administrative Screens

The last approach, the use of administrative screens, appears to overcome the limitations of both the UI interviewer and the PMLPC approaches. The use of administrative screens is essentially the automation of the process described above with respect to the use of the UI interviewers. Its distinct advantage over the use of the PMLPC program is that it doesn't have a size limitation as its level of analysis is the individual claimant.

The theoretical justification for developing a set of screening criteria was noted early in this paper. In addition, the work of Crosslin, et.al., demonstrated that a combination of individual factors such as age, UI status, prior industry attachment were important predictors of how an unemployed individual would fare in the future. The study concluded:

We believe that dislocated workers "in need" of adjustment assistance, can be identified by carefully analyzing employment dynamics at the sub-state level, within sub-industry classifications. Knowing a terminnee's UI entitlement, status, rate of recent local industry employment decline, age and other personal characteristic will enhance program administrators' abilities effectively to target training and other adjustment resources allocated to dislocated workers.

Combining the above findings with the other research on the identification issue, suggests a set of screens as follows:

- age (e.g., 44 years of age and over).
- educational level.
- tenure on the job.
- postlayoff confirmation of difficulty (e.g. 10 or more weeks of UI).
- attachment to a industry in decline.

However, it should be noted at the outset that not all states presently have all of the necessary information for the various screens. In some cases this is due to either the absence of such information on the claims form, or the failure to electronically capture this information if it is in fact obtained from the claimant. Education is probably the one variable where this occurs most frequently. Tenure with the employer, especially if it is long term (e.g., three years) is another

possible troublesome area and one which may have to be estimated with proxies. While most states potentially have the capability to develop such data, the cost and complexity of doing so (using the existing data files) would probably preclude them from so doing.⁴

A reasonable solution may be to limit tenure to the base period, which should be feasible for the majority of states. An optimum solution for both the problems of missing data and tenure would be to add questions addressing these areas to the application form and allowing for electronic capture.

In addition, while the use of the above screens is conceptually straightforward, the actual use in nearly all states would require the merging of data from different files within the UI system. While requiring some programming initially, once operational the only significant costs would be that of computer time. While definitive estimates are not available, the ongoing costs associated with the use of automated screens would appear to be considerably less than the other two approaches.

One additional cost-saving benefit that derives from the use of the automated UI files results from the fact that the claimant's current address is a data element. What this provides is a potentially automated means of contacting individuals selected as a result of the screening process for program participation.

Results of State Questionnaire

In order to determine how the various program operators are presently identifying dislocated workers and if the UI systems and their administrative data bases were being employed, a questionnaire was sent to all 51 state contacts (including Puerto Rico) for the Dislocated Worker program. While perhaps more specific information could have been obtained by surveying the 600 plus SDAs, time did not permit it. In any event, it was felt the state contacts would have general information which would be of value. In addition, the research divisions of the state

⁴Over forty states operate what is called a "wage reporting" system and have the potential to develop long term tenure data. The remaining states are in the process of converting their systems to wage reporting and will have done so by 1988.

employment security agencies were also contacted as another source that would provide knowledge about the use of the state UI files.

Background Information

Forty eight of the fifty one states (including Puerto Rico) contacted returned the questionnaire (copy in appendix). The responses indicated that in 17 states the DW program was operated by a single entity, which in 12 cases was the state employment security agency (normally the job service) or an organization which included ES. In the remaining instances the designation went to a diverse number of organizations which included the following:

- Employment security agencies
- Individual service delivery areas (SDAs)
- AFL-CIO organizations
- State resource centers
- Community colleges
- OJT vendors
- Private for-profit and nonprofit organizations
- Iron Workers Union
- Human resource agencies
- Department of Aging
- Associated General Contractors
- Operating Engineers
- University system
- Regional Planning Commission
- Department of Education
- Department of Vocational Education
- Labor unions
- JTPA IIA Administrative Entity
- Alcoholic Rehabilitation Agency
- Economic Opportunity Organization
- Community based organizations
- United Auto Workers
- Community Office of Regional Affairs

It was interesting to note that in spite of the reductions in funding nationally, eight states anticipated planned enrollments to be higher in PY 1986 (over PY 1985), another six saw little or no change, while 29 foresaw a decrease. (The remaining states were unsure.)

A perhaps more startling finding, especially in view of the criticism that the states were not able to spend their allotments, was the fact that only four states reported any difficulty in identifying dislocated workers in PY 1985. In PY 1986, the number anticipating difficulty dropped to two.

Identification

Respondents were asked to rank, in order of importance, the major means by which dislocated workers were presently being identified. The number of items ranked first by the respondents are listed below:

	<u>Number of First Rankings</u>
Notification of plant closings or layoffs by unions, employers, etc.	14
Individual application as a result of outreach activities or promotional efforts	12
Referral by Employment Service	12
Media announcement of plant closing or layoff	10
Initial detection through some use of the Unemployment Insurance system	6
Other	3

Note: Rankings exceed the number of returns as several states ranked various categories equally.

Of particular interest to this paper is the limited use of the unemployment insurance systems. However, while only six states indicated that it was the major method used in the identification process, another 26 states indicated that, while not the primary means of identifying dislocated workers, it was being used in some fashion or another.

Those using the UI system either as a primary or secondary source for identification were roughly split between having the interviewers make referrals (17) or using some type of screen applied to the automated UI files (12). If the UI interviewers were used, they normally referred potential dislocated workers to ES where they were furthered interviewed to determine their eligibility.

The most common approach for states using some type of automated process was to screen for individuals who had drawn a certain number of UI checks (i.e., 10 to 15) for follow up. Other approaches included the screening of individuals who had worked for firms that had been noted as undergoing a layoff or closure. In the case of two states, this approach was expanded to target on industrial classifications that had been determined

to be having difficulties. Another state combined the number of weeks of UI drawn (15) with an age screen (45 and older) to produce a potential list of dislocated workers. These individuals in turn were contacted by mail.

Only five states indicated they used the PMLPC program which is not really surprising in view of its newness and the fact it is fully operational in only a limited number of states. There were several comments to the effect that it would be used when available, or that it was presently being considered.

In general, states nearly always used a variety of methods in the identification process. Only one state indicated that it used a single method, while on average slightly over four means were being utilized.

Reasons for not using UI

The major reasons given for not using UI data are as follows:

Existing identification methods were adequate	9
Employed a pre-layoff targeting strategy	5
Confidentiality problems with UI data	4
Cost of accessing UI data	2

The following quote generally summarizes the responses under response one:

Marketing efforts and outreach have been well received. Enrollment goals are being maintained with current efforts. With reduced allocations, we see no reason to change recruitment efforts.

Considering the fact that few respondents indicated any difficulty in identifying dislocated workers, the above is not surprising. This is especially true in PY 1986 where reduced funding levels tended to elicit comments such as "we have more dislocated workers than money to serve them."

Five states indicated that they utilized a pre-layoff strategy for targeting dislocated workers. In these instances, the general comment was that UI data was after-the-fact and consequently of little or no value.

The fact that some state DW programs ran into confidentiality issues with regard to the release of UI data was expected, as all states have some type of confidentiality provision regarding this information. (Note: The confidentiality provisions would not apply in the 12 states where

the program was operated by the employment security system.) These provisions tend to be similar as all are based, to some degree, on model legislation provided when the state programs were enacted during the 1930s. Using Nevada's as an example:

Except as otherwise provided in this section, information obtained from any employing unit or person pursuant to the administration of this chapter and any determination as to the benefit rights of any person is confidential and may not be disclosed or be open to public inspection in any manner which would reveal the person's or employing unit's identity.

However, the law goes on to provide certain exceptions as follows:

Subject to such restrictions as the executive director may by regulation prescribe, such information may be made available to any agency of this or any other state, or any federal agency, charged with the administration or enforcement of an unemployment compensation law, public assistance law, workman's compensation or labor law, or the maintenance of a system of public employment offices, or any state or local agency for the enforcement of child support, or the Internal Revenue Service...

It would appear that a liberal interpretation of the term "public employment offices" would allow for the transfer of claimant information to Title III providers. While speculating on the exact language of other state laws, it appears that this interpretation is not always applied.

Other uses of the UI system

Lastly, 26 states indicated they made other uses of the UI system with the most common (13) being some type of verification that DW participants were drawing UI. This stems from the matching provisions in Title III and the fact that UI benefits can be counted for up to 50 percent of the required match. The only other significant use reported (7) was the use of UI data for the allocation of DW monies to substate levels.

Summary

Perhaps the one major observation that can be reached from the above survey is that the existing identification procedures probably are not targeting limited DW resources as effectively as they might if a more structured use of the UI system and its data bases were employed. The flexibility given the states, in not

only defining dislocated workers but also who administers the program, may be the primary source of the difficulty. The myriad of organizations which are actually running the programs would seem to guarantee that the actual processes and definitions would vary considerably, and also that they would tend to follow the orientation of the program operator. Examples of the latter would be programs that were operated by unions or by management organizations. The diversity of program operators would also ensure an unfamiliarity with the UI system and a hesitancy to use it. The unfamiliarity that many of these entities have with the UI system undoubtedly also contributed to the situation as does "turf" and confidentiality issues from the standpoint of the employment security system.

The fact that few states reported any difficulties in identifying dislocated workers does not necessarily imply that an efficient identification process is in place. The real issue is whether or not resources are being targeted to those individuals most in need, and not to dislocated or unemployed workers in general. The tendency to rely on such sources as unions, employers and the media combined with the apparent absence of postlayoff confirmation certainly raises some questions as to the efficacy of the present identification process. In addition, the definite tendency to focus on larger firms would exclude many individuals who may be facing severe reemployment problems.

Conclusion

The intent of this paper was to examine the existing identification methods being used by DW program operators and to discuss the potentials of utilizing the UI system to a greater extent. In doing so, it became apparent that the existing procedures and practices made limited use of the UI system, and were generally not based on any systematic approach to targeting those dislocated workers facing the most difficulties. Given the past research on economic dislocation and the potential capabilities of the UI systems, there is certainly strong justification as to more systematic use of the UI data base.

In addressing the question of how the UI system could be used in this process, it seems clear that the greatest potential lies in the use of various screens applied to the UI administrative data bases to target those individuals who have the greatest probability of facing postlayoff difficulties. The advantages of this approach are twofold: in the first instance the existing UI data usually meets all the objective criteria for identification previously noted from past research (i.e., tenure, age, industry decline, education, post-layoff confirmation or

difficulty, etc.), and secondly it is normally accessible through automated means. What this means is that the identification process can be approached through an objective and cost-efficient means.

As noted earlier, however, the use of this process is limited and it is not being used anywhere to the degree envisioned above. This is not surprising as the "looseness" of the Title III legislation as to both who operates the Title III program and who these services should be provided to would certainly seem to be factors working against it. Additional "structural" barriers are such things as the degree of automation in some states, confidentiality provisions, the present absence of certain data elements (e.g., not all states collect education data), cost consideration and turf issues. On the other hand, it should be recognized that a number of states are using automated screens to some degree and their use will probably increase as program operators become more aware of the capabilities of the UI system.

In addition, it would seem that the Employment and Training Administration of the U. S. Department of Labor could play a significant role in making program operators aware of how the UI system could be used and encouraging its use. At the same time, ETA could also encourage state employment security agencies to make that data available. While the federal role to date has been basically one of "hands off," such a role as described above would certainly seem to be an appropriate one.

In conclusion, the magnitude of the dislocated worker problem in this country is such that it is clear the identification process should be a key component in any program, and that identification should be approached in an objective and systematic manner. Of all of the methods considered in this paper, both those being used by program operators and those potential uses of the UI systems that were discussed, the use of some set of screens applied against the UI data base clearly seems to be the optimum approach. This is not to say it should be the only approach, as in some instances limitations in UI coverage will produce gaps, but that it should form the connerstone of the identification process.

State-----

IDENTIFICATION OF DISLOCATED WORKERS
THE ROLE OF STATE UNEMPLOYMENT INSURANCE (UI) SYSTEMS

1. Is your Title III program operated by a single entity?
Yes-----
No-----
If yes, who is the operator-----
If no, who are the various entities-----

2. What are your planned enrollments for PY 1986?-----
3. How do the above planned enrollments compare with PY 1985?
Higher-----
About the same-----
Lower-----
4. Did you experience any difficulty in identifying dislocated workers in PY 1985? Yes---, No---. Did you anticipate any problems in PY 1986? Yes---, No---.
5. In order of importance (with one being the most important), please list the major means by which dislocated workers are being identified. Note: only rank those means which are currently being used.
 - a. Media announcement of plant closings or layoff.
 - b. Other notification of plant closings or layoff (e.g. notification by unions, employers, etc.).
 - c. Individual application as a result of outreach activities or promotional efforts.
 - d. Referral by Employment Service.
 - e. Initial detection through some use of the Unemployment Insurance system.
 - f. Other (please specify).
6. If item (e) -- UI system -- was ranked, please indicate how dislocated worker identification is made.
 - a. Detection and referral to Title III operator by UI interviewers-----.
 - b. Systematic review of automated UI administrative files using predetermined screens (e.g., all claimants who have drawn over 15 weeks of UI and are 45 years of age or older, exhaustees, etc.)-----.

If category (b) was checked, please describe the screens being used.

- c. Use of Permanent Mass Layoff and Plant Closing (PMLPC) data----- . Note: This is a new program funded by the Bureau of Labor Statistics which is not operational in all state employment security agencies.
 - d. Other ----- . Please describe.
7. If you are presently not making use of the UI system or administrative records for the identification of potential dislocated workers, please describe why this is the case.
8. Are UI data being used for any other purpose (e.g. the allocation of Title III resources, program design, etc.).
- Yes-----.
 - No-----.
- If yes, please describe.

THANK YOU

Notes: We would appreciate it if you would include any written material that relates to this undertaking.

BIBLIOGRAPHY

- Bendick, Marc, Jr., and Devine, Judith Radlinski. "Workers Dislocated by Economic Change: Do They Need Federal Employment and Training Assistance?" [Washington, D. C.]: The Urban Institute, [1981]. In Report No. 13: Seventh Annual Report: The Federal Interest in Employment and Training, pp. 175-226. Washington, D. C.: The National Commission for Employment Policy, October 1981.
- Crosslin, Robert; Reed, Gary; and Wandner, Stephen. "Economic Dislocation Among American Workers." n.p.: U. S. Department of Labor, Southern Economic Association Annual Meeting, 1981.
- Crosslin, Robert; Hanna, James; and Stevens, David. Economic Dislocation: Toward A Practical Conceptual Approach. n.p.: The Nevada Employment Security Department, 1983.
- Crosslin, Robert, and Wandner, Stephen. "Using the Continuous Wage and Benefit History to Locate Dislocated Workers." U. S. Department of Labor, Unemployment Insurance Service, 1980.
- Gordus, Jeanne; Jarley, Paul; and Fermen, Louis. "Plant Closings and Economic Dislocation." [Kalamazoo, Mich.]: The Upjohn Institute for Employment Research, 1981.
- Meyer, Robert. "Structural Change and Job Dislocation." n.p.: The Brookings Institute, 1984.
- United States. Congressional Budget Office. Dislocated Workers: Issues and Federal Options. [Washington, D.C.]: n.p., July 1982.
- United States. Congress. Office of Technology Assessment. Technology and Structural Unemployment: Reemploying Displaced Adults. [Washington, D.C.]: n.p., 1986.
- United States. Department of Labor. Bureau of Labor Statistics. BLS Reports on Displaced Workers. Washington D.C.: U. S. Department of Labor, November 1984.

THE NEW JERSEY UNEMPLOYMENT INSURANCE REEMPLOYMENT DEMONSTRATION
PROJECT: IDENTIFYING THE POPULATION TO BE SERVED

Stephen A. Wandner
Jon C. Messenger

I. INTRODUCTION

The Unemployment Insurance Reemployment Demonstration project is a major policy initiative being conducted by the U.S. Department of Labor. The project is just becoming operational in the State of New Jersey; project operations will continue for a period of a year and a half. Evaluation reports on the demonstration project are scheduled to be completed in May 1987 (process analysis) and September 1988 (impact analysis).

The purpose of the demonstration project is to develop an early intervention reemployment program for unemployment insurance (UI) recipients who are likely to exhaust their UI benefits and have difficulty finding reemployment. To accomplish this goal, the demonstration project must demonstrate that it can: 1) identify potential exhaustees early in their spell of unemployment, and 2) provide additional reemployment assistance which is effective, efficient and properly targeted.

The reemployment services provided to participants in the New Jersey demonstration project are over and above those provided by existing employment and training programs. What is being tested is whether providing such additional services to the population of potential exhaustees would be good Federal public policy. The services provided are: 1) job search assistance, including a job search workshop; 2) retraining or relocation; and 3) a "reemployment bonus."

Before such services can be offered, however, we need to identify potential exhaustees. It is not a simple matter to identify potential exhaustees early in their spell of unemployment. Like "displaced workers," of which they are essentially a subset, it has proven difficult to forecast in advance who will exhaust their UI benefits and who will not.

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This paper concentrates on the identification of the appropriate target population for the demonstration, although the issue of the reemployment services being provided is also discussed in some detail. The discussion will begin with a description of the goals and overall approach of the project; the experimental service packages being provided to participants; and the process being used to deliver those services. The paper will then focus in on issues related to defining the target population for the demonstration: what criteria are being used to select participants for the project; why these criteria were selected; what we hope to learn about the feasibility of selecting potential exhaustees during the project; and how this information could be used in designing a UI reemployment program.

The remainder of this paper will proceed as follows. Section II presents a general description of the demonstration project. An analysis of the environment of the demonstration project is presented in Section III. The target population for the demonstration project is described in Section IV. Finally, Section V provides a synopsis of the likely outcomes of the demonstration.

II. GENERAL DESCRIPTION OF THE DEMONSTRATION PROJECT

1. OVERVIEW

Purpose

The purpose of the New Jersey Unemployment Insurance (UI) Reemployment Demonstration Project is to determine the effectiveness of providing additional reemployment services, above those currently provided by the Employment Service (ES) and the Job Training Partnership Act (JTPA), to UI beneficiaries who are likely to exhaust UI and have difficulties returning to jobs similar to their prior employment. These services would be provided to beneficiaries early in their spell of unemployment--services would be offered during their fifth week of claiming benefits. The project was initiated by the U.S. Department of Labor (USDOL) and is operated under a Cooperative Agreement with the New Jersey Department of Labor (NJLDR). The project is designed to provide Federal Government policymakers with information they need to determine: whether it is possible and how to identify future UI exhaustees early in the claim period; whether a new or modified Federal program should be developed; and, if a program would be developed, what shape(s) such a program might take, its possible costs and benefits and the relationship of such a program to the existing Federal-State UI program. The project is on a highly accelerated schedule to provide policymakers with preliminary data by March 1987.

The goal of the New Jersey Demonstration Project is to demonstrate that, by offering reemployment services to UI claimants early in their claim period, worker adjustment to structural labor market barriers can be facilitated more rapidly than would otherwise be the case. The demonstration project puts an auxiliary system into place that screens structurally unemployed UI claimants from other--seasonally and cyclically--unemployed claimants and treats them in a manner appropriate to the nature of their unemployment. Thus, the demonstration will be designed to provide a means for helping the UI system to handle unemployment that is more permanent in nature.

Target Group and Location

UI beneficiaries served by the demonstration project are intended to be prospective UI exhaustees who are expected to have difficulty returning to work in jobs similar to their prior employment. Operationally, this group is defined as claimants who are laid off, not subject to recall, and who are to be further screened using certain demographic and/or labor force characteristics (e.g., labor force attachment) to identify those who are likely to exhaust benefits and who are unlikely to return to the same or similar jobs to those they have left.

The demonstration project will be conducted in a small number of the 39 local offices in New Jersey; ten local offices have been identified as demonstration sites. Approximately 9,000 claimants will be randomly selected for the demonstration, in order to produce approximately 3,100 demonstration participants who receive the full range of services available to them.

Workers in these demonstration offices will be divided into two groups, likely exhaustees and others. This determination will be made based on objective data collected at the time of filing a new initial claim. The data will include a short supplemental survey form, which will be completed by all claimants in the selected offices. It will include information on likelihood of recall and labor force data which will allow the NJDOL to separate all claimants into either likely exhaustees or all other claimants.

Approach

The reemployment services provided to participants in the project will be over and above those normally provided to UI claimants throughout the State of New Jersey. All claimants reporting to local offices will have available to them all reemployment services normally provided to them, including those of the "Rapid Response Team" which offers services to workers prior to layoff in the case of plant closings.

UI beneficiaries in demonstration local offices, including those assigned to treatment and control groups, continue to receive ongoing reemployment services from UI, ES and JTPA. For instance, they are eligible for JTPA Title III services; they are referred to ES; they participate in the UI work search and ERP process. In the case of plant closings, they are offered Response Team-provided services prior to becoming employed; if they accepted Response Team-offered services, they could still receive complementary demonstration project services; if they did not accept the former services, they could receive any of the latter.

This project is a "classic" experiment, screening the population of UI beneficiaries who reach their fifth week of benefits to identify those who are likely to exhaust benefits and have difficulty becoming reemployed. Those individuals identified will then be assigned to test and control groups. For this project to have meaningful results, it is essential that beneficiaries be assigned to test ("treatment") and control groups randomly, so that differences between these groups can be attributed to differences in reemployment services. It is also essential that treatments be provided according to design specifications and uniformly applied among participating local offices.

Claimants determined to be likely exhaustees will be randomly assigned to treatment and control groups by the demonstration computer system. The treatments consist of: 1) intensive job search assistance (JSA) only; 2) retraining or relocation assistance; and 3) a reemployment "bonus" (see below.) All three of these treatment groups will receive intensive, mandatory job search assistance. The additional reemployment services will be optional and will be offered only to treatment groups 2 and 3, respectively.

Job search assistance will include testing, assessment, counseling, job search workshops, a fully-staffed resource center, counselor follow-up activities, and job referral. This assistance would be immediately offered as a package to individuals in each treatment group, except for those workers opting to enroll in training through the demonstration project. Participants receiving training will be referred to the resource center and receive job referral services after completing training.

Both the determination of who is likely to exhaust UI benefits--and would therefore be eligible for demonstration project treatments--and the assignment to test and control groups would be accomplished using data collected through the normal

operations of the NJDOL supplemented by a few additional pieces of data collected from the supplemental survey, which will be administered during a session informing claimants of the UI benefit rights, which follows the filing of an initial claim for UI.

UI claimants filing new initial claims in demonstration site UI offices would be informed about all the available NJDOL services, about the demonstration project, and about the fact that they might be selected to participate in it. All claimants in those local offices attending a Benefits Rights Interview would complete the supplemental survey with data needed for determination as to whether they are likely exhaustees. In the fourth week of claiming benefits those workers determined to be likely exhaustees and assigned to one of the treatment groups would be scheduled and sent a letter notifying them to report to their local Employment Service (ES) office for an appointment.

Claimants would appear at the ES local office during their fifth week of claiming benefits. All individuals will attend an initial orientation session to familiarize them with the demonstration and to register them with the ES. They would also be informed about the mandatory intensive job search assistance and about the other optional services available to them if they are assigned to treatments 2 or 3. Later that week, those individuals would receive testing via the GATB (General Aptitude Test Battery.) The following week, individuals would receive a five-day job search workshop for three-and-one-half hours per day.

The week after that--the seventh week of claiming benefits--individuals would receive an assessment and counseling session, which would include information about why they have been determined to be likely to exhaust their UI benefits and have difficulty returning to work. The end-product of the counseling session will be an individual "employability development plan," which will provide the claimant with a basic strategy for becoming reemployed. Individuals assigned to treatment 1 will be immediately referred to the resource centers, where they will conduct their job search activities. Individuals randomly selected into treatment 2 would be offered a choice of classroom training (CT), on-the-job training (OJT), or relocation assistance, and then be referred to appropriate services. Individuals randomly selected into treatment 3 would receive the offer of a reemployment "bonus" payment and would then be referred to the resource centers. The additional services mentioned--CT, OJT, relocation assistance, or a reemployment bonus--will be provided only if they are voluntarily accepted by a particular claimant.

Data will be collected for all claimants in the participating local offices to be used for the evaluation of the project. Data will be collected on benefit payment, pre- and post-unemployment wages, and demonstration project participation. A number of different data sources will be used, including the New Jersey UI data base, demonstration computer system files, and telephone interviews of former participants. This data will be used to determine if claimants were correctly assigned to groups likely or unlikely to exhaust UI. It will also be used to analyze the process by which the project was conducted and the impact of the project. The main focus of the impact analysis will be to compare each of the treatment groups to the control group to determine whether the project was cost-effective.

2. LOCAL OFFICE SELECTION

Overview

Three criteria were used as the basis for determining the process by which local offices were selected for participation in the demonstration project. Assurance of an adequate sample size was the most important consideration in determining the number of local offices needed and the size of the claimant population needed in each office. For this reason, a number of smaller local UI offices had to be excluded from consideration for participation in the demonstration.

The second consideration that affected local office selection was a concern for the validity and generalizability of demonstration results. Because of this consideration, it was decided to select the local offices for the demonstration on a random basis, after excluding offices that are not feasible. To include the broadest range of offices possible--in terms of industry, proximity of ES offices to UI offices, and other factors--it was decided to stratify the sample geographically as well.

The third and final consideration was to provide each claimant who is eligible for the demonstration with an equal probability of selection. To maintain this objective with offices of unequal size, it was necessary to take the random sample of local UI offices with the probability of selection proportional to the size of the eligible claimant population in each office. This also means that the variable used for local office selection needs to have a distribution that is similar to the distribution of the eligible claimant population. The variable that seemed to fit this criterion best is receipt of UI fifth week payments.

Selection Process and Offices Selected.

Based on the considerations just mentioned, the contractor, Mathematica Policy Research, took a random sample of local offices with the probability of selection proportional to the distribution of UI fifth week payments for FY 1985. Two types of offices were excluded from the random selection process. The first type excluded were offices whose claimant population was too small to contribute a sufficient sample of potential UI exhaustees to the demonstration. This criterion excluded fourteen local offices, which includes all of the New Jersey Grade III (smallest claims load) offices and many of the Grade II (moderate claims load) offices in the state. The other type of local office that was excluded are "special cases." These include an office that deals primarily with seasonal workers (Wildwood), an office with relatively low manufacturing employment (Toms River), and an office with a very specialized labor market (Atlantic City)

This sampling procedure produced a geographically stratified random sample of UI offices with the probability of selection proportional to the distribution of fifth week payments. Mathematica selected ten local UI offices where demonstration services will be provided. These ten offices are as follows: Bloomfield, Burlington, Butler, Elizabeth, Hackensack, Jersey City, Newark, Paterson, Perth Amboy, and Woodbury. These offices are spread geographically around the state.

3. ADDITIONAL SERVICE PACKAGES--"TREATMENTS"

There will be three treatment groups in this experiment. The first group will receive job search assistance (JSA) only. The second group will receive JSA plus the offer of a voucher for either retraining or a relocation allowance. The third group will receive JSA plus an offer of a reemployment "bonus." All three groups will continue to receive their UI benefits in addition to being eligible for the experimental treatments. The JSA component of all treatments will be mandatory (except for the use of the resource centers); the other treatments offered to Groups 2 and 3 will be voluntary. Individuals identified as potential participants (see discussion of the operational definition of this term below) will be randomly assigned to one of the treatment groups or to a control group.

Treatment One: Job Search Assistance (JSA) Only

Treatment 1 will consist of job search assistance (JSA) only. This treatment is designed to test the concept that many potential exhaustees already possess marketable skills but simply

lack basic job search skills and/or the motivation to use them. To provide claimants with job search skills, a week-long job search workshop will be provided. To provide claimants with the encouragement to use these newly obtained skills, a fully-staffed resource center will be provided, along with periodic counselor follow-up at designated intervals. (Separate UI monitoring of work search will occur as usual.)

Job search assistance will include testing, assessment, counseling, job search workshops, the availability of a resource center, counselor follow-up activities, and job referral services (including limited job development activities.) Individuals in this treatment will proceed through the common treatment components of orientation, testing, a job search workshop, and an assessment/counseling interview.

The job search workshop will run for five days, lasting approximately 3.5 hours per day. The workshop will cover a number of basic employment-related concerns, such as what the various stages of unemployment are; what participants' feelings are regarding job loss and how to deal with those feelings; what constitutes an effective job search, etc. In addition, workshop participants will learn important job search skills, including: how to set realistic job goals; how and where to research specific jobs or job clusters; how to plan job search activities; how and where to look for job leads; how to write resumes and similar employment-seeking tools; how to contact employers via the telephone; how to fill out job applications effectively; and how to conduct themselves and answer questions appropriately during an employment interview.

Following the job search workshop and the counseling/assessment interview the following week, individuals in this treatment will be expected to actively search for work. As a result of the assessment/counseling interview, participants will have a specific job goal, an employability plan directed at achieving that goal, and a working knowledge of what is available in the resource center and how to use these materials effectively. It is expected that participants will then make substantial use of the resource center, since they will have been encouraged to do so throughout the job search workshop and during the assessment/counseling interview.

To encourage voluntary claimant use of the resource centers, they have been equipped with daily newspapers, lists of area employers, job listings, business directories, government employment listings, occupational literature, etc. Appropriate furnishings and phone banks will also be provided so that claimants can use the center as a "base of operations" for their job search. Every effort will be made to provide a supportive

environment for that search, including having a counselor available at the center to answer questions and provide feedback to participants regarding their job search activities. By encouraging claimants to use the centers, JSA participants will be available to provide encouragement and support to each other as well.

In addition to maintaining the resource center for JSA participants, the demonstration also provides for counselor follow-up of claimants at regular intervals. The importance of providing for regular follow-up of participants after the provision of a job search workshop was one of the major findings of the South Carolina demonstration.¹ The follow-up will consist of in-person contact of JSA participants at intervals of 2, 4, 8, 12, and 16 weeks after the initial assessment/counseling interview. For participants who frequent the resource center, in-person follow-up will occur there. Participants who do not make use of the resource center during a given follow-up period will be contacted by phone to set up a personal interview for follow-up purposes. These interviews will be positive (not compliance-oriented) in nature and oriented toward providing job information, counseling, and a "sounding board" for participants.

The treatment 1 services differ from the New Jersey current service environment in the following ways:

1. Participation would be greater (an estimated 80 percent versus approximately 14 percent currently.)
2. Quality of services would be uniform.
3. Services would be offered much earlier in the claim period (starting at the fifth week of the UI entitlement period versus the fourteenth week for the New Jersey Job Search Assistance Program (JSAP).)
4. Follow-up activities would be more extensive than those offered under the current system.
5. Testing and counseling would be greatly increased (an estimated 80 percent versus less than 5 percent currently.)

Treatment Two: Training or Relocation Assistance.

Treatment 2 will consist of job search assistance plus an additional offer of either training or relocation assistance. This treatment is designed to test the concept that a significant portion of structurally unemployed workers have skills that are no longer in demand in the local labor market where they

previously worked, and therefore, that such individuals would be appropriate candidates for job training or relocation assistance. Specifically, claimants who need to acquire new skills or upgrade previously learned skills will be encouraged to take training, either classroom training or on-the-job training. Other claimants who have skills that may be marketable in other locations will be offered relocation assistance to aid them in expanding the geographic scope of their job search efforts.

Treatment 2 consists of three basic service "tracks" which a particular claimant may take: 1) classroom training (CT); 2) on-the-job training (OJT); or 3) job search with relocation assistance available. Individuals in this treatment, like those in treatment 1, will first proceed through the common treatment components of orientation, testing, a job search workshop, and an assessment/counseling interview. In case studies of eight projects funded under the dislocated worker provisions of JTPA (Title III), the use of a job search component in conjunction with assessment early in the enrollment period to identify those workers with marketable skills was found to be effective in reducing training costs.²

At the time of the assessment/counseling interview, claimants who have been randomly selected into this treatment will be informed of the availability of job training or relocation assistance. The counselor and the claimant will then review the claimant's GATB test results, his or her job goals and occupational interests, his or her previous employment experience, information on "demand" occupations in the particular local labor market area, and other relevant information, in order to determine whether or not the claimant is an appropriate candidate for training or relocation assistance. For example, individuals with a marketable or transferable skill in the local labor market area would not be appropriate candidates for receiving expensive training services, and the counselor would have the discretion to refuse to make training services available to them. Similarly, the counselor could refuse to provide the claimant with relocation assistance if this was not an appropriate option.

Unlike many previous training efforts, however, the amount of discretion that will be accorded to the claimant in making the decisions on what type of training to take (i.e., CT or OJT) and the specific training course in which to enroll (or the specific employer, if OJT is chosen) will be considerable. If classroom training is chosen, the claimant will be able to select a training course from a wide variety of vendor programs that have been approved by the New Jersey State Departments of Education, Higher Education, or Labor. If on-the-job training is chosen, the claimant will be able to choose from among the available OJT

"slots" developed by the local JTPA Service Delivery Area (SDA) or instead choose to develop his or her own OJT job using a demonstration OJT "voucher." Nevertheless, the counselor will have the discretion to disapprove unsuitable training, and the final decision on what type of training and specific training course to pursue will be the joint responsibility of the counselor and the claimant. This decision will be formalized by its incorporation into the individual's employability plan, which must be signed by both the counselor and the claimant.

Following the assessment/counseling interview, claimants who opt for classroom training will be enrolled in their chosen training course as quickly as possible. Claimants who opt for OJT will be placed in their chosen OJT slot, or, if no appropriate slots are available, will then receive the "voucher," which indicates that they are eligible for reimbursable OJT if hired. Both of these processes will be aided by the presence of a JTPA SDA counselor at each demonstration (local ES) office. This counselor will be responsible for making all the necessary arrangements for referral to training. In addition, the counselor will arrange for remedial education prior to training if needed.

Once an individual has been enrolled in training, he or she will be exempt from normal UI work search requirements for up to three weeks while waiting for training to begin. When training begins, the participation of the claimant in training will be monitored regularly by the SDA counselor. At the completion of training, the SDA counselor will attempt to place the participant in an unsubsidized job using the normal JTPA placement process in place in the particular SDA (of course, many OJT participants may be hired into regular jobs by their OJT employers.) However, unless and until such placement occurs, the claimant will be required to search actively for work on their own.

To assist claimants in their post-training job search efforts, the SDA counselor will provide them with an exit interview. This interview will include a review of the individual's employability plan, the significance of the training just completed, and job search strategy. In addition, the claimant will be encouraged to use the resource center and will receive follow-up contacts the same as individuals in treatment 1.

Claimants who choose the third "track" in this treatment, job search with relocation assistance available, will be encouraged to use the resource center and receive regular follow-up contacts as in treatment 1. However, these individuals will also be eligible to receive two types of relocation allowances. The

first type of relocation allowance is for expenses related to travel to pre-arranged job interviews; actual expenses for such travel will be reimbursed up to a maximum of \$400. The second type of relocation allowance is for moving expenses--up to a maximum of \$1,000--related to accepting new employment in a different geographic area. For both types of relocation allowances, travel distances must exceed 50 miles (one way) to qualify for reimbursement.

The treatment 2 services differ from the New Jersey current service environment in the following ways:

1. Participation would be greater (an estimated 30 percent versus less than 5 percent currently.)
2. Services would be offered much earlier in the claim period (starting at the fifth week of the UI entitlement period.)
3. The range of training opportunities available to participants would be greater (because of greater claimant discretion in the choice of training, the availability of OJT vouchers, etc.)
4. Relocation assistance would be available to claimants not taking training.
5. Testing and counseling would be greatly increased (an estimated 80 percent participation versus less than 5 percent currently.)

Treatment Three: Reemployment Bonus

Treatment 3 will consist of job search assistance plus the additional offer of a reemployment "bonus." This treatment, like treatment 1, is designed to test the idea that targeted workers already possess marketable skills but simply lack basic job search skills and/or the motivation to use them. Unlike treatment 1, however, this treatment assumes that structurally unemployed workers receiving UI face significant disincentives to becoming reemployed. Two particular disincentives to reemployment appear to be operating here: 1) the prospect of reduced wages (and reduced total compensation, i.e., benefits and/or working conditions) in comparison to those earned on their previous job, and (2) the small but significant work disincentives that are inherent in the UI benefit structure. To overcome these disincentives, treatment 3 is designed to provide a tangible additional incentive for participants to become reemployed--a reemployment "bonus."

Unlike the first two treatments, the provision of a financial incentive for becoming reemployed is very new to the United States, although similar programs have been tried--with some apparent success--in several European countries.² Therefore, for this treatment, the main design issue was how to structure the reemployment bonus payment. In developing the design for the the reemployment bonus, the following criteria were deemed to be crucial:

1. The structure of the bonus should encourage individuals to return to employment rapidly rather than remaining on UI--i.e., it should reduce the "reservation wage."
2. The structure of the bonus should be simple and straightforward enough that it provides individuals with a clear incentive for becoming reemployed--one which they can fully comprehend.
3. The structure of the bonus should not encourage beneficiaries to take minimum wage jobs, jobs far below their earnings potential, or very short-term jobs. Rather, it should encourage them to take jobs which lead to an appropriate career track.
4. The bonus should resemble, to the extent possible, a UI benefit "cash-out" program. That is, the bonus should provide beneficiaries with part of their remaining entitlement in exchange for not exhausting it.
5. The bonus should have the potential of saving the UI system money if implemented on a statewide basis.
6. The bonus cannot be prohibitively expensive such that it bankrupts funds available for the experiment or would be unfeasible for a potential future program.

Using the preceding criteria as guidelines, the structure of the reemployment bonus was developed. During this process, a number of different bonus structures were proposed, most of which were very complex and administratively cumbersome. The final design of the reemployment bonus, however, is relatively simple: the bonus would provide participants with an offer of one-half of their remaining UI entitlement in exchange for becoming reemployed. This amount is equal to about \$1,500 for the average claimant in New Jersey, where a large proportion of claimants are receiving the maximum benefit. The amount of the bonus will then decline at a steady rate over time until it reaches zero, providing a strong financial incentive for rapid reemployment.

Participants in this treatment will first pass through the common treatment components of orientation, testing, job search workshop, and an assessment/counseling interview. At the interview, which occurs during the seventh week of the benefit period, claimants will be informed of the availability of the bonus and the conditions of its use. Starting at the time of the interview, participants will have between two and two-and-one-half weeks (depending on the day of the interview) to collect the maximum bonus amount by becoming reemployed. On the Friday of the second full week after the assessment interview, the amount of the bonus will begin to decline, decreasing by 10 percent. The bonus will continue to decline by ten percent a week thereafter, reaching zero at the end of the eleventh week after the assessment interview (the eighteenth week of the entitlement period.)

The reemployment bonus is designed to resemble, as much as possible, a UI benefit "cash out" program (as mentioned previously.) This will provide for UI beneficiaries to be paid a portion of their remaining entitlement in a "lump-sum" amount. In practice, however, individuals who become reemployed and then lose their jobs "through no fault of their own," will once again be able to collect UI benefits. There is no way to prevent this, short of having participants sign a waiver for the amount of money they receive in bonus payments, under current state UI law. However, we anticipate that the number of participants who would be affected by this occurrence will be rather small (only participants laid off from their jobs in the same benefit year would be affected.) Workers who voluntarily quit their jobs, however, would be disqualified under the current New Jersey UI law. The problem of workers returning to UI would be eliminated if a permanent program were adopted, as there could then be a true cash-out of the remaining entitlement.

Participants in treatment 3 will be encouraged to make use of the resource center for conducting their job search activities, just like participants in treatment 1. In addition, treatment 3 participants will receive counselor follow-up services at the designated 2, 4, 8, 12, and 16 week intervals. The only difference between treatments 1 and 3 is the offer of a reemployment bonus.

Since the reemployment bonus provides a strong financial incentive for rapid reemployment, it is possible that the availability of the bonus could encourage treatment 3 participants to accept inappropriate employment in order to qualify for the payment. Having recognized this possibility, three provisions have been included in the structure of

treatment 3 to discourage participants from accepting inappropriate employment. First, the demonstration project will not pay individuals a reemployment bonus for obtaining the following types of employment: 1) work provided by the individuals's pre-layoff employer, 2) temporary work, 3) seasonal work, 4) part-time work, 5) work provided by a relative. To receive a bonus, participants must obtain full-time (at least 32 hours per week), permanent employment.

Second, the assessment/counseling interview will be used to provide guidance to claimants regarding the type of jobs that they should seek, depending on their particular skills, aptitudes, interests, employment history, etc. The counselor will also caution the participant about the hazards inherent in attempting to "game the system," such as the long-term wage loss that would result from accepting a low-wage job just to get the bonus. Finally, counselors will inform participants that former UI claimants who voluntarily quit their new jobs or get fired (pending adjudication) would not be eligible for a continuation of benefits; this will further encourage participants to seriously consider whether or not a particular job is right for them.

Third, the wage subsidy payment has been divided into two "lump-sums," with the participant having to remain employed for twelve weeks in order to collect the full subsidy payment. Upon verification of appropriate reemployment, the former claimant's reemployment bonus will be computed on the Participant Tracking System (PTS), and, four weeks later (pending verification of continued employment), the individual will receive his or her first "lump-sum" payment. This payment will be equal to 60 percent of the total reemployment bonus that the individual has earned. Eight weeks after the payment of the first bonus, the individual will receive the remaining 40 percent of his or her bonus in a second "lump sum"--provided that they are still employed by the same firm at that time. By making payment of the reemployment bonus contingent upon continued employment in this way, the demonstration hopes to encourage individuals to consider a longer time horizon when deciding whether or not to accept a particular job. All three of these provisions--employment standards, counseling, and multiple payments contingent on employment--will act to encourage treatment 3 participants to seek appropriate employment.

The treatment 3 services differ from the the New Jersey current service environment in the following ways:

1. The same five differences in JSA that were listed for treatment 1 also operate in this treatment.

2. Treatment 3 is a new departure from the current environment in its provision of a reemployment bonus, which is not a programmatic option anywhere in the United States.

4. ADMINISTRATIVE LINKAGES.

The UI Reemployment Demonstration Project is a cooperative effort in every sense of the word. In addition to the Cooperative Agreement between USDOL and NJDOL, the demonstration involves a number of linkages among New Jersey agencies at the State and local levels of government. At the State level, the demonstration project--which is coordinated in the Office of Income Security--involves the Divisions of Administration, Employment Services, Employment and Training, Media and Community Resources, Planning and Research, Programs and Systems Development, Unemployment and Disability Insurance, and the Office of Telecommunications and Information Systems.

Of these agencies, three will play an especially crucial role in the implementation and operation of the demonstration project: Unemployment and Disability Insurance, which administers the UI program; Employment Services, which administers the Federal-State Employment Service (ES); and Employment and Training, which administers the Job Training Partnership Act (JTPA.) New Jersey UI will be involved with administering the New Claimant Questionnaire (NCQ), checking for compliance with demonstration requirements, performing fact-finding interviews and nonmonetary determinations, handling UI claims for individuals in classroom training, and processing payments for reemployment bonuses, relocation assistance, and transportation allowances (for travel to training locations.) New Jersey ES will be responsible for delivering a number of demonstration services, including: orientation sessions, testing, job search workshops, assessment/counseling interviews for treatments 1 and 3 and for claimants receiving relocation assistance, follow-up activities for treatments 1 and 3, and staffing the resource centers. New Jersey JTPA will be in charge of providing the assessment/counseling interviews and exit interviews for treatment 2, arranging for participant referral to classroom and on-the-job training (OJT) slots, conducting follow-up activities for training participants, performing OJT job development activities, and processing payments to classroom training vendors and OJT employers.

The success of the demonstration requires close cooperation between UI, ES, and JTPA, and also between their counterparts at the local level--local UI offices, local ES offices, and

local JTPA Service Delivery Areas (SDAs.) In order to accomplish this task, a number of important linkage mechanisms are being used. For one example, representatives from UI, ES, and JTPA were actively involved in the process of planning the demonstration design, as part of an interagency workgroup. For another, the project has been centrally coordinated by a project manager in the Office of the Assistant Commissioner for Income Security, and a project organizational structure has been superimposed over the functional structures of the various agencies. But perhaps the most unique linkage mechanism that is being used in the demonstration is the co-location of ES and JTPA counselors in the local ES offices. Within the carefully crafted responsibilities outlined previously, ES and JTPA counselors will work as a team to handle the demonstration workload in the local offices.

Thus, the demonstration involves close cooperation between New Jersey UI, ES, and JTPA staff, including local SDAs. The development of administrative linkages among these agencies is another by-product of the demonstration, and it may serve to provide a model for similar programmatic efforts.

5. SUMMARY AND STATUS

The Unemployment Insurance Reemployment Demonstration project, initiated in October, 1985, by Secretary of Labor William E. Brock, has now moved into the implementation stage. The New Jersey UI Demonstration Project is geared toward an "early intervention" strategy. The project hopes to demonstrate that, by offering reemployment services to UI beneficiaries early in the claim period, worker adjustment to structural labor market barriers can be made to occur more rapidly than would otherwise be the case. To accomplish this, three distinct reemployment service structures--or "treatments"--will be tested: job search assistance (JSA) only; JSA plus training or relocation; and JSA plus a reemployment bonus. In addition, testing, assessment, and counseling services will be provided to participants in all of the treatment groups. The provision of these varied services will involve close cooperation among several New Jersey agencies, particularly the Unemployment Insurance, Employment Service, and JTPA (Job Training Partnership Act) programs.

The project is divided into three phases: Phase I is the design phase; Phase II is the implementation phase; and Phase III is the evaluation phase. USDOL and NJDOL have approved the project design (Phase I), and authorization to proceed with Phases II and III was received on May 1.

Phase II has now begun. The training of demonstration staff, the installation of a computerized management information system, and arrangements for local office facilities have been completed. Enrollment of participants began May 19 in ten demonstration sites with the collection of supplemental questionnaire data on new UI beneficiaries. This information is then matched against preselected criteria in order to determine which workers are likely to suffer prolonged unemployment. These individuals are then randomly selected into one of the three "treatment" groups or into a "control" group that will continue to receive current services. The delivery of demonstration services to project participants begins on July 7 in the local ES offices.

The demonstration project is expected to operate for approximately a year and a half. Preliminary results will be available in March, 1987. A final evaluation of the demonstration is scheduled to be completed by September, 1988.

III. ANALYSIS OF THE DEMONSTRATION ENVIRONMENT

1. THE NEW JERSEY LABOR MARKET ENVIRONMENT

The New Jersey economy is currently experiencing a period of rapid overall job growth. Since the 1981-82 recession, when New Jersey's unemployment rate was 9.8 percent, nonfarm employment has grown a rate of over 4 percent per year, adding a total of 413,000 jobs to the economy since December 1982.³ Leading the surge in job growth are the service-producing sectors of the New Jersey economy: retail trade, transportation, finance, business services, and health care. As a result, the New Jersey labor force, once dominated by the manufacturing sector, is rapidly becoming a service-oriented domain. Since 1979 the five service sectors, taken together, have grown 117 percent.⁴

This growth has driven the New Jersey unemployment rate down to 5.4 percent of the labor force as of the first quarter of 1986. This unemployment rate means that labor market conditions in New Jersey are the tightest that they have been since the end of the great economic expansion of the 1960's. In addition, the "insured" unemployment rate--the number of UI claimants measured as a percentage of all workers covered under the UI system--fell to 2.7 percent in March 1986, which is the lowest such figure since 1953.⁵

The tightness of the New Jersey labor market as a whole seems to indicate that the demonstration project may have trouble obtaining a sufficient sample of potential UI

exhaustees for drawing conclusions based on an experimental design. However, the relative prosperity of the overall economy masks a continuing decline in several sectors of the economy, particularly manufacturing. Despite the large gains in nonfarm employment since 1982, manufacturing in New Jersey has continued its downward slide. In 1985 alone, factory employment decreased by 16,000 positions.⁶ Since 1979 manufacturing employment in New Jersey has declined by 10 percent, compared to an 8 percent drop for the nation as a whole.⁷

As a result of this decline in manufacturing, New Jersey has experienced over 100 plant closings and mass layoffs (layoffs of 50 or more workers) in the past year. In the first 9 months of 1985 alone, over 10,000 workers lost their jobs via a plant closing or mass layoff action.⁸ Since 1983, well over 30,000 New Jersey workers have become unemployed as a result of a plant closing or mass layoff. In fact, the problem became so serious that Governor Thomas Keane established a plant closing "rapid response" team to aid affected workers by acting as a focal point for readjustment services.

Thus, while the overall rate of unemployment remains low by national standards, the unemployment that remains is heavily concentrated in a declining industrial sector--manufacturing--and appears to be overwhelmingly structural in nature. The State of New Jersey's quarterly economic report, New Jersey Economic Indicators, reaches the same conclusion:

Unemployment can be expected to recede from its current 5 1/2 percent level only grudgingly, because much of the problem that remains is structural, involving displaced workers and others not easily matched with the kinds of job opportunities that will be opening up.⁹

This is, of course, precisely the type of unemployment situation that is likely to be long term in nature, and, therefore, is a suitable environment for the purposes of the demonstration project.

2. THE NEW JERSEY CURRENT SERVICE ENVIRONMENT

One of the major strategies of the New Jersey Demonstration Project is to build on the services and service mechanisms already present in New Jersey. In this respect, New Jersey workers currently have available to them a wide range of services similar to those offered in most other states. For displaced workers, these services include: job search

workshops under the New Jersey Job Search Assistance Program; training and retraining services under both Title III of the Job Training Partnership Act (JTPA) and the New Jersey Jobs Training Program; testing and counseling services from the Employment Service (ES); and remedial education, English as a second language, apprenticeship, etc., from a variety of sources. In addition, workers affected by particular plant closings have available to them the services of the New Jersey Plant Closing Response Team, which acts as a coordinating mechanism for the delivery of displaced worker services.

By far the largest of the available services to assist displaced workers in their reemployment efforts is the New Jersey Job Search Assistance Program (JSAP.) The JSAP provides eligible individuals with a standard, week-long job search workshop. During the 1984-85 program year (July 1984-June 1985), the Employment Service provided the JSAP to 6,090 workers from around the state.¹⁰ Of this number, 5,498 individuals were certified to be Title III eligible and thus can be considered to be "displaced workers."¹¹ During the same program year, there were 43,780 individuals registered with ES who were officially categorized as displaced workers.¹² Therefore, we can estimate that approximately 12.6 percent of displaced workers in New Jersey have received the JSAP. This gives the JSAP easily the widest coverage of the displaced worker population of any service in the state.

The next largest service offered to displaced workers under current service arrangements is job training and retraining, which is offered under both Title III of JTPA and the New Jersey Jobs Training Program (NJJTP.) Although a number of training-related services are offered under these programs (e.g., work experience, English as a second language (ESL), etc.), the greatest volume of services is concentrated in essentially two types of training: classroom training (CT) and on-the-job training (OJT.) Classroom training enrollees of all kinds numbered 1,170 during the 1984-85 program year, making CT the largest training component in New Jersey. OJT was a close second, with 1,020 enrollees during the same period.¹³ The total coverage of training services, however, pales in comparison to the total number of displaced workers in the state, even when using "official" figures which seem to underestimate the problem. Using the 43,780 ES registrants as an approximation of the population of workers displaced over a one year period, the percentage of workers who received training is only 5 percent of the total displaced worker population.¹⁴

Another large group of services offered to displaced workers in New Jersey are regular ES services. These services include a number of activities, but the primary ones are testing and counseling. While no figures are available on displaced workers who receive these ES services, figures on UI claimants who receive these services can provide a reasonable approximation of the degree to which services are currently available to potential demonstration participants. Data covering the first eleven months of calendar year 1985 show that testing was provided to 2,356 UI claimants and counseling to 1,713 UI claimants in the state. With a population of 127,201 UI applicants during that period, we can see that participation in these services was quite low--less than 2 percent for each service.¹⁵

The final major service provided to displaced workers in New Jersey is assistance from the state's "rapid response" team, the Plant Closing Response Team. The purpose of this response team, one of only three such state groups nationwide, is to provide a mechanism for coordinating the delivery of worker adjustment services to individuals affected by the planned closing of or substantial layoffs at a particular plant. In the case of a closing or layoff, the response team meets with representatives of both labor and management, ideally prior to the actual layoff, and attempts to get them to agree to a plan for the orderly transition of the plant's workforce into new jobs. The response team does not usually provide additional services per se; rather, it acts as a focal point for coordinating available readjustment services, such as the JSAP and training services under Title III and NJJTP. In this regard, approximately 200 plant closing meetings have been held by the response team during the past year. Nevertheless, the team can provide significant levels of additional services--i.e., on-site services such as intake and outplacement services--if management and labor request them. However, this occurs much less frequently and only four or five such efforts are planned during the remainder of 1986.¹⁶

In summary, the current service environment in New Jersey is, with the notable exception of the Plant Closing Response Team, quite similar to the service environments of the states in general. This similarity should serve to make the results we obtain in New Jersey--regarding the effect of providing additional services (above and beyond those normally provided by UI, ES, and JTPA) to permanently displaced UI claimants--reasonably generalizable to the nation as a whole.

IV. TARGET POPULATION FOR THE DEMONSTRATION PROJECT

1. OBJECTIVE

The objective of the New Jersey UI Reemployment Demonstration project is to test our ability to identify UI claimants who are likely to exhaust benefits without good prospects for returning to the same or similar work and to determine the effectiveness of providing additional reemployment services, above those currently provided by the Unemployment Insurance Service, the Employment Service, and JTPA to UI beneficiaries who are likely to exhaust UI and have difficulties returning to jobs similar to their prior employment.

To be able to target potential UI exhaustees among UI beneficiaries and then to efficiently apply reemployment services to them, a practical operational definition was developed to identify UI claimants who have a high probability of exhausting UI benefits and then experiencing further prolonged unemployment in the absence of special services. Possible operational definitions have been developed for the purpose of this project by determining if there are key indicators that are predictive of long term unemployment among UI claimants.

2. REVIEW OF THE LITERATURE

Definitions

The population of "potential UI exhaustees who will have difficulty becoming reemployed" is essentially a subpopulation of the larger population of "displaced" workers. Potential UI exhaustees represent the portion of the displaced worker population which is currently insured by the UI system and thus is eligible to receive UI benefits and services. The term "displaced worker" (or "dislocated worker," the terms are interchangeable) refers to individuals who have essentially two defining characteristics: 1) they have had some "substantial" attachment to the labor force as demonstrated by a record of "steady" employment experience and 2) they are now permanently laid off due to structural economic factors, i.e., they are "structurally unemployed" (which means they are likely to remain unemployed even in periods of favorable economic conditions.)¹⁷

As this definition indicates, displaced workers, the population from which the group "potential UI exhaustees who will have difficulty becoming reemployed" is drawn, is itself a

subset of an even larger group--the "structurally unemployed." Structural unemployment is unemployment that is secular in nature, rather than a result of seasonal or cyclical fluctuations in the business cycle. The "structurally unemployed" are a group of individuals who are unemployed due to a number of factors that are built into the economic system: inflexible wages and prices (including wage "floors"), which result in structural mismatches between worker skills and functional job requirements; skill "bottlenecks," which create inflationary pressures that act to dampen economic growth and thus prevent full employment levels from being reached; shifts in the industrial and occupational composition of labor markets (due to technological change or international trade, for example), which make previously marketable skills obsolete; limited worker mobility, which creates geographical mismatches between workers and jobs; etc.¹⁸ In addition to displaced workers, the group of structurally unemployed individuals includes, for example, the "economically disadvantaged," who face many of the same skill barriers (either functional job skills or job search skills) as displaced workers but typically do not possess the same degree of labor force attachment.

The definition of displaced workers in the literature varies widely. Some example definitions are as follows: 1) "unemployed individuals whose involuntary job loss was due to a plant closing or substantial reduction in force"¹⁹; 2) "a nondisabled adult who has been unemployed more than eight weeks in either a long-term declining industry, occupation, or region"²⁰; 3) "persons whose industries or occupations are in a state of permanent decline resulting from technological changes in modes of production and increased international competition"²¹; 4) "people who have lost jobs and have remained unemployed for relatively long periods as a result of evolving structural changes in the economy and who are not likely to regain employment easily even during improved economic conditions."²²

Scope of the Problem

Determining the scope of the problem of worker displacement in the United States is a difficult task. All such efforts run up against a major difficulty:

distinguishing those who are unemployed because of deficiencies in search effort or temporary declines in demand from those who lack the requisite skills and other qualifications to find jobs presently available in their areas.²³

This difficulty translates into the plethora of varied definitions presented above, none of which seems to delineate who is or is not a displaced worker for all conceivable circumstances.

Several fairly recent studies have attempted to measure the scope and magnitude of the problem of worker displacement in the United States. Estimates of the number of displaced workers ranged from about 100,000 to over 5 million individuals, depending on the specific definition used in the study. For example, a Congressional Budget Office (CBO) study in 1982 estimated that the number of displaced workers was between 100,000 and 150,000, with a restrictive definition that included only people who had become unemployed in a "declining" industry during the 1981-82 recession and who were unemployed for a minimum of six months in 1983. On the other hand, CBO estimated that, using a definition that included all workers displaced in industries or geographic areas experiencing economic decline, the total number of displaced workers rose sharply to between 1.7 and 2.1 million.²⁴

An important analysis of the scope of the worker displacement problem is provided in a 1983 study by the U.S. Department of Labor's Bureau of Labor Statistics (BLS) (whose author, Paul O. Flaim, is also a presenter at the Western Economic Association Session on "Measuring Structural Unemployment.") The results of the BLS survey are based on a questionnaire survey of all Current Population Survey households; these people were asked to provide information on all household members, age 20 and over, who lost a job during the years 1979-83. According to this study a total of 11.5 million workers reported losing their jobs during that period. In order to determine how many of those 11.5 million workers were "displaced workers," the BLS study applied one major criterion: the worker must have been employed for at least three years on their previous job prior to layoff (There were other minor criteria such as "seasonality" factors and a variety of other factors that could not be easily classified.) Using this criterion, the study estimated that 5.1 million workers had been "displaced" from their jobs during the study period.²⁵

Using the BLS study as a basis, a recent study by the U.S. Department of Labor's Unemployment Insurance Service (UIS) further refines the discussion of the magnitude of the worker displacement phenomenon. This study, which was an analytical forerunner of the New Jersey Demonstration Project, subtracts from the BLS total the 40 percent of workers who reported their

unemployment as being caused by "slack work," since this type of problem is probably more correctly attributed to cyclical factors. This calculation produces a total of 3.1 million displaced workers over the 1979-83 study period.

Of the 3.1 million workers who were displaced at some time during the 1979-83 period, 1.2 million were still unemployed at the time of the BLS survey (January 1984.) The UIS study estimates that approximately 300,000 to 500,000 of these workers would be UI exhaustees or potential exhaustees.²⁶ Although not all members of this group would qualify for the demonstration (e.g., some are out of the labor force and others may have exhausted their UI entitlement), this is the general population toward which demonstration services have been targeted, and all demonstration participants have been drawn from this group. Thus, the UIS figure can serve as a rough estimate of the size of the population that would be eligible for a national UI reemployment program.

Predictors of UI Exhaustees

To develop the operational definition of the target population for the demonstration, we reviewed recent studies that have attempted to identify the characteristics of the unemployed who had considerable work experience and job skills but still had a significant chance of remaining unemployed. These studies include, for example, the Small Business Administration's "The State of Small Business: Report to the President," which was based on data from the 1980 Current Population Survey (CPS.) Some possible predictors that were found to be explanatory variables for long-term structural unemployment--and thus exhaustion of UI benefits--are unemployment due to plant closing, mass layoffs without recall, unemployment in regions with employment declines, and claimant personal and economic characteristics such as age, education, job tenure, wage level, industry, and occupation.²⁷

Specific predictors were as follows:

Age	Over 45
Education	High School graduate with no further education
Employment	Relatively high wage average earnings (for example, in the range of \$9.00 - \$10.00 per hour) and fringe benefits
Family Characteristics	Relatively high family income; homeowner

Occupation	Specific Occupation Operators Fabricators Laborers Handlers Equipment Cleaners Helpers Semi-skilled operator Skilled craftsmen Declining Occupation
Industry	Specific Industry Manufacturing durable goods Declining Industry
Regions	Declining Employment High Unemployment

This wide variety of characteristics indicates a large possible list of predictors. However, a lack of agreement exists on a small, usable list for operational purposes. Therefore, it was necessary to develop our own operational definition of the target population for the demonstration.

3. OPERATIONAL DEFINITION OF THE TARGET POPULATION

In order to target the demonstration on displaced workers, it was necessary to adopt a set of claimant characteristics that could be used to "screen out" claimants whose unemployment could be attributed to other--seasonal, cyclical, or frictional--factors. However, in adopting these screens, there was an inherent problem: displaced workers have been most clearly identified by the length of their spell of unemployment; the longer they are unemployed the more likely they are to be truly "displaced" from the workforce. Yet, it is not possible to determine before the fact which individuals will suffer longer periods of unemployment.

Therefore, it was decided to use screening criteria that err on the side of including claimants who should have been screened out, rather than excluding claimants who should have been included. In this way, we will be certain to capture the great majority of structurally unemployed workers in the population from which demonstration participants will be selected. Later, using the data collected on the control group, we can look at UI claimants who exhaust their entitlements to see what characteristics they possess, and thus identify the characteristics that are associated with long-term

unemployment. This assumes that a reasonable amount of self-selection will operate to remove claimants who do not need services from the demonstration, thus providing a higher percentage of long-term unemployed individuals.

Based on this rationale, seven "screens" will be used to isolate permanently displaced workers from the general population of new claimants in the UI demonstration offices. These screens, which constitute the operational definition of the target population for the demonstration, are as follows:

1. Permanence of Layoffs. Claimants who expect to be recalled and have a definite recall date will be excluded from the demonstration. The purpose of this screen is to ensure that demonstration participants are workers who have been permanently displaced from their previous jobs. Individuals facing only temporary layoffs are not in need of reemployment assistance.
2. Job Tenure. Claimants who do not have a minimum of three years of tenure with their last employer prior to applying for UI benefits will be excluded from the demonstration. To qualify for the demonstration, an individual must also have worked full-time for only one employer during the three-year period. The purpose of this screen is to ensure that demonstration participants have a substantial attachment to the job from which they were laid off.
3. Age. Workers who are less than 25 years of age will be excluded from the demonstration. Although 25 may be an arbitrary number, younger workers generally have limited labor market attachment and have employment situations and problems which are substantially different from those of more experienced workers.
4. First Payment. Claimants who do not receive a first payment will be excluded from the demonstration. To participate in the demonstration, individuals must be eligible, both in monetary and nonmonetary terms, for UI benefits. In addition, this screen will also (by nonmonetary determinations of eligibility under UI) eliminate individuals who are voluntarily unemployed.
5. Union Hiring Hall Arrangements. Claimants who are covered by state-certified union hiring hall arrangements will be excluded from the demonstration.

The major industry affected by this exclusion is construction, which by nature is a seasonal industry and therefore inappropriate for the demonstration. Individuals covered by such arrangements are normally excluded from UI work-search and ES registration requirements anyway.

6. Partial Payments. Claimants who are currently employed and thus receive a partial UI payment will be excluded from the demonstration. Such individuals are not appropriate for the demonstration since they are still attached to a particular job.
7. Type of Claim. Individuals with claims that are "special" in nature (UCX, UCFE, interstate, or combined wage claims) will be excluded from the demonstration. The unique complexities of these types of claims are not amenable to demonstration operations and research.

Of these seven screens, three are particularly significant for research purposes--permanence of layoff, job tenure, and age. Permanence of layoff is a direct and crucial question: the purpose of the demonstration is to serve permanently unemployed workers, not individuals on temporary layoff due to cyclical or seasonal factors. Job tenure is important because it is essential that the workers served by the demonstration have significant job attachment; workers who have come to depend on their job and have not recently demonstrated mobility within their particular industrial, occupational or geographic labor market(s) are more likely to have difficulty becoming reemployed. Similarly, young workers are generally more mobile than older workers: this group has not yet established "roots" in a particular industry or occupation. Young workers are also likely to experience more turnover in their employment situation, since they generally have fewer domestic responsibilities and often possess supplemental sources of income.

4. PLANNED ANALYSIS OF DEMONSTRATION DATA

At the end of the operational phase of the demonstration project, an analysis will be conducted using data on the test, control and excluded population to determine whether the additional services provided were properly targeted and, if not, how they could be better targeted. The goal of this analysis is to determine whether the project was properly targeted or whether an actual, operational program could be devised which would be properly target and cost effective.

The analysis will permit both a determination of whether services were provided to individuals who should not have received them and whether individuals determined not to need additional service by the demonstration project screens in fact exhausted their UI benefits and thus might have benefited from the additional services.

An impact analysis will be conducted for the entire population of participants and its subpopulations. The results will be used to determine how cost effective the demonstration has been for all of the participants and for portions thereof. The analysis will determine if and where the screens for entry into the program were too narrowly defined, and, conversely, where the screens were too broad. It will thus be a tool for improving the targeting of future demonstration project(s) or a full-fledged program.

Analyzing those screened out of the project and who were therefore ineligible for additional service will reveal which UI claimants, determined unlikely to exhaust their benefits and have difficulty finding reemployment, did, in fact, do so subsequently. To the extent this occurs, there will be reason to believe that the screens used for the demonstration project were too tight and should have been relaxed in some manner. However, the relatively broad definition that was used in the demonstration was intended to minimize the likelihood of such an occurrence.

The result of examining these two groups will be the basis for developing a more accurate set of screens for determining future participant groups for similar projects or programs. Taken together they will provide information on where the screens were either too tight or too loose. The impact analysis should provide new or different potential screens which would have better selected participants for the demonstration project. It should also provide the tools for predicting who is a potential exhaustee of the UI program. These tools should be valuable for structuring further analytical work and for policy development and program design efforts.

V. LIKELY OUTCOMES OF THE DEMONSTRATION PROJECT

The population served in the test groups of the demonstration project will be UI beneficiaries who collect at least their first UI check and meet a number of other screens. They may or may not have exhausted their entitlement to UI in the absence of the provision of additional reemployment services and, in addition, they may or may not have

subsequently had employability problems after they exhausted benefits.

The screens for the demonstration project have intentionally been constructed to be loose. We expect that a number of individuals will pass through the screens and not be likely exhaustees. These screens were drawn loosely because of past difficulties--indicated above--with predicting who would exhaust benefits and an understanding that precise screens could not be accurately developed during the design phase of this project. One of the major goals of this project is to be better able to predict exhaustion from the UI program by the end of the evaluation phase of the project. The data collection and analysis plans for the project were designed to enable us to be able to do this. In particular, the collection of data on all beneficiaries walking through the doors of the ten demonstration offices--test ("treatment") and control groups, eligibles and noneligibles--should allow us to determine, after the fact, who would have benefited from the project reemployment services and who would not.

The project is also based on the assumption that, given the loose screening criteria, eligible UI beneficiaries will self select themselves such that potential exhaustees will participate in the voluntary services and nonexhaustees will not. This means that we expect that it will largely be potential exhaustees who will accept the additional services of the resource center, training, relocation and reemployment bonuses (although the experimental impacts will of course be measured over the entire group of claimants selected for a particular treatment.) The evaluation of the project will determine the extent to which this assumption was valid.

The result of this evaluation will provide information for improved targeting in the future. The budget request by President Reagan to the Congress for Fiscal Year 1987 contains an item for additional demonstration projects to be funded in the amount of \$10 million. These projects would replicate, expand and refine the results from the New Jersey project. Early analysis of the New Jersey project may be able to improve the screens to be used in the subsequent projects, which will in turn provide us with information for further refinements. Finally, Secretary William Brock is committed to reviewing the results of the demonstration projects to develop new policy initiatives--if warranted by the evaluation results--that would provide carefully targeted, cost-effective programs.

FOOTNOTES

¹U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, Evaluation of the Charleston Claimant Placement and Work Test Demonstration, (Washington, D.C.: U.S. Department of Labor, 1985): p.32.

²Organisation for Economic Cooperation and Development (OECD), Manpower Affairs Evaluation Programme, Manpower and Social Affairs Committee, Measures to Assist Workers Displaced by Structural Change: Report by Evaluation Panel No. 1. (Paris: O.E.C.D., November 26, 1984): p. 15.

³New Jersey Department of Labor, Division of Planning and Research, New Jersey Economic Indicators No. 260. (Trenton, NJ: New Jersey Department of Labor, April 25, 1985): p. 2.

⁴Ibid.

⁵Ibid.

⁶New Jersey Department of Labor, Division of Planning and Research, New Jersey Economic Indicators No. 256. (Trenton, NJ: New Jersey Department of Labor, December 12, 1985): p.2.

⁷New Jersey Department of Labor, Division of Planning and Research, New Jersey Economic Indicators No. 260: p.2.

⁸New Jersey Department of Labor, Office of Planning and Management, "Companies and Jobs Affected by Closures and Permanent Mass Layoffs," (Trenton, NJ: New Jersey Department of Labor, October 1985).

⁹New Jersey Department of Labor, Division of Planning and Research. New Jersey Economic Indicators No. 260: p.3.

¹⁰Walter Corson, Allan Hershey, Stuart Kerachsky and David Long, "Design of the New Jersey UI Reemployment Demonstration Project," (Princeton, New Jersey: Mathematica Policy Research, April 1986): p. 39.

¹¹New Jersey Department of Labor, Division of Employment and Training, "P.Y. 1984 Job Training Partnership Act (JTPA) Enrollments/Terminations," (Trenton, NJ: New Jersey Department of Labor, 1985).

¹²Corson, et. al., "Design of the New Jersey UI Reemployment Demonstration Project," (Trenton, NJ: Mathematica Policy Research, April 1986): p. 21.

¹³New Jersey Department of Labor, Division of Employment and Training, "P.Y. 1984 Job Training Partnership Act (JTPA) Enrollments/Terminations," (Trenton, NJ: n.p., 1985).

¹⁴Corson, et. al., "Design of the New Jersey UI Reemployment Demonstration Project," p. 40.

¹⁵Ibid., p. 39.

¹⁶Ibid., p. 41.

¹⁷Jon C. Messenger, Public-Private Partnerships in Job Training: Increasing Private Sector Involvement in the Process of Training the Unemployed, (Harrisburg, PA: n.p., August 1985): pp. 157-8.

¹⁸U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, Alternative Uses of Unemployment Insurance, (Washington, D.C.: U.S. Department of Labor, March 17, 1986): p. 20.

¹⁹Robert L. Crosslin, James Hanna, and David W. Stevens, Economic Dislocation: Toward a Practical Conceptual Approach, Prepared for the Nevada Employment Security Department, (September 1983).

²⁰Marc Bendick Jr. and Judith Radlinski Devine, "Workers Dislocated by Economic Change: Is there a Need for Federal Employment and Training Assistance?" in Seventh Annual Report: The Federal Interests in Employment and Training, (Washington, DC: National Commission for Employment Policy, October 1981).

²¹Stephen E. Baldwin and Ann Donohue, Displaced Workers: New Options for a Changing Economy, (Washington, DC: National Commission for Employment Policy, Revised September 1983).

²²Stephen Sheingold, Dislocated Workers: Issues and Federal Options, (Washington, DC: Congressional Budget Office, July 1982).

²³U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service, Alternative Uses of Unemployment Insurance, (Washington, D.C.: U.S. Department of Labor, March 17, 1986): p. 22.

²⁴Richard Greene, "Tracking Job Growth in Private Industry," Monthly Labor Review, (September 1982): pp. 3-9.

²⁵U.S. Department of Labor, Bureau of Labor Statistics, Displaced Workers, 1979-83, (Washington, D.C.: U.S. Department of Labor, July 1985): p. 1.

²⁶U.S. Department of Labor, Employment and Training Administration, Unemployment Insurance Service. Alternative Uses of Unemployment Insurance, (Washington: D.C.: U.S. Department of Labor, March 17, 1986): p. 23.

²⁷U.S. Small Business Administration, "The State of Small Business: Report of the President," (Washington, D.C.: Government Printing Office, May 1984): p. 22.

BIBLIOGRAPHY

- Abt Associates. Serving the Dislocated Worker: A Report on the Dislocated Worker Demonstration Program. Cambridge, Mass.: Abt Associates, December 1983.
- Baldwin, Stephen E., and Donohue, Ann. "Displaced Workers: New Options for a Changing Economy." Washington, D.C.: National Commission for Employment Policy, Revised September 1983.
- Bendick, Marc, Jr. "Dislocated Workers and Midcareer Retraining in Other Industrial Nations." Columbus, Ohio: The Ohio State University, 1984. In Displaced Workers: Implications for Educational and Training Institutions, pp. 189-208. Edited by Kevin Hollenbeck, Frank C. Pratzner, and Howard Rosen. S. l.: The National Center for Research in Vocational Education, n.d. DOL HD5715.2 D5.
- Bendick, Marc, Jr., and Devine, Judith Radlinski. "Workers Dislocated by Economic Change: Do They Need Federal Employment and Training Assistance?" [Washington, D. C.]: The Urban Institute, [1981]. In Report No. 13: Seventh Annual Report: The Federal Interest in Employment and Training, pp. 175-226. Washington, D.C.: The National Commission for Employment Policy, October 1981.
- Bendick, Marc, Jr. Workers Dislocated by Economic Change: Toward New Institutions for Midcareer Worker Transformation. Washington, D.C.: The Urban Institute, February 1982.
- Cassing, J. H., and Hillman, A. L. "A Social Safety Net for the Impact of Technical Change: An Evaluation of the Myers Committee's Adjustment Assistance Proposal." Economic Record 57 (September 1981): 232-237.
- Cook, Robert F., editor. Draft Report: Dislocated Worker Projects Under Title III of the Job Training Partnership Act. Rockville, Maryland: Westat, Inc., 1985. DOL HD5708.55 U5D4 1985.
- Corson, Walter,; Hershey, Allen; Kerachsky, Stuart; and Long, David. "Design of the New Jersey UI Reemployment Demonstration Project." Princeton, NJ: Mathematica Policy Research, April 1986.
- Corson, Walter; Maynard, Rebecca; and Long, Sharon. An Impact Evaluation of the Buffalo Dislocated Worker Demonstration Program. Princeton, NJ: Mathematica Policy Research, Inc., 1985.

- Corson, Walter; Maynard, Rebecca; and Wichita, Jack. Process and Implementation Issues in the Design and Conduct of Programs to Aid the Re-employment of Dislocated Workers. Princeton, NJ: Mathematica Policy Research, Inc., 1984.
- Crosslin, Robert L.; Hanna, James S.; and Stevens, David W. Identification of Dislocated Workers Utilizing Unemployment Insurance Administrative Data: Results of a Five State Analysis. Washington, D.C.: U. S. Department of Labor and The National Commission for Employment Policy, June 1984.
- Crosslin, Robert L.; Hanna, James; and Stevens, David W. Economic Dislocation: Toward a Practical Conceptual Approach. Prepared for the Nevada Employment Security Department, September 1983.
- Flaim, Paul O., and Sehgal, Ellen. "Displaced Workers of 1979-83: How Well Have They Fared?" Monthly Labor Review 108/6 (June 1985): 3-16.
- Green, Richard. "Tracking Job Growth in Private Industry." Monthly Labor Review. (September 1982).
- Martin, Phillip L. Labor Displacement and Public Policy. Washington, D.C.: Lexington Books, 1983. HD5708.55 U6M37 1983.
- McLennan, Kenneth. "Policies to Stimulate the Hiring of the Long Term Unemployed and Permanently Displaced Workers." Statement before the Senate Subcommittee on Employment and Productivity. Washington, D.C.: Congress of the United States, 1983.
- McLennan, Kenneth. "Unemployment Insurance to Help Dislocated Workers." Journal of the Institute for Socioeconomic Studies (Summer 1983): 59-73.
- Messenger, Jon. Public-Private Partnerships in Job Training: Increasing Private Sector Involvement in the Process of Training the Unemployed. Harrisburg, PA: n.p., August 1985.
- New Jersey Department of Labor. Division of Employment and Training. "P.Y. 1984 Job Training Partnership Act (JTPA) Enrollments/Terminations." Trenton, NJ: n.p., 1985.
- New Jersey Department of Labor. Division of Planning and Research. New Jersey Economic Indicators No. 256. Trenton, NJ: New Jersey Department of Labor, December 12, 1985.

New Jersey Department of Labor. Division of Planning and Research. New Jersey Economic Indicators No. 260. Trenton, NJ: New Jersey Department of Labor, April 25, 1985.

Organization for Economic Cooperation and Development. Manpower Measures Evaluation Programme, Manpower and Social Affairs Committee. Measures to Assist Workers Displaced by Structural Change: Report by Evaluation Panel No. 1. Paris: O.E.C.D., 1984. (Restricted)

Organization for Economic Cooperation and Development. A Review of Member Countries' Experiences in Alternative Uses of Unemployment Insurance Money. Paris: O.E.C.D., 1982. (Restricted)

Pease, Donald J., and Clinger, William F., Jr. "Recession Ripples: Helping the Displaced Worker; Reform Unemployment Insurance." Wall Street Journal, 29 January 1985, p. 32 (W), p. 32 (E).

Sheingold, Stephen. Dislocated Workers: Issues and Federal Options. Washington, D.C.: Congressional Budget Office, July 1982. HD5706.U5.

United States. Department of Labor. Employment and Training Administration. Unemployment Insurance Service. Alternative Uses of Unemployment Insurance. Washington, D.C.: U.S. Department of Labor, March 17, 1986.

United States. Department of Labor. Employment and Training Administration. Unemployment Insurance Service. Comparison of State Unemployment Insurance Laws. Washington, D.C.: n.p., 1985. DOL HD7096.U5 A332.

United States. Department of Labor. Bureau of Labor Statistics. Displaced Workers, 1979-83. Washington, D.C.: U.S. Department of Labor, July 1985.

United States. Department of Labor. Employment and Training Administration. Unemployment Insurance Service. Evaluation of the Charleston Claimant Placement and Work Test Demonstration. Washington, D.C.: U.S. Department of Labor, 1985.

United States. Small Business Administration. "The State of Small Business: Report of the President." Washington, D.C.: Government Printing Office, May 1984.

MEASURING STRUCTURAL
UNEMPLOYMENT: COMMENTS

Louis Jacobson

INTRODUCTION

I am pleased to have the opportunity to discuss these two papers: 1) "The Permanence of Dislocation: 1979-83" by Robert L. Crosslin, James S. Hanna, and David W. Stevens and 2) "The Displaced Workers' Problem as Seen Through a Special Survey" by Paul O. Flaim. Although the style and nature of the data of these two papers differ markedly, they both address the same issues:

1. Who is displaced, and
2. What are the effects of displacement.

The contrasts and similarities in the conclusions, given the differences in methodology, are particularly revealing.

IDENTIFICATION OF DISPLACED WORKERS

To begin, both papers grapple with the difficult question of how to identify a displaced worker. In the abstract, the definition of displacement which appeals to me is that:

a worker must be forced to permanently leave a job he or she would otherwise continue to hold.

Thus, operationally two conditions must be met:

1. The worker must separate permanently from a given employer, and
2. the worker, if not displaced, would otherwise have remained employed

These conditions seem simple, but raise some profound questions.

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The Permanency of Displacement

First, how permanent should job loss be to be classified as a displacement? This may appear to be an odd question, but there is ample evidence that workers, particularly those in highly paid unionized jobs, will accept recall five or more years after initial layoff. Thus, measurement of the number of workers displaced depend critically on the time path of recalls.

Because recalls often occur after several years, it is most appropriate to consider displacement as a continuum. Thus, the ideal "sample frame" for a displaced worker study would be all workers placed on "indefinite" layoff (whose employment was not of a temporary nature). It would then be possible to track workers in five (rather than four) labor status categories--recalled, reemployed same industry, reemployed in a different industry, unemployed, and out-of-the-labor force.

The greatest strength of the study by Crosslin-Hanna-Stevens (which for simplicity I will refer to as the CHS study) is the recognition of the importance of the time dimension of displacement, and its examination of the timing of recalls, reemployment, etc.

The authors exploited a key advantage of using longitudinal work history data from state UI systems--the ability to track the time path of unemployment and reemployment with precision. The data showed that almost all recalled workers returned to their former employers within 12 months. These results suggest that Paul Flaim's decision to drop workers laid off within one year of the survey date, largely eliminated any bias due to the exclusion of recalled workers.

But the evidence presented by CHS is inclusive. First, the CHS study only examined recalls up to the end of 1983. Many recalls occurred after 1983 when the post-recession recovery was strongest. Second, the study omitted states where the recovery was strongest. In particular, the study omitted the midwestern states where the recovery in the auto industry was exceptionally strong. Third, the total period under observation was "only" 15 quarters in Pennsylvania. Thus, at least in this state the data show that, although the recall rate dropped dramatically, the probability of recall is still fairly high after 15 months.

Recall probabilities equal the number recalled in a given period as a percent of those who have not yet been recalled. In contrast Diagrams 1, 2 and 3 display the number of recalls in a given period as a percent of all recalls. In addition, the most

relevant diagram would be for workers in declining durable manufacturing industries, since these workers are most similar to those in the BLS sample. It is quite likely that this group would exhibit even higher long-run recall probabilities.

The high probability of eventual recall for workers in declining industry (due to an increased willingness to accept recall after long waits) may even explain a result which surprised CHS--the fact that recalls rates displayed in table 2 were higher for workers in declining industries.

Enhancing the Value of the BLS Data

In my view the value of the special BLS survey conducted in January 1984, would have been greatly enhanced if follow-up questions were asked to all workers whose plant closed or were placed on "indefinite" layoff after January 1979 rather than only those who were not recalled by the survey date. This would have permitted the effect of recalls on the number and timing of displacements to be studied directly.

Interestingly, the omission of recalled workers from the sample is likely to be far more serious in the survey just completed in January 1986. More than 200,000 auto workers considered to be displaced in the earlier survey might now be considered non-displaced because the strong recovery in this industry led to their recall. (Some preliminary data from the 1986 survey suggests that this bias is present. If so, this would support my guess that the timing of the survey in relationship to the business cycle is the prime determinant of the bias introduced by the exclusion of recalled workers, not the amount of time elapsed between layoff and survey.)

Limitation of the UI Data

CHS's use of UI administrative data provides some very valuable information about potential limitations in the BLS sample, but the reverse is also true. The BLS data demonstrates an obvious limitation of the UI data base used by CHS--only displaced workers who file for UI are in the UI data base. In fact, only two-thirds of the BLS sample of displaced workers responded that they collected UI.

Because the BLS sample was limited to workers with three or more years tenure, it is very unlikely that a displaced worker would not be eligible for UI. Thus, we should expect that one-third of the displaced workers did not collect UI because they experienced little if any unemployment, and therefore, had very

little incentive to apply for UI. (This hypothesis could easily be checked by using the BLS data to cross-tabulate collection of UI, unemployment duration, and whether pre-separation earnings were high enough to qualify for UI.)

If the above hypothesis is true, use of UI data which excludes job leavers from declining industries who do not file for UI could severely under-estimate the number of displacements and over-estimate the costliness of displacement.

A second limitation of the UI data is more subtle. CHS went to great length to use ES202 employment data to distinguish declining and non-declining industries in local labor markets. Although this technique has considerable merit, it does not perfectly capture displacements. Some declining industries are simply cyclically sensitive, and do not suffer from long-run structural declines, while some individual firms in growing industries experience declines or fail completely, dislocating workers.

Thus, the BLS survey question which asks each individual the reason for job loss is superior in discriminating between cyclical and secular job loss. (Plant level ES202 data covering long-run trends, however, could provide an even better measure to detect structural decline.)

The Probability of Job Leaving in the Absence of Dislocation

The previous section showed that determining whether a displacement occurs is complicated because a worker may be recalled years after layoff. In this section complications from the opposite problem are considered--would a worker accept recall if it were offered?

This also may seem like a strange question, but it goes to the heart of accurately measuring displacements, and explaining why displacement can be so costly. If a worker would have voluntarily left a given job independently of his or her employer's action it would be difficult to claim that a concurrent fall in labor demand displaced that worker. Similarly, if a worker left voluntarily it would be difficult to believe that the worker was made worse off--the worker most likely left for another job which paid at least as well or left the labor force because non-market activities are at least as satisfying.

Thus, an ideal measure of displacement would exclude voluntary leavers who happened to be laid off--workers who would not accept recall if offered.

It is difficult, indeed, to empirically determine whether a worker would or would not accept recall. Ideally, individual quit propensities could be calculated for job leavers who are not laid off and these probabilities applied to similar laid off workers. In order to do this, however, the effect of a host of factors, including the cyclical declines on job opportunities, would have to be appropriately measured.

Probably the best that can be done is limit the sample of displaced workers to individuals who are reasonably likely to remain employed in the absence of an employer directed reduction in force. Thus, I personally applaud the decision by the BLS to restrict the displaced worker sample to workers with three or more years of employment in the same firm. Workers with less than four years tenure have clearly been shown to have very high propensities to leave jobs voluntarily.

It is unfortunate that the CHS study ignores the importance of tenure. It would be particularly interesting to see the distribution of labor force status and recalls over time broken down by tenure. There is little question in my mind that one reason declining industries had high recall probabilities was that the workers in these industries had high tenure.

THE EFFECT OF DISPLACEMENT

Both the CHS and the Paul Flaim papers provide valuable insights into the number and characteristics of displaced workers, and make intelligent choices to utilize each data base effectively to examine displacement. Both these analyses rely almost exclusively on the use of cross-tabulations.

Paul Flaim's paper examines the cost of displacement in a similarly "simple" and highly intelligent manner. One focus is describing the subsequent employment status of displaced workers, and how the status varies for workers in different industries and demographic groups.

A second focus is evaluating the loss of earnings due to displacement. A particularly nice touch was providing a distribution of losses relative to prior earnings for workers in different industries. This approach is particularly apt because it appropriately focuses attention on the fraction of workers with moderate and large losses, and explicitly avoids the conceptual error of permitting the gains experienced by some workers to "cancel" the losses of others.

Although it is standard in the economics profession to equate quality with use of highly sophisticated tools, econometrically

sophistication does not necessarily produce clear, intelligible findings. In my view the simplicity of Flaim's approach was an asset. The results were easy to comprehend and made good sense. Most likely the quality of the information would have been improved only marginally had "fancy" econometric techniques been applied, but the clear cost would have been a reduction in clarity of the results.

In contrast, the CHS paper employed multivariate regression techniques, but did not present a clear picture of the effects of displacement. One problem is that it is not obvious which workers were included in the regressions. Comparisons of sample sizes in Table 1 and 2 versus those in appendix tables show that the number of workers who did not return to the same employer (presumably a necessary condition to be considered displaced) but were employed (presumably a necessary condition to be in a post-wage equation) was far fewer than the number of workers included in the regressions. Where did these extra workers come from? Were recalled workers in the sample? Were workers with no reported earnings in the post-period included?

What comparisons would be most appropriate anyway? It would seem to me that recalled workers (or non-unemployed workers) would make the best comparison group. Why not compare recalled workers in non-declining industries to recalled workers in declining industries, non-recalled workers in declining industries, and non-recalled workers in non-declining industries. (The importance of whether the worker changed industries could also be examined, but in a separate regression.)

In addition, it would be well worthwhile determining how earnings losses varied across industries (at least at the one digit level) by crossing industry dummies with the above employment status dummies. Perhaps even more important would be determining the relationship between losses and both sex and tenure by crossing the industry-employment status dummies with a dummy for tenure equal to three or more years and a dummy for sex.

Finally, including measures of UI exhaustion in the specification is inappropriate if the key goal is to measure earnings loss due to displacement. It is hardly surprising that workers who exhaust UI have larger earnings reductions than workers who find jobs relatively rapidly. At least we should know the incidence of exhaustion among displaced workers! It would be more appropriate to estimate the probability of exhausting UI given the worker is displaced, or use the basic equation to estimate each workers individual loss and then examine characteristics (such as exhaustion) associated with large losses.

In short, there is insufficient information in the CHS paper to derive an estimate of the cost of displacement from the regression equations. But the appropriateness of the basic equation should also be tested. Meaningful comparisons could require separate estimating equation by industry, tenure, sex, and age.

I would settle for results paralleling those in the Flaim paper based on simple tabulations of pre and post earnings by industry group, age group, and labor force status. The results presented in table 11 come closest to this form, but it is difficult to accept these results on face value. These results contrast sharply to those for workers with characteristics similar to those described in Paul Flaim's study. In general high wage, prime-age men who are displaced and change industries suffer the largest losses relative to workers who do not change employers, while displaced workers who stay in the same industry have much smaller losses.

SUMMARY

The papers by Crosslin-Hanna-Stevens and Paul Flaim provide useful and mutually reinforcing information about the effect of displacement on labor force status (whether the worker is employed, or out of the labor force).

The CHS paper also provided useful information about the time path of recalls, the return to the same industry, and return to any work. Based partly on this information, it is plausible that many workers categorized in the BLS survey as displaced in 1984 would not be considered displaced in 1986 because they were recalled. The BLS data base would have been improved if recalled workers who otherwise met the displaced worker criteria were included in the sample (along with information on the timing of the recall).

The Flaim paper also provides information about the total number of workers who are displaced in the recessions which occurred in the early 1980's, and excellent information about the effect of displacement on earnings. A major strength of this work is that the data are disaggregated in a meaningful way--by industry, age group, and sex.

In contrast, the CHS paper provides useful information about the effect of unemployment and industry decline on earnings. The paper does not include sufficient information to estimate the

effect of displacement on earnings. In fact, proper estimation of the cost of displacement might require use of a different comparison group and use of separate estimating equations for workers in different major industry groups, and age-sex-tenure groups.

A key limitation in the UI administration data used by CHS is that workers who do not file for UI are excluded from the sample. (In contrast, data from the regular CPS survey can be used to complement the displaced worker survey.) This limitation probably would lead to under-estimation of the number of displaced workers and over-estimation of the loss of earnings. In addition, it may preclude use of the most appropriate comparison group.

Despite some limitations, both the CHS and Paul Flaim papers are particularly valuable because they help publicize the availability of these two unique sources of information on displacement, and help delineate some of the advantages (and disadvantages) of using these data. A number of excellent studies have been completed and are in process using the BLS data. I believe use of administrative data merits far more attention than they have received to date, and hope this session will stimulate that interest.

MEASURING STRUCTURAL
UNEMPLOYMENT: COMMENTS

Stephen E. Baldwin

My assignment today is to concentrate on the two programmatic papers, by Hanna and by Messenger and Wandner, but I want to start by noting the Commission's support of data analysis as well. We have supported the work of Crosslin, Hanna and Stevens which Robert Crosslin has reviewed, which exploits the advantages of the Unemployment Insurance system as a data base. To be even-handed, we have also supported studies which used the CPS data base discussed by Paul Flaim. The first of these studies was by Marc Bendick and Judith Devine, which appeared in the Commission's Seventh Annual Report. We will shortly issue a study using the 1985 Displaced Worker survey data, by Professors Mike Podgursky and Paul Swaim of the University of Massachusetts at Amherst.

NCEP has also been concerned with programmatic issues. In 1983, I co-authored, with Ann Donohue, a paper for the Senate Budget Committee which looked at ways to make more effective use of the UI system. We ended up recommending a program that is very similar to test option 2 in the New Jersey experiment. A major difference is that we were content to have identification and assessment done by the 13th week of unemployment, while the New Jersey program gets started in week 5. I think that is a big improvement, since all I have heard and read since stresses the need for early involvement in the reemployment process.

POLICY ISSUES FOR DISLOCATED WORKER PROGRAMS

I want to discuss five major policy issues which emerge from both the Hanna survey of State responses and the Messenger & Wandner summary of the New Jersey experiment. They are targeting, identification, cost effectiveness, creaming and institutional responsiveness. All of them involve tradeoffs among diverse objectives, and my purpose is to make these tradeoffs explicit.

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Targeting is accomplished by specific eligibility and selection criteria. In JTPA Title III, the targets are workers involuntarily separated from their jobs, with dim reemployment prospects. About 500,000 workers per year would be eligible for Title III assistance: the Act provides funding for 10-20% of them.

Once eligible, targeting on subgroups is often proposed. In the Hanna paper, explicitly, priority should be given to the "most in need." It should be recognized that such priority tends to trade off numbers served against serving those with greater problems. That is because with a fixed budget, programs for the more job ready, primarily search assistance and placement, are cheaper per client than programs such as academic remediation and occupational training.

In the New Jersey experiment, targeting is based on the distribution of fifth week UI payments to those laid off without a definite recall date. Beginning intervention at the fifth week trades off the costs of treating individuals who would cope on their own versus the gains from getting people started doing something early in their period of unemployment.

Identification refers to using predictors or screens to separate those most likely to have reemployment difficulty from the larger group of laid off workers. I think that such screens are the best approach to use in persuading individuals to enter programs before their UI runs out. (Particularly since there are no Extended Benefits in all but two States nor any Federal Supplemental Compensation program.)

However, there are two groups that could be disproportionately excluded from programs if screens such as "UI-recipient predicted as likely to exhaust" are used as admissions criteria to programs. These groups are 1) highly motivated "volunteers" who would like to get started right away, and 2) the converse, UI benefit exhaustees who delayed thinking about adjustment for six months.

Cost effectiveness measurement depends crucially on the timing and valuation of benefits. Long term follow-up has been discouraged under JTPA, so that the New Jersey experiment and the Title II experiment just started are to be welcomed. It may well be, however, that cost effectiveness is inversely proportional to need. It may cost quite a lot to obtain moderate improvements in employability for displaced workers needing remediation in reading and writing, for instance. A second consideration is the extent of "displacement" in the

sense of the difference between gross impact and net impact of a program. Are program graduates taking jobs that otherwise would have been filled by others? If the main effect is moving some people up the hiring queue, net cost effectiveness is less than if the jobs would otherwise have gone unfilled.

"Creaming" refers to taking the most job-ready applicants in preference to those most in need of assistance. There is also the potential of setting group against group. If upskilling opportunities, say, go disproportionately to white male high school graduates, women and minorities will not have their skills used to the fullest extent. Counselors using sex role stereotypes to decide what is "appropriate" training are an obvious point of conflict.

Institutional responsiveness means can the UI/ES/JTPA system do the job? In our 1983 paper, Ann Donohue and I assumed a positive answer to this question and assumed development of adequate screening techniques. The advances represented by these two papers include specification of screens and development of interagency coordination mechanisms.

I hope that these systems will work as designed, but it is important to be sure that the rewards and sanctions are consistent with system goals. For instance, giving credit for placements but not for referrals to an educational institution could bias the agency response away from what is most appropriate for each client.

Another area of responsiveness is how the system will handle displaced managers and clerical workers after being structured with blue collar manufacturing workers as the major clientele. In sorting out Federal/State/local roles, it is important to continue the involvement of groups such as the National Governors Association, National Association of Counties and those associations focused on UI. The Commission hopes to continue its own concern with these issues.

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1978

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1980

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Raymond P.F. Fische and G.S. Maddala, Effect of Unemployment Insurance on Duration of Unemployment: A Study Based on CWBH Data for Florida, Florida State University and University of Florida. (Available from DOL/ETA, Patrick Henry Building, Room 7402, 601 D Street NW, Washington. D.C. 20213, while supply lasts.) 80-3

*Jerry Kingston, Paul Burgess, Robert St. Louis and Joseph Sloane, Benefit Adequacy and UI Program Costs: Simulations with Alternative Weekly Benefit Formulas, Arizona Department of Economic Security and Arizona State University. 80-4

1981

UI Research Exchange. Information on unemployment insurance research. First issue: 1981. Unemployment Insurance Service. 81-1
NTIS PB83-152587. Price: \$19.00

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1983

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1984

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1985

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1986

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