

ARKANSAS

**The Demonstration of
State Work/Welfare Initiatives**

Final Report on the WORK Program in Two Counties

**Daniel Friedlander
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Janet Quint
James Riccio**

September 1985

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with

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Manpower Demonstration
Research Corporation

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The Authors

PREFACE

This is the final report on MDRC's evaluation of the WORK Program in Arkansas. An earlier interim report described the program's implementation in eight counties, while this report focuses primarily on the WORK Program's effects on enrollees' employment and welfare outcomes in two large areas: Pulaski South, the southern part of Pulaski County, in which Little Rock is located; and Jefferson County, which contains the city of Pine Bluff.

Arkansas is one of a number of states participating in MDRC's multi-state Demonstration of State Work/Welfare Initiatives. Others include Arizona, California, Florida, Illinois, Maine, Maryland, New Jersey, Texas, Virginia and West Virginia.

In this demonstration, MDRC has a unique opportunity to work closely with a number of states in evaluating their employment programs, while at the same time examining a subject that is of national as well as state concern: the critical relationship between work and dependency. Addressing state issues in a manner that benefits policy at many levels is a challenge that MDRC is privileged to be undertaking.

In order to understand this project, one must realize that this demonstration documents an important shift in program responsibilities away from the federal government to the states. The studies evaluate the initiatives states themselves chose to implement under the provisions of the Omnibus Budget Reconciliation Act of 1981, in which they received authority for the first time to operate Community Work Experience (CWEP) programs for recipi-

ents of Aid to Families with Dependent Children (AFDC) and to streamline the administrations of their Work Incentive (WIN) systems. Because states responded to these options in different ways, the demonstration is not built around a single model. Rather, the initiatives represent some of the major variations being tried in this country and span a range of local economic conditions and AFDC program provisions.

Most states receive two research reports over the course of the demonstration. The first one covers issues of implementation and participation. Later reports, such as this one, present program impacts and benefit-cost studies.

MDRC could not have conducted this demonstration without the support of The Ford Foundation, which provided funds for the planning stage and for the evaluation activities of the participating states, matching an equal investment of state or other local resources. This joint funding relationship is another significant aspect of the demonstration effort.

In the implementation and early analysis of the Demonstration of State Work/Welfare Initiatives, MDRC has been gratified by the sustained commitment of the participating states and foundations and their interest in the findings. It is our hope that the process and results of this demonstration will contribute to informed decision-making and ultimately lead to the development and operation of even more effective programs designed to increase the self-sufficiency of welfare recipients.

Barbara B. Blum
President

EXECUTIVE SUMMARY

In October 1982, the Arkansas Department of Human Services (DHS) began operating the WORK Program for single heads of households receiving or applying for welfare under the Aid to Families with Dependent Children (AFDC) program. The WORK Program is a WIN Demonstration, authorized by the Omnibus Budget Reconciliation Act (OBRA) of 1981, and, in Arkansas, it replaces the Work Incentive (WIN) Program, the federal employability training program for welfare mothers. While both programs share in the goal of increasing the unsubsidized employment of the welfare population -- and hence reducing welfare dependency -- the WORK Program gives a new emphasis to participation in employment services, mandating activity for a broad segment of the welfare caseload.

The WORK Program was initially implemented in eight counties, or nine areas, in Arkansas. The eight counties together encompass 33 percent of Arkansas' population and, as of May 1981, contained 39 percent of the adults on the AFDC welfare rolls. Since mid-1983, the Manpower Demonstration Research Corporation (MDRC), a nonprofit organization that tests innovative social policy approaches, has been studying the program and issued in 1984 an interim report on implementation and patterns of early participation.

In this second and final report, the evaluation updates the previous research, focusing on the WORK Program's effects in two counties: Pulaski South, the southern part of Pulaski County, in which Little Rock is located; and Jefferson County, which contains the city of Pine Bluff.

Enrollees' employment and welfare outcomes are discussed, as well as the program benefits and costs.

The intent of the WORK Program is to require participation of new applicants to welfare and recipients who have recently been determined mandatory, primarily because their youngest child has turned three. WIN volunteers (usually so classified in Arkansas because they have younger children) are also encouraged to participate. For welfare applicants who are judged mandatory, registration with the WORK Program is a prerequisite for completion of the application process. For mandatory recipients, failure to comply with staff assignments to activities constitutes grounds for sanctioning, or withholding the adult's share of the family's benefit payment.

With a principal aim that of surpassing the rates of participation achieved under WIN, the WORK Program has sought to deliver employment services to a larger proportion of eligible registrants in the welfare caseload than in the past. To do so, the WORK program designed a fixed sequence of required activities: a two-week group job search, or job club, followed by up to 60 days of individual job search. In Jefferson and Pulaski South (as in two other of the eight counties), enrollees who were still unemployed after both activities were to be assigned to an unpaid work experience position for up to 12 weeks. On completion of this sequence, participants could be reassigned to any program activity, or occasionally to a new one.

The choice of both job clubs and work experience offered challenges to DHS staff since neither the state nor local offices had much experience with these activities. Prior to 1981, the Department of Human Services had

primarily offered WIN registrants individual job search assistance. Job clubs were operated in one county only, and WIN Work Experience, or unpaid work in public or nonprofit agencies for a limited duration, was rarely utilized.

With the passage of OBRA in late 1981, another option was available: Community Work Experience, or CWEP, whereby mandatory work assignments can last as long as the grant does -- with weekly work hours determined by the grant level divided by the minimum wage. CWEP was originally planned for the WORK Program, but Arkansas officials decided that CWEP work hours would be too restricted to be useful, given the state's relatively low grant levels. Instead, they opted for an alternative version of the activity -- WIN Work Experience, which allows for 20 to 30 hours of weekly work, regardless of the size of the grant, with the component limited, in Arkansas, to 12 weeks. In the end, however, work experience was used infrequently in the WORK Program.

In a second step intended to extend the reach of the WORK Program, Arkansas obtained a federal waiver to apply mandatory status to mothers whose youngest child was age three or more (rather than six, as under the WIN rules). In the sample for the two counties studied in this report, over half of the enrollees were parents of a child under six.

This Executive Summary highlights the major findings from the two-year MDRC evaluation of the WORK Program in Pulaski South and Jefferson Counties. The study was funded by The Ford Foundation, the State of Arkansas and the Winthrop Rockefeller Foundation. The evaluation is one of a number of studies MDRC has undertaken as part of the Demonstration of State Work/Welfare Initiatives, an 11-state investigation of the employment

initiatives for welfare recipients that state and local governments have developed under the new OBRA authority.

The Study Design, Sample and Data Sources

This report addresses a number of key questions in three main areas of study:

Process Study

- Did the WORK Program meet its objective of expanding the reach of employment services to a broad segment of the eligible case-load?
- What were the resulting participation rates and related operational performance indicators?
- Was it feasible to implement the WORK Program components: job clubs, individual job search and work experience? What were the rates of participation in each?
- For those who entered unpaid work experience, was the work requirement viewed as fair? Did the positions foster the employability and skills development of participants? Were participants satisfied with their jobs?

Impact Study

- How effective was the WORK Program in increasing enrollees' employment and earnings, and reducing welfare receipt and payments?
- In the two main subgroups of the sample, which group experienced the larger impacts: applicants or recipients?
- What were the different impacts for enrollees in the two counties studied? What trends were observed in other subgroups?

Benefit-Cost Study

- For the two counties studied and for each separately, how did the overall measurable benefits compare to program costs?
- How were gains and losses distributed among the targeted welfare population, the taxpayers and society as a whole?

- What individual benefits and costs were most important to the overall results?

To obtain reliable answers, an experimental design was implemented in Jefferson and Pulaski South, the two counties where the number of individuals eligible for the WORK Program exceeded the program's capacity to serve them expeditiously. During the WORK Program enrollment interview, eligible individuals were randomly assigned either to an experimental group -- in which participation was required in assigned program activities -- or to a control group, which was excluded from participating in WORK Program activities for the duration of the research. Random assignment began on June 20, 1983 and continued through March 31, 1984, during which time 1,153 applicants and recipients entered the main research sample.

For the study of program impacts, the employment and welfare outcomes for all experimentals (both participants and nonparticipants) were compared to those of all controls over nine months of follow-up from the point of sample enrollment. Data for the process analysis came from a number of different sources, including a case file search of 339 WORK Program entrants. For the benefit-cost study, program benefits were compared to net operating costs using impact and process results, as well as fiscal and administrative records of the WORK Program.

The background characteristics of the research sample show that, while almost all of these single parents were women, with the majority (86 percent) black, sample enrollees were a group with notable diversity. Half had never been married; one-fourth had, but were not living with their spouses; and another one-fourth were divorced or widowed. More than half had children between ages three and five, and half had never attained a

high school diploma or its equivalent. This diversity extended to the employment and welfare histories of the enrollees, where recipients were seen as the far more disadvantaged group. Sixty-five percent had received welfare for two years or more, while only 7 percent of the applicants had done so. (An additional 37 percent of the applicants had received welfare for a shorter period of time.) And, in another striking contrast, only 7 percent of the recipients had worked in the year prior to enrollment, while some 33 percent of the applicants had done so.

Findings on Program Participation

The extent of participation in the WORK Program is analyzed in two ways in this report. First, the study examines the proportion of all individuals in the sample who "ever participated" -- for one day or several months -- in group job search, individual job search or work experience, the three principal components of the WORK Program, within nine months of program entry. Second, the study shows the proportion of all individuals who, at the nine-month point, were still registered in the program but had not yet participated in these activities.

The second measure takes account of the fact that some enrollees were only eligible for a short period of time, leaving the program before participating because they were either not approved for welfare or were deregistered for some reason not connected to program activity, such as remarriage or a change in income status. (Neither of these measures shows, on a monthly basis, the percent of program registrants who were actively engaged in job search or work experience -- an alternative participation measure suggested in proposed national legislation.)

- Overall, during the nine-month follow-up, somewhat over one-third (38 percent) of the WORK Program entrants in the two counties took part in the main program activities: group job search, individual job search and/or work experience.

Overall, this 38 percent "ever participated" rate is moderate compared to the levels attained in other states studied by MDRC. Further, it does surpass the participation rates achieved in Arkansas under WIN (at 19 and 21 percent) and thus met DHS expectations for the WORK Program.

- Rates of participation in these activities increased over the follow-up period, although the majority of those who participated did so in the first month after enrollment.

Although the WORK Program's aim was to extend services to as many enrollees as possible, central staff recognized that, with limited resources, this could not be accomplished quickly. Staff therefore were given guidelines to work with the more employable ones first and then draw into active participation those with greater employment barriers.

The increase in rates on a monthly basis indicates that staff may have in fact followed this policy. While the largest number of individuals began activities in the first month after enrollment, participation rose for one early group of enrollees (tracked for 12 months) from 25 percent in the first month to 32 percent in the third month, to 39 percent in the sixth month. After that point, the increases tended to level out.

- Participation rates were higher for the later WORK Program entrants than for the earlier enrollees.

Almost half (45 percent) of the later enrollees (those entering the program in early 1984) participated in job search and/or work experience within three months, compared to 32 percent of the group entering in the summer of 1983.

Three factors may account for the higher participation of later

enrollees. First, as program staff were able to reduce the backlog, they may have been better able to serve more incoming enrollees. Second, later enrollees had less of a history of welfare receipt, and staff may have turned their attention to them more promptly. Third, central DHS in early January 1984 issued new guidelines putting more pressure on local offices to increase levels of participation.

- At the end of nine months, about one-quarter of the WORK Program entrants were still eligible and in the program, but had not yet participated in one of the three principal activities.

By nine months after enrollment, a full 23.7 percent of the sample was still registered in the program, but had not yet taken part in any program component. This proportion remained inactive primarily because of the discretion granted to local staffs to "unofficially" excuse certain enrollees from participation. Thus, the reach of the job search mandate was extensive, but not universal.

While reasons for nonparticipation were not measured, findings suggest that, while the intention of staff was to assign the largest proportion of registrants possible to job search activities, WORK Program guidelines gave local staffs considerable discretion to grant deferrals and de facto exemptions to people whom they believed faced severe barriers to employment. These included illness, illiteracy or pregnancy and a lack of child care or transportation -- problems such that program staffs may have considered participation either too difficult or not helpful for these enrollees. It is thus likely that many individuals in the still-enrolled, but never-reached group were judged "unemployable" and were not assigned to activities for these reasons.

- Sanctioning was not a major reason for departure from the WORK Program.

According to state administrative records, only 88 sanctions were issued among the 1,733 people assessed in Pulaski South through September 1984, for a sanctioning rate of 5 percent. The rate in Jefferson County was 3 percent.

- Overall, rates of participation for the principal subgroups of the total sample -- applicants and recipients -- were quite similar, although those applicants who were approved for aid participated at a higher rate than recipients.

A similar proportion of applicants (37 percent) and recipients (40 percent) were active in the program within the nine-month period. However, when the applicant subgroup was further divided into those who were approved for aid versus those who were denied, almost half (49 percent) of the approved applicants were found to be active in program services. Of those applicants who were denied aid, a smaller but not negligible 20 percent had also participated before welfare eligibility had been determined.

Findings on Program Implementation

- Well-run group job search sessions or job clubs, aided by a central manual -- but less clearly defined individual search components -- characterized the WORK Program. Local differences were evident in the two counties studied here. Overall, Pulaski South appeared to offer a more intensive and better-run program of job search services than Jefferson.

The experience in both counties illustrates the extent of the local variation that occurred in the WORK Program. Jefferson County had high staff turnover, which resulted in implementation problems such that the job club was without a leader for a considerable length of time. Thus, while a

good number of enrollees participated in the job club (33 percent), the quality of services may have been lower than planned during some periods.

Pulaski South, on the other hand, sometimes side-stepped the job club component, assigning many of its more "job-ready" individuals directly to the job developer for unsubsidized placement. Probably as a result, participation in individual job search was higher in Pulaski South (at 26 percent) than in the job club (24 percent) and a good bit higher than Jefferson's rate of individual job search activity (20 percent).

In addition, there is some evidence that Pulaski South may have worked more intensively with its enrollees, including those who were initially unsuccessful in job search. Approximately half of those who entered job club were recycled through that component.

- Enrollees were rarely assigned to work experience in either county. The low 3 percent participation rate reflects the staff's low priority for the component.

Even though many individuals had already left the WORK Program by the time of the probable work assignment, other factors account for the component's low rate of participation. First, guidelines failed to define clearly who among enrollees should be assigned. Second, the job developers charged with operating the component had many competing responsibilities. Third, local operators displayed little interest in running work experience, and were not pressed by central staff to conform to the program model.

- In a survey of enrollees who did participate at a worksite, both they and their supervisors said that the jobs were important and not make-work. Participants also agreed that a work requirement was fair.

Interviews were conducted with a random sample of 22 participants and

their supervisors in Pulaski South, Jefferson and two other WORK Program counties where work experience was offered. Participants interviewed said that they liked their jobs, believed they had learned something, and stated that they felt better about getting welfare when they were working for it. However, when asked about the usefulness of their work compared to the level of benefits they received, most respondents who worked said they believed that the agencies got the better end of the bargain.

Findings on Program Impact

- The WORK Program serves a welfare population with a normally low level of employment.

As noted earlier, some 33 percent of the welfare applicants in the sample had worked at some time during the year prior to program enrollment, but only a little more than 7 percent of the welfare recipients had done so. Thus, while the recent labor market activity of the applicants was not high, that of the recipients was very low. Working with a population of this character was a challenge for the WORK Program.

The statutory environment helped to shape the character of this sample and Arkansas' AFDC population. The state's standard of need is among the lowest in the nation, and, under OBRA's eligibility rules, virtually any full-time employment will make a family ineligible for welfare and result in case closings. Thus, for single parents who work, there may be less mixing of work and welfare than in states with higher standards of need.

Impacts for the Full Sample

The short-term impacts of the WORK Program were estimated by comparing

the behavior of all enrollees -- both participants and nonparticipants -- in the experimental group to that of all control group members after a nine-month follow-up. Sample members with zero earnings or zero welfare payments are included in the averages of earnings and welfare dollars. Tests of statistical significance determined whether the measured differences were likely to have resulted by chance or from the program intervention.

- The WORK Program achieved modest increases in employment and earnings.

Against the backdrop of low pre-program employment, the WORK Program was effective in helping its enrollees achieve modest improvements. As seen in Table 1, all short-term employment indicators were higher for the experimental group over the nine-month follow-up period. Nearly 19 percent of experimentals were working during the second or third follow-up quarters, compared to 14 percent of controls, for a gain, or an impact, of 5 percentage points. This employment increase among experimentals is a one-third improvement over the control group level. The earnings of experimentals also rose by \$78 from \$213 for controls to \$291 for experimentals. These gains should not obscure the fact that overall employment and earnings remained low.

- Clear reductions in welfare receipt were found for WORK Program enrollees. Those welfare savings were still growing at the end of the study period.

The effect of the program on welfare receipt built up over time. Little difference in the proportion receiving welfare was observed between the experimental and control groups during the quarter that individuals enrolled.

TABLE 1

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SUMMARY OF IMPACTS FOR RESEARCH SAMPLE

Outcome and Follow-Up Period	Experimentals	Controls	Difference
Ever Employed, Quarters 2 - 3 (%) ^a	18.8	14.0	+ 4.8**
Average Number of Quarters With Employment, Quarters 2 - 3 ^a	0.30	0.22	+ 0.08**
Ever Employed (%)			
Quarter of Enrollment	16.1	11.8	+ 4.3**
Quarter 2	14.6	9.6	+ 5.0***
Quarter 3	15.2	12.2	+ 3.1*
Average Total Earnings, Quarters 2-3 (\$) ^a	280.63	212.94	+77.70*
Average Total Earnings (\$)			
Quarter of Enrollment	98.79	83.33	+15.46
Quarter 2	140.77	86.38	+54.39**
Quarter 3	149.86	126.55	+23.31
Ever Received Any AFDC Payment, Quarters 1 - 3 (%)	72.8	75.9	- 3.1
Average Number of Months Receiving AFDC Payments, Quarters 1 - 3	4.96	5.49	- 0.53***
Ever Received Any AFDC Payments (%)			
Quarter of Enrollment	66.6	69.0	- 2.4
Quarter 2	65.6	71.4	- 5.8**
Quarter 3	56.8	63.8	- 6.9***
Average Total AFDC Payments Received, Quarters 1 - 3 (\$)	771.69	864.55	-92.86***
Average AFDC Payments Received (\$)			
Quarter of Enrollment	249.86	258.31	- 8.65
Quarter 2	275.57	316.79	-41.22***
Quarter 3	246.46	289.44	-42.99***

SOURCE: Table 5.1.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare payments. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

^aQuarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded.

As more enrollees began their job search activities, however, experimentals began to leave welfare at a faster rate than controls. At the end of the follow-up period (quarter three), 64 percent of the control group were receiving welfare compared to 57 percent of the experimental group, for a reduction of 7 percentage points. (See Table 1.) Over the whole nine-month period, controls received welfare payments for five and one-half months, on average, compared to five months for experimentals.

Matching this reduction in welfare receipt was a corresponding impact on payments. Total benefits paid in the third quarter averaged \$289 per control and \$246 per experimental, for a difference of \$43. This impact amounts to a 15 percent difference in welfare expenditures for this quarter and is a true "welfare savings."

At least three-fourths of this savings occurred because fewer people were receiving welfare payments. Only one-fourth or less came from the lower average payments made to experimentals who were still receiving benefits. The prominent role of the first factor is probably explained by the state's relatively low standard of need, which assures that most individuals who obtain full-time employment will become ineligible for AFDC. Termination of grant payments rather than a partial reduction may tend to happen more frequently in Arkansas than in states with a different standard of need.

Welfare reductions for enrollees appeared to continue beyond the nine-month observation period. Analysis of a small sample of enrollees with two extra quarters of follow-up turned up no evidence that the savings had stopped by the 15-month mark.

Impacts for the Subgroups

- Compared to applicants, recipients had a much lower record of recent employment when they entered the WORK Program. Despite this supposed disadvantage, the program had more sustained employment impacts on the recipients.

Several recent studies of employment programs for the welfare population have suggested that more disadvantaged subgroups can be helped most by program services. Program impact is, by definition, a change in behavior, and those subgroups with the lowest skill levels and weakest work records often possess the greatest potential for real change. "Job-ready" individuals, on the other hand, can frequently find and keep employment without special assistance. Their higher rates of employment (or "placement rates") may not therefore represent much of a change from what would have happened without program intervention.

As seen in Table 2, the immediate employment impact for applicants and recipients in this sample was similar: an increase of about 5 percentage points in the quarter after enrollment (quarter two). But applicants had difficulty sustaining this impact into the third quarter.

Normal employment patterns, as observed in the control group, help to explain this finding. Applicant controls, even without special program assistance, were often able to regain lost jobs or find new ones, thus shrinking the experimental-control difference (or impact) in employment rates. Recipient controls were less able to increase their employment levels on their own.

However, assisted by the WORK Program, recipient experimentals were able to find jobs that they would not have otherwise found. As a result, recipient experimentals took the lead over recipient controls, and that

TABLE 2

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SUMMARY OF IMPACTS FOR RESEARCH SAMPLE, BY WELFARE STATUS

Outcome And Follow-Up Period	Applicants			Recipients		
	Experimental	Control	Difference	Experimental	Control	Difference
Ever Employed, Quarters 2-3 (%) ^a	23.7	18.1	+ 4.8*	11.5	6.7	+ 4.8**
Average Number of Quarters With Employment, Quarters 2-3 ^a	0.36	0.30	+ 0.07	0.20	0.10	+ 0.10**
Ever Employed (%)						
Quarter of Enrollment	22.0	16.4	+ 5.6**	7.0	5.5	+ 1.5
Quarter 2	17.9	12.8	+ 5.1**	9.7	5.0	+ 4.7**
Quarter 3	18.6	16.8	+ 1.8	10.3	5.3	+ 5.0**
Average Total Earnings, Quarters 2-3 (\$) ^a	348.34	302.15	+46.19	199.90	87.25	+112.65**
Average Total Earnings (\$)						
Quarter of Enrollment	132.94	128.89	+ 4.06	45.86	18.78	+27.08
Quarter 2	167.75	115.65	+52.10	98.34	45.71	+52.63*
Quarter 3	180.58	186.48	- 5.91	101.56	41.54	+60.02**
Ever Received Any AFDC Payment, Quarters 1 - 3 (%)	58.9	61.8	- 2.9	93.9	95.8	- 1.9
Average Number of Months Receiving AFDC Payments, Quarters 1 - 3	3.48	3.76	- 0.29	7.20	7.99	- 0.79***
Ever Received Any AFDC Payments (%)						
Quarter of Enrollment	48.9	50.2	- 1.3	93.7	96.1	- 2.4
Quarter 2	52.6	57.1	- 4.5	85.3	92.1	- 6.8**
Quarter 3	45.2	48.5	- 3.3	74.3	85.7	-11.4***
Average Total AFDC Payments Received, Quarters 1 - 3 (\$)	559.91	588.96	-29.05	1,091.57	1,262.88	-171.31***
Average AFDC Payments Received (\$)						
Quarter of Enrollment	154.52	144.60	+ 9.92	393.34	422.60	-29.26**
Quarter 2	219.46	242.05	-22.59	360.27	424.92	-64.65***
Quarter 3	185.94	202.32	-16.38	337.97	415.37	-77.40***

SOURCE: Tables 5.4 and 5.5.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare payments. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

^a Quarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded from the measures of total follow-up employment and earnings.

lead remained constant through the last (or third) quarter at 5 percentage points. The applicant employment impact, on the other hand, dropped from its 5 percentage point level in quarter two to less than 2 percentage points in quarter three. (See Table 2.) At this juncture, the difference between applicant experimental and control employment was no longer statistically significant.

Within the applicant subgroup, there were individuals with no recent work experience and other characteristics associated with lower "employability." Tentative evidence suggests that, in the final quarter, these applicants may have experienced employment gains of a similar magnitude to those of recipients.

- Short-term reductions in welfare receipt among experimentals were much larger, on average, for a recipient than for an applicant. The difference in impacts was such that nearly all welfare savings achieved by the WORK Program in the nine-month follow-up came from the savings for recipients.

Over the nine-month follow-up period, welfare savings per recipient were nearly six times higher than the savings per applicant (\$171 vs. \$29, a difference statistically significant at the 5 percent level). Although recipients were only 40 percent of the full sample of program enrollees, they accounted for 80 percent of the total nine-month welfare savings achieved by the WORK Program.

By the end of observed follow-up (quarter three), the dollar difference in payments per recipient was \$77 (down from \$415 for controls to \$338 for experimentals), for a 19 percent reduction in benefit expenditures for the quarter. The corresponding reduction for applicants was from \$202 to \$186 -- at \$16, only an 8 percent savings. (See Table 2.)

A partial explanation for these findings rests with the normal pattern

of AFDC eligibility determination and turnover. Roughly 40 percent of all applicants who enrolled in the WORK Program -- about the same proportion for experimentals and controls -- never received any welfare during the observation period. For these people who did not meet the AFDC eligibility criteria, participation in the WORK Program would not have made any difference. On top of this, not many people (a not statistically significant 2.9 percent of applicants) were deterred from pursuing their requests for assistance by the program requirements. In addition, applicant controls who were granted aid often received it for only a short period, leaving the program little room for extra expenditure reductions. Recipient controls, on the other hand, left welfare more slowly so that the program intervention made more of a difference.

- The program worked just as effectively for mothers with pre-school children as it did for parents with children of school age.

The federal waiver that lowered the exemption criterion on the youngest child's age from six to three enabled the WORK Program to expand enrollment. Over half of the sample had a pre-school child, and for recipients this figure topped 70 percent by the beginning of 1984.

The child-care responsibilities of a single parent with a younger child could have precluded program impacts on employment and welfare receipt. The evidence indicates that this was not the case. In the short-run, employment and welfare impacts were of a similar magnitude, on average, for enrollees with a young child and enrollees without one.

- The WORK Program appeared to be more effective in Pulaski South than in Jefferson.

Virtually all of the employment gains came from the impacts in Pulaski

South where the employment rate at the end of follow-up rose 2 percentage points for applicants and 9 percentage points for recipients. There were no measured employment impacts in Jefferson County, and welfare savings per experimental were also smaller, roughly half those estimated for Pulaski South. Observation has suggested that the principal reason for these differences may have been the more intensive program treatment offered to enrollees in Pulaski South.

Findings from the Benefit-Cost Analysis

The benefit-cost analysis compares the program's outcomes to the resources used to produce them. The components of this analysis include potential benefits such as the value of the net output from work experience jobs, the increase in earnings from regular jobs, changes in the taxes experimentals pay, changes in their AFDC, Medicaid and Unemployment Insurance payments, and savings in the costs of administering these transfer programs. Program effects on Food Stamps and General Assistance were not measured.

Estimated WORK Program costs include the resources expended for enrollees' assessment, job clubs, individual job search and other local staff activities; the cost of monitoring by the central office of the WORK Program and by the Department of Human Services; and the allowances and incentive payments made to experimentals. The costs incurred by the local Job Training Partnership Act (JTPA) program in serving people referred by the Pulaski South office are also included.

It is important to note that all benefits and costs were estimated on a per experimental basis and are net of the benefits and costs attributed

to the control group. In addition, because the study's follow-up period was short, projections were made for benefits and costs generated after data collection ended. The time horizon for the study -- the total period covered by the observed and extrapolated estimates -- is five years from the point of random assignment.

To understand how estimated benefits compare to program costs, it is first necessary to ask from whose perspective the benefits and costs are being considered. This analysis considers the economic consequences of the program separately from three perspectives: the experimental group, all other people in society (referred to as the "taxpayers"), and both groups combined (which together constitute all of society). This was done by computing a "net value" (in 1984 dollars) of all the gains and losses that accrued to each group.

Two major limitations are important to note. First, the program's impact on earnings is estimated with less reliability than other impacts. Second, the extent to which program impacts will persist after the observed follow-up period is difficult to predict. Consequently, alternative estimates have been made, using different assumptions about the persistence of program impacts on earnings and welfare receipt. One estimate -- based on findings from several recent studies -- is that the magnitude of the impacts observed during the last two quarters of follow-up will continue unchanged after the follow-up period. A second is that the impacts will decline by 30 percent per year, which is approximately the rate of decay for impacts in a national study of female welfare clients in the WIN Program. Additional estimates using only available observed data assume that no benefits will be generated after the follow-up period. This is an

extreme assumption.

Given the uncertainty surrounding future program impacts, the reader is advised to focus on the pattern of findings rather than on the specific values cited. The major findings are summarized below and in Table 3.

- Taxpayers experienced a net gain from the WORK Program that ranged from \$209 to \$1,177 per enrollee over five years.

The range of taxpayer net gains reflects the different extrapolation assumptions used, but the positive overall effect for taxpayers persisted, no matter what assumption was chosen. It was also unaffected by any imprecision in the earnings estimate since taxpayers are not directly affected by experimentals' earnings, and the taxes on those earnings are not a major component of taxpayer benefits. Taxpayer gains were also found for both counties. Primary benefits from the taxpayers' point of view were reductions in AFDC and Medicaid payments to experimentals since taxpayers support these two programs. A reduction in AFDC administrative costs was another benefit for taxpayers, as was the small increase in taxes paid by the experimentals employed in unsubsidized jobs.

- Unlike taxpayers, experimentals appear not to have benefited financially from the program.

While the program generated an increase in earnings net of taxes as a result of experimentals' improved rates of unsubsidized employment, these seem to have been offset by reductions in AFDC and Medicaid payments. However, since the earnings estimate is less reliable than other estimates in the analysis -- and this variable is a major source of net value from the experimentals' perspective -- the actual effect of the program on experimentals is much less certain than the effect on taxpayers. Moreover, it is not known whether other sources of support, such as from family

TABLE 3

ARKANSAS

OBSERVED AND EXTRAPOLATED
NET VALUE ESTIMATES FOR BENEFIT-COST ANALYSIS, BY PERSPECTIVE

Type of Estimate	Perspective		
	Experimentals	Taxpayers	Society
Observed Net Value ^a	\$-168	\$209	\$41
Total Net Value Assuming 30% Decline in Impacts ^b	-363	711	224
Total Net Value Assuming No Change in Impacts ^c	-535	1177	842

SOURCE: Chapter 6 and Table 8.5.

NOTES: Costs were estimated for the same five year period as benefits although most costs were incurred in the first year after random assignment.

Results are for Pulaski South and Jefferson samples combined and are expressed in 1984 dollars.

Within each perspective, positive numbers indicate gains to that group and negative numbers indicate losses.

^a Sum of observed gains and losses.

^b Sum of observed and extrapolated gains and losses, assuming an annual 30 percent decline in program impacts during the extrapolation period.

^c Sum of observed and extrapolated gains and losses, assuming no change in program impacts after data collection ends.

members, earnings not recorded by the Unemployment Insurance system, or Food Stamp and General Assistance payments, were used by experimentals to compensate for the loss in AFDC and Medicaid. Program effects on these variables were not measured. Nevertheless, there is no evidence from this study to suggest that the experimental group's economic circumstances were improved by the program.

- Because the effect on taxpayers was larger than the effect on experimentals, the net value for society as a whole was positive. However, important differences were evident by county.

The gain to society as a whole ranged from \$41 to \$642. The results, however, varied substantially by county. While the taxpayers' gains outweighed the apparent losses of experimentals in Pulaski South, this was not true for Jefferson, where the effect on society was negative.

- The net value of the WORK Program from the perspective of the government budget was positive.

This perspective differs from the taxpayers' perspective only in that it ignores the output produced in program-related jobs. Since the value of work experience and JTPA output was small (only \$20) and existed only in Pulaski South, the total value was quite similar to the taxpayer results.

- The average cost of the WORK Program was low.

The average cost of the program, at \$158 per experimental, largely reflects the small size of the program staff in each county, and the fact that program services were not especially intensive. For example, few people received work experience, and the job clubs were operated so that relatively little staff time was required. Moreover, individual job search was not very time-consuming for staff to administer to an average individual.

It is also useful to remember that the WORK Program may generate a number of benefits and costs that are not easily measured. For instance, one such benefit may be an increase in self-esteem among individuals whose employment opportunities are improved by the program. Alternatively, there may be negative consequences associated with the reduced care of children by parents who participate in program activities, even when alternative care is available. Yet, there may also be positive benefits to children in having working mothers as role models. Intangible benefits and costs such as these are beyond the scope of this analysis, although they should be considered in judging the overall merits of the WORK Program.

Conclusion

If there are two broad questions readers most want answered by this evaluation research, they probably are "What kind of a program is WORK?" and "Is it effective?" The process research, which addressed the first question, indicated that the WORK Program succeeded in increasing participation in job search components beyond that of the WIN Program for mandatory AFDC applicants and recipients, but did not implement a work requirement. Participation in the work experience component was low and remained that way. Job search levels, in contrast, grew over time: A good portion of participation came after the first month, but still, at the end of nine months, almost one-fourth of all enrollees were still in the program but had not yet participated in a job search component.

The evidence on program effectiveness from the impact and benefit-costs analyses can be characterized as a two-part story. On the one hand, the evidence suggests that the WORK Program succeeded in reducing the net

taxpayer and budgetary cost of welfare, which clearly is one of the policy goals of the program. The program consistently reduced welfare payments to experimentals over the period covered by the research. Moreover, the estimated cost of the program is low compared to that of similar programs. These two findings are important in reaching the benefit-cost conclusion that the WORK Program produces a net gain to taxpayers, as well as a net budget savings.

On the other hand, the research indicates that, while the program did lead to an increase in earnings, it does not appear to have improved the economic circumstances of experimentals. Although this conclusion is subject to considerable uncertainty, it appears that the program did not generate sufficient earnings from employment to offset recipients' losses in AFDC payments and Medicaid benefits.

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ARKANSAS:

**FINAL REPORT ON THE
WORK PROGRAM IN TWO COUNTIES**

CHAPTER 1

INTRODUCTION

This is the second and final report on a three-year evaluation of the Arkansas WORK Program, which has been operated since October 1982 by the Arkansas Department of Human Services (DHS). The program requires certain applicants and recipients of Aid to Families with Dependent Children (AFDC) to participate in a sequence of activities -- mainly group and individual job search and, in some cases, unpaid work experience -- intended to improve their rates of unsubsidized employment and reduce public assistance caseloads and costs. Those who do not participate risk having their welfare applications denied or losing their benefits.

The preceding report on the WORK Program described early implementation.¹ This report will update those findings but focus primarily on the WORK Program's effects on enrollees' employment and welfare receipt and on program benefits and costs. To do this, it examines the experience and outcomes for welfare applicants and recipients in two counties, Pulaski South and Jefferson.²

The WORK Program grew out of the federal Omnibus Budget Reconciliation Act (OBRA) of August 1981. This legislation enacted a number of changes in the AFDC program and gave states expanded authority to plan and carry out initiatives to increase the linkage between welfare and work. In particular, states were allowed, under the Work Incentive (WIN) Demonstration Program, to reorganize the management of the WIN Program, the major federally-funded employment program for AFDC recipients.

Arkansas is one of a number of states that elected to operate a WIN Demonstration Program and design its own program of employment services for welfare recipients. Arkansas also chose to administer the new initiative solely through the public assistance agency, thus replacing the bifurcated structure of the traditional WIN Program, which divides management between that agency and the state employment service.

The purpose of this chapter is to provide a context for understanding the WORK Program and the results of the evaluation. The chapter first presents an overview of the WIN Demonstration and the WORK Program, and then describes the evaluation design and the differences between the two counties studied in this analysis. The chapter concludes with a brief summary of the findings from the first report and the major questions addressed in this report.

A. Program Intentions

Prior to the WIN Demonstration, Arkansas, like other states, had operated the WIN Program with relatively limited resources. The WIN Demonstration option did not improve these funding levels, but high-level Department of Human Services officials believed they could use the WIN resources more flexibly and perhaps more efficiently under the WIN Demonstration than under the regular program.

The WIN Demonstration had several other advantages. First, DHS officials had been dissatisfied with the scope of service provision in the WIN Program in which large numbers of registrants remained unassigned to program activities. A major goal of the WORK Program was to better WIN participation rates by encouraging operators to reach more deeply into, and

to serve a larger proportion of, the welfare caseload. The primary mechanism for doing so was to be the application of a mandatory participation requirement to all registrants who might reasonably be expected to benefit from taking part in program activities.

Officials were also responsive to a general concern about welfare expenditures. Believing that WIN had not succeeded in curbing these costs, DHS staff had interest in trying a new approach to encourage more recipients to work and leave the rolls. Finally, officials hoped that the new program, as run by the welfare agency, would be more efficiently operated than the predecessor WIN Program, with its dual agency management.

B. Program Model

The WIN Demonstration was implemented as the WORK Program in eight Arkansas counties,³ which collectively serve a high proportion of the state's AFDC caseload (39 percent of all the adults on the rolls as of May 1981). Of the total number of people applying for AFDC in these eight counties between July 1983 and June 1984, 53 percent were WORK Program registrants, either as volunteers or as individuals required to register.⁴

Until 1981, Arkansas' WIN Program had primarily assisted its registrants by helping them conduct individual job search. There was much less emphasis on group job clubs -- programs that typically teach participants job-hunting skills and then supervise their telephoning of prospective employers in a peer group setting. These programs, which had been widely adopted by the WIN Program nationwide, were operated almost exclusively in Pulaski County. With the inception of the WIN Demonstration, however, job clubs became one of the WORK Program's standard activities.

As authorized by the 1981 OBRA legislation, Community Work Experience Programs (CWEP) -- programs in which welfare clients work at unpaid jobs in exchange for their welfare grants -- were also an option available to the state, and in fact, the Department of Human Services originally planned to operate a CWEP component. However, CWEP requires that participants' work hours be determined by dividing grant levels by the minimum wage, and the state has a relatively low grant level. In the view of DHS officials, this limited the hours of the work obligation too much to be useful to either participants or employers. The state thus chose to incorporate another form of mandatory work, already authorized under the regular WIN Program, into its WORK Program. WIN Work Experience places participants for up to 13 weeks in unpaid jobs, with weekly hours not tied to the size of the grant. In Arkansas, the limit was set at 12 weeks.

In essence, the WORK Program supplemented individual job search -- its customary work-related service -- with two activities largely untried in the state's previous WIN Program -- group job search, or the job club, and work experience. The new WORK Program performed all functions usually handled by WIN: registration, employability assessment, assignment to activities and deregistration. An individual was to proceed through program activities sequentially: after assessment, two weeks of job club, followed by up to three months (subsequently reduced to two) of individual job search efforts. In the two counties studied, people who were still unemployed at this point were to be assigned to a work experience position.⁵ At the end of the sequence, they could be reassigned to any program component or occasionally to a new one.

Like WIN, the WORK Program enrolled individuals who had been referred

by the local income maintenance units. The program was targeted to applicants for welfare who would normally be required to register with the WIN Program and recipients who were newly determined WIN-mandatory. (See Chapter 2 for a more detailed discussion of the target group.) Applicants and recipients who were not required to register with WIN were encouraged to volunteer for the program.

Generally, the WORK Program followed WIN's eligibility rules to determine which groups of clients were required to register. As described in the WIN handbook, individuals could be exempted if they were:

1. under 16 years old
2. enrolled full-time in school and under 21 years
3. sick, as determined by the income maintenance unit
4. incapacitated, as determined by the income maintenance unit
5. 65 years old or more
6. living in a remote area: located two hours or more away from a WIN office
7. a caretaker of a sick person
8. a mother of a child under six years of age
9. a mother or female whose spouse is a WIN registrant

There was, however, one important exception in the WORK Program's eligibility guidelines, which broadened the target population. A waiver obtained from the Office of Family Assistance within the U.S. Department of Health and Human Services required welfare recipients with children aged three to five to participate, if they had available adequate child care. This step was taken for several reasons. DHS staff believed that the younger women would be less settled into dependency than the general welfare population and more likely to benefit from the program if they were reached early in their welfare stay. The then Commissioner of Social Services also thought that mothers not dependent on public assistance were better role models for their young children.⁶

C. Evaluation Design

The evaluation of the Arkansas WORK Program is part of MDRC's Demonstration of State Work/Welfare Initiatives, which examines the implementation, impact and cost-effectiveness of major AFDC initiatives adopted by a number of states in response to the 1981 OBRA legislation. In addition to Arkansas, studies are under way in California, Illinois, Maine, Maryland, New Jersey, Virginia and West Virginia, with a study of welfare diversion being conducted in Arizona, Florida and Texas.⁷

MDRC's evaluation in Arkansas' Pulaski South and Jefferson Counties, as in most other states in the demonstration, includes three types of analyses: process, impact and benefit-cost. Chart 1.1 summarizes the questions, the methodology and data sources of each, while the following sections describe the analyses briefly.

1. The Process Analysis

The process analysis examines the operations of the WORK Program and identifies the factors that facilitate or constrain program implementation. The analysis has two main parts. The first presents an in-depth description of the content and administration of the program model, highlighting major activities and management procedures. Most of this line of inquiry was pursued in the first study, but the current report supplements that analysis with a worksite study. Through a survey of a selected group of participants and supervisors at work experience worksites, participant attitudes about the work requirement and other factors are examined.

The second part of the process analysis tracks and explains the movement of individuals through the program, examining participation rates and updating the material in the first report. The proportion of the caseload

CHART 1.1

ARKANSAS

DESIGN FOR THE EVALUATION OF THE WORK PROGRAM

Research Component And Questions	Methodology	Data Sources	Reports ^a
<p>IMPACT ANALYSIS</p> <p>Does the WORK Program result in an increase in employment and earnings and/or a reduction in welfare dependency and benefits?</p> <p>Do impacts vary for groups with different prior employment and welfare dependency?</p>	<p>Comparison of the employment and AFDC outcomes over time for AFDC applicants and recipients randomly assigned to the experimental program or to a control group.</p>	<p>Uniform client characteristics collected at program enrollment</p> <p>AFDC payment and unemployment insurance earnings files</p> <p>Program administrative records</p>	<p>Second</p>
<p>BENEFIT-COST ANALYSIS</p> <p>To what extent does the WORK Program lead to an increase in direct [budget] expenditures?</p> <p>Do program benefits exceed or fall below costs?</p>	<p>Estimation of the increment in operating costs (including administrative costs and payments to institutions and to participants for work-related expenses) for experimentals compared to the control group</p> <p>Estimation of the net present value of the state initiative by comparing additional costs and benefits</p>	<p>State and local budgets, data on special payments, and studies of staff time allocation</p> <p>Cost data, program administrative records, impact estimates, and value of output estimates from the study of work experience worksites</p>	<p>First/Second</p>
<p>PROCESS ANALYSIS</p> <p><u>Participant Flow Study</u></p> <p>What is the pattern of program participation and what factors explain observed differences?</p> <p>Is participation mandatory and do participation rates vary for different subgroups of the population?</p> <p>What is the content and administrative structure of the demonstration program?</p> <p><u>Worksite Study</u></p> <p>What is the quality of the work experience worksites? Do they develop employability and provide social benefits?</p>	<p>Analysis of the pattern of program assignment, participation, and deregistration</p> <p>Study of the interaction between participation pattern and program design, institutional arrangements, administrative practices, and other conditions</p> <p>Study of program components and staff decision making</p> <p>Analysis of the characteristics of program worksites: do they develop job skills? do they provide useful goods and services? do they provide psychological benefits?</p>	<p>Program administrative records, including status, outcome, and participation</p> <p>Systematic observation, case file studies, interviews with program staff and participants</p> <p>Systematic observation, interviews with program staff, program administrative records</p> <p>Surveys conducted with supervisors and participants at a random sample of 24 worksites in Pulaski, Jefferson, Sebastian, and Crawford Counties</p>	<p>First/Second</p> <p>Second</p>

NOTE: ^a The first report refers to the Interim Findings from the Arkansas WIN Demonstration Program published in November 1984; the second report refers to this report.

that remained in the WORK Program without participating is a critical question addressed for the first time.

2. The Impact Study

The impact study, a primary focus of this report, examines a number of questions about the WORK Program's effectiveness in the two counties: Does the model have short- or longer-term impacts on enrollees' employment and earnings, receipt of welfare or the size of their benefit checks? Do the impacts vary across different subgroups of the welfare population: e.g., recent applicants versus recipients; enrollees in Jefferson versus Pulaski South; people with and without recent employment experience; or women with children between three and five years versus those with older children?

To explore these and other questions, this study uses an experimental design. At the enrollment interview, all eligible enrollees were randomly assigned either to an experimental group offered the program treatment or to a control group, which did not receive any special services. Random assignment ensured that experimental and control group members would be similar in all characteristics except services received. Thus, any statistically significant differences in behavior should result from differences in program treatment. Impacts were estimated by comparing welfare and employment outcomes of experimentals and controls.

The main research sample consists of 1,153 welfare applicants and recipients, who were randomly assigned between June 20, 1983 and March 31, 1984. This sample is supplemented by a sample of 940 individuals who were enrolled in the program but not served before the start of the research.

Follow-up data for all sample members were collected through January 1985. Thus, for this report, the employment experiences and welfare pay-

ments for the latest sample members were tracked for a minimum of nine months and those for the earlier entrants for up to 15 months. Most sample members were followed for at least nine months.

3. The Benefit-Cost Analysis

The third part of the research study is a benefit-cost analysis. This compares the net costs of operating the WORK Program to the net benefits which result primarily from increases in earnings and reductions in welfare benefits, if any. Benefits and costs are analyzed from the points of view of program experimentals, taxpayers and society as a whole.

4. The Research Sample

MDRC's two studies on the Arkansas program, the first report and this final analysis, use two overlapping but different research samples. The first report focused on 1,277 individuals who were enrolled in the program in the eight original counties between June and September 1983. This report examines the experiences of the control group as well as experimentals in order to compare outcomes for those eligible and ineligible for program services. This analysis is thus limited to a sample formed by random assignment in two of the eight original counties, Jefferson and Pulaski South, the only areas in which eligible people outnumbered program slots by a level high enough to allow for this technique. Some of the members of this two-county sample -- 258 out of the 1,153 -- were part of the research sample of early enrollees followed in the interim report. On average, from June 1983 through July 1984, sample members in Jefferson and Pulaski South together made up almost 40 percent of all enrollees in the eight-county program.⁸

D. Program Setting

Arkansas is a mixed rural/urban state. The two counties covered in this study include two of its largest urban areas -- part of Little Rock in Pulaski South and Pine Bluff in Jefferson.

In many respects, the two counties exhibit some fairly striking differences, as seen in Table 1.1. In a state with a generally low population density (44 inhabitants per square mile), Pulaski South has over four times the density -- and almost four times the population -- of Jefferson.⁹ Both counties have some public transportation, but bus lines do not extend into outlying districts. Of the two counties, Pulaski South is clearly the more affluent and has the stronger labor market. In 1980, Pulaski's median income was \$15,652; Jefferson's, at \$12,761, was much closer to the average in Arkansas -- \$12,224.

The percentage of the population living below the poverty line in Jefferson is double that in Pulaski (18 percent versus 9 percent). Again, Jefferson's rate approximates the relative poverty of the state as a whole (15 percent), while Pulaski's more closely matches the country's poverty level. Forty-two percent of Jefferson's population is non-white; in Pulaski the proportion is 26 percent.

Statewide, the Arkansas AFDC caseload level has declined steadily from 1977-1981 and dropped even more sharply as a result of the new federal eligibility rules introduced by OBRA. At 22,000, the level stabilized and remained that way during this study period. Jefferson and Pulaski, however, were not part of this overall trend. From 1982-1984, Jefferson's caseload grew from 1,600 to 1,800, while Pulaski's declined -- from 2,100 to 1,700.¹⁰ Together, the two counties contained about a fifth of the

TABLE 1.1

ARKANSAS

SELECTED CHARACTERISTICS OF WORK PROGRAM TARGET AREAS, BY COUNTY

Characteristic	Pulaski ^B	Jefferson	Statewide
1980 Population ¹	340,613	90,718	2,288,435
County Seat	Little Rock	Pine Bluff	N/A
Percent Urban ^{2/b}	87.2	88.2	51.8
Population Density (Inhabitants per square mile.) ³	444.1	102.8	43.9
Percent Non-White ⁴	25.8	41.6	17.8
Percent of Families ⁵ Below Poverty Line	9.4	18.0	14.8
Average Unemployment Rate, 1983 ^{6/c}	7.7	10.5	10.1
Average Weekly Earnings of Individuals in Covered Employment, 1983	315.98	288.16	271.48
Availability of Public Transportation ⁸	Urban- Rural Transit System Covers Part of County	Urban-Rural Transit System Covers City of Pine Bluff and Immediate Area	N.A.

SOURCES: ¹ General Housing Characteristics, Arkansas 1980 Census of Housing, U.S. Department of Commerce, Bureau of the Census, Table 1, Summary of General Housing Characteristics, 1980.

² Number of Inhabitants, Arkansas 1980 Census of Population, U.S. Department of Commerce, Bureau of the Census, Table 2, Land Area and Population, 1930 - 1980.

³ Ibid., Table 3, Population of Counties by Urban/Rural Residence, 1970 and 1980.

⁴ Calculated from General Social and Economic Characteristics, Arkansas, 1980 Census of Population, U.S. Department of Commerce, Bureau of the Census, Table 58, Persons by Spanish Origin, Race, and Sex, 1980.

(continued)

TABLE 1.1

⁵ Ibid., Table 181, Poverty Status in 1977 of Families and Persons for Counties in 1980, and Table 72, Poverty Status in 1979 of Families and Persons, 1980.

⁶ Unpublished statistics from Arkansas Employment Security Division, Research and Analysis Section, 1983 data.

⁷ Ibid.

⁸ WORK Program Planning and Research Documents.

NOTES: N/A indicates not applicable.

^a Pulaski includes both Pulaski North (Job Search Only) and Pulaski South (Job Search/Work Experiences).

^b As defined by the Census Bureau, the urban population comprised all persons living in urbanized areas (that is, population concentrations of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled contiguous area) and in places of 2500 or more inhabitants outside of urbanized areas.

^c Unemployment rate is not seasonally adjusted.

state's entire AFDC caseload.

From 1981-1982, the state's unemployment rate mirrored the national recessionary trends, climbing in the months before the start of the study. Once again, however, Jefferson and Pulaski South differed in the extent to which they followed this overall pattern. While statewide unemployment at 9 percent continued to stay high through 1983 relative to the years before 1981, it was as low as 7 percent in Pulaski South and as high as 10 percent in Jefferson.¹¹ This pattern, in association with the others just discussed, suggests that within the context of a relatively poor and somewhat rural state, the analysis of results from these two counties present an opportunity to view the operations of the WORK Program in two quite different environments.

E. Implementing the WORK Program: Findings From the First Report

MDRC's first report on the WORK Program focused on its operational feasibility and implementation experience through September 1983. It gave an early picture of participation and described the nature and quality of services.

A major finding was that while WIN's participation rates are not strictly comparable to those of the WORK Program, the differences were large enough to support the conclusion that the program met its goal of exceeding WIN's previous rates. No more than 21 percent of WIN registrants entered WIN work and training components in fiscal year 1981, but 40 percent of the WORK Program sample participated at some point in program components within three months of enrollment.

The WORK Program areas studied, however, showed wide variation in the

participation rates observed both in job search activities and work experience. In part, the range appears to reflect the discretion on assignment policies given to the local offices.

The report also found that in most counties group job clubs operated smoothly, within clearly defined guidelines. Individual job search and work experience, however, were far more subject to local interpretation and variation. Individual job search frequently became a holding status in which few demands were placed on enrollees. Participation rates in work experience were generally low. In contrast, participation rates in group job clubs were the highest of all three components, reflecting both the clear articulation of the program goals and procedures, and the job club's position as the first in a sequence of activities.

Two additional findings from the report bear repeating. First, the WORK Program, in keeping with the priorities set by central DHS staff, appeared to serve individuals who had few barriers to employment first and then turn to those with more serious problems. Second, the program had a relatively modest level of resources and supports -- not only in terms of office staffing but also in the opportunities available in the local labor markets and surrounding communities: e.g., many had no public transportation and rural areas had few employers. Program achievements were thus wrested from an environment that posed some significant challenges to implementation.

F. The Current Report

As this chapter suggests, the evaluation of the WORK Program seeks to provide answers to a broad range of questions about the feasibility,

impact, cost-effectiveness and targeting of job search and work experience programs. Among the main questions are:

Process Study

- Did the WORK Program meet its objective of expanding the reach of employment services to a broad segment of the eligible caseload?
- What were the resulting participation rates and related operational performance indicators?
- Was it feasible to implement the WORK Program components: job clubs, individual job search and work experience? What were the rates of participation in each?
- For individuals who entered unpaid work experience, was the work requirement viewed as fair? Did the positions foster the employability and skills development of participants and provide social benefits? Were participants satisfied with their jobs?

Impact Study

- How effective was the WORK Program sequence in increasing employment and earnings, and reducing welfare receipt and payments?
- In the two main subgroups of the sample, which group experienced the largest impacts: applicants or recipients?
- What were the different impacts for the two counties studied? What trends were observed in other small, but important, subgroups?

Benefit-Cost Study

- For the two counties studied and for each separately, how did the overall measurable benefits compare to program costs?
- How were gains and losses distributed among the targeted welfare population, the taxpayers and society at large?
- What individual benefits and costs were most important to the overall results?

This report addresses these questions in the following manner.

Chapter 2 presents the research design, sample and data sources in detail.

Chapter 3 describes the environment of the evaluation, discussing some of the problems inherent in analyzing participation patterns and impacts. Chapter 4 contains an overview of the program flow, and a series of performance indicators summarizing participation. Chapter 5 covers short-term, employment and welfare outcomes and estimates of the longer-term accomplishments as well as findings on the applicant/recipient and other subgroups of interest. Findings on the benefits of the program relative to costs are discussed in Chapter 6, and conclusions are presented in Chapter 7.

CHAPTER 2

THE RESEARCH DESIGN

This chapter presents in more detail the research design and analytical techniques used in the process, impact and, to a lesser extent, the benefit-cost studies. It describes the characteristics of the research sample and discusses the data sources used in all three analyses. Chapter 6, however, provides a more complete discussion of the benefit-cost methodology and data sources.

A. The Research Design

As noted in Chapter 1, this study aims to isolate the impacts of the WORK Program in Pulaski South and Jefferson Counties through the use of an experimental research design. In these two counties, unlike the other six, the number of individuals eligible to participate exceeded the capacity of program staff to serve them promptly, thereby making random assignment feasible. Program registrants thus became part of either an experimental group, which received services, or a control group, which was offered none. The employment rates, earnings, welfare receipt and benefit payments of each group were tracked and compared over a period of time.

1. Eligibility

Two groups were eligible to take part in the WORK Program: new applicants for welfare who were classified mandatory and thus required to register with the WIN Program and those already receiving welfare who were newly determined mandatory and also required to register. These

recipients' family circumstances had changed so that they were no longer exempt from WIN registration, most commonly because their youngest child had turned three. In addition, recipients with children between the ages of three and five were required to register when the WORK Program obtained a waiver to classify women with children that age as mandatory.

2. Random Assignment

As seen in Figure 2.1, which depicts the formation of the research sample and the program flow, random assignment took place at the point when individuals were enrolled into the program. The WORK Program case manager telephoned an MDRC data clerk who, consulting a list of random numbers, assigned the person to either the experimental or control group. The process continued from June 20, 1983 through March 31, 1984, and went smoothly in both counties.

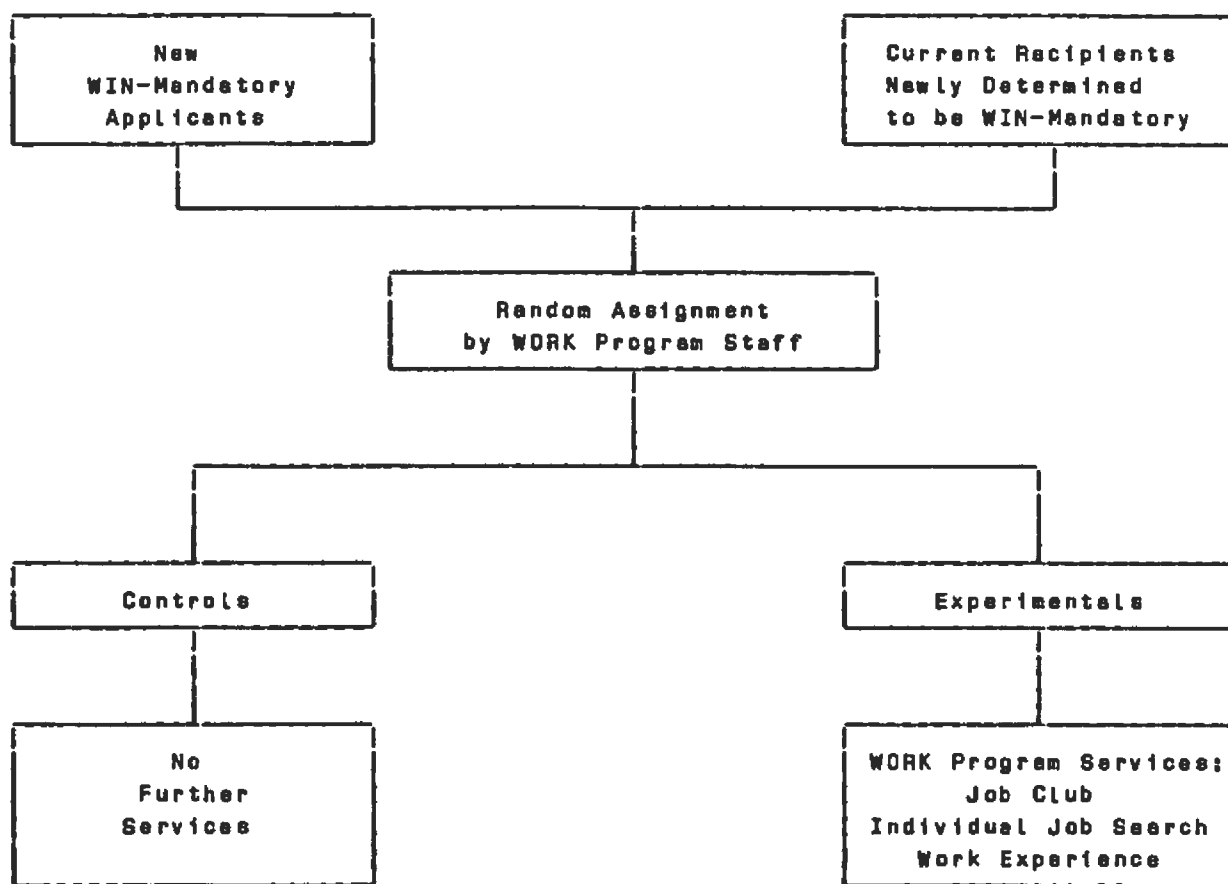
It should be noted that controls for the most part received no special program services. Program observations and interviews confirm the fact that controls did not take part in WORK Program activities and received only minimal services from outside providers. The impact analysis thus compares outcomes for a group served by the program to those of a true no-treatment group, rather than to those of a control group which is given a lesser degree or different mix of services (as is often the case in such studies).

B. Methodological Considerations

The experimental group contains a majority of enrollees who did not take part in services, whether by staff decision, their own decision, or simply because they were off the welfare rolls too quickly to participate.

FIGURE 2.1

ARKANSAS RESEARCH DESIGN



In order to obtain unbiased estimates of impacts on participants alone, it would have been necessary to single out for comparison a similar subgroup of controls who would have participated if program services had been available to them. This would have been difficult, if not impossible, because many differences, such as motivation or family circumstances, cannot be observed but are still strongly related to the fact of participation. For this reason, nonparticipants and participants in the experimental group are combined for estimation of program impacts.

The random assignment process was designed to ensure that experimental and control groups were similar, as discussed in the next section. Because no major differences existed between research groups before enrollment, measured differences during follow-up can safely be attributed to differences in services. However, to improve the efficiency of the estimates¹ -- and to account for any small differences between the two groups which could have occurred despite random assignment -- the important impacts were also calculated using multiple regression analysis.

Numerical estimates of human behavior are always subject to elements of chance and uncertainty. Because statistical tests can often rule out chance, these tests were conducted wherever appropriate. Differences between groups are "statistically significant" when there is less than a 10 percent probability that there is no real program effect underlying the estimate. The tables in this report also indicate by asterisks whether differences between groups were statistically significant at the 1, 5 or 10 percent levels using two-tailed² t-tests, chi-square tests or tests of difference of proportions. Each of these significance levels indicates that there is only a one in 100, one in 20, or one in 10 chance that a

given difference would have occurred in the absence of the program.

C. The Research Sample

As explained in Chapter 1, the impact sample analyzed in this report differs from the eight-county sample of program enrollees analyzed in the interim report. The sample used here contains 1,153 individuals, enrolled over three periods, divided into 570 controls and 583 experimentals located in Jefferson and Pulaski South. (See Table 2.1.) A random subsample of 339 experimentals was used to track program participation patterns. In addition, a supplemental sample of 940 individuals who enrolled in the WORK Program before the research began is described in Appendix A. This group, which was judged by staff to have serious employment barriers, received a lower priority for services than the main research sample, but had been randomly assigned in the hope that they might eventually be served. In fact, this sample did not participate to any great extent, but some tabulation of outcome data for this group is offered in the appendix.

Finally, Chapter 4 and Appendix B discuss the worksite interviews conducted with a subsample of 22 work experience participants and their supervisors (24). Unlike other samples in this report, which were drawn only from two counties, this subsample was taken from the four counties operating a work experience component during the demonstration period.

D. Sample Characteristics

Random assignment worked effectively to produce experimental and control groups with similar demographic characteristics. (See Appendix Table C.1.) The two groups differed only slightly in a few respects.

TABLE 2.1

ARKANSAS

DISTRIBUTION OF RESEARCH SAMPLE MEMBERS,
 BY PERIOD OF ENROLLMENT, COUNTY, AND RESEARCH GROUP
 (JUNE 20, 1983 - MARCH 1984 SAMPLE)

Period of Enrollment	Pulaski South		Jefferson		Total
	Experimentals	Controls	Experimentals	Controls	
June 20 - September 1983	154	173	106	98	532
October - December 1983	95	106	68	66	335
January - March 1984	94	89	53	50	286
Total Sample	343	368	227	215	1,153

SOURCE: Tabulations from MDRC Client Information Sheets.

Table 2.2 presents the background characteristics of the sample. Almost all were women.³ Eighty-six percent were black, with almost all the rest white. The other characteristics of the sample show that they were a group with some diversity. Almost half had never been married, one-fourth were married and not living with their spouses and about one-fourth were divorced or widowed. Half had not attained a high school diploma or its equivalent. The average age of the sample members was 29; half were between 25 and 34, and a quarter were less than 25. More than half had children less than six years old.

On the whole, the sample had a fairly substantial history of welfare dependency. Thirty-one percent had received welfare for two years or more before being enrolled in the sample; and, on average, individuals had been on welfare for 11 of the preceding 24 months. Only 23 percent of the sample had held a job at some point during the year prior to enrollment and, of these, only 14 percent had done so in the quarter before they enrolled.

The impact and benefit-cost analyses focus on several important sub-groups within the research sample, broken down in the following tables. The primary division is between new applicants for welfare (60 percent of the sample) and recipients (40 percent) who had recently been determined WIN-mandatory. As seen in Table 2.2, recipients had a much longer history of welfare receipt than applicants, with recipients, on average, having spent 19 months on the rolls in the two years before enrollment compared to an average of six months for applicants. Only 8 percent of the recipients had never had an AFDC case of their own,⁴ compared to well over half of the applicants (56 percent). Less than 10 percent of the recipients had

TABLE 2.2

ARKANSAS

SELECTED CHARACTERISTICS OF RESEARCH SAMPLE MEMBERS
 AT TIME OF WORK PROGRAM ENROLLMENT, BY WELFARE STATUS
 (JUNE 20, 1983 - MARCH 1984 SAMPLE)

Characteristic	Total	Applicants	Recipients
County (%)			
Pulaski South	61.7	64.9	57.0***
Jefferson	38.3	35.1	43.0***
Sex (%)			
Male	2.4	1.5	3.7**
Female	97.6	98.5	96.3**
Age (%)			
Less Than 19 Years	3.1	1.2	6.0***
19-24 Years	23.7	22.2	25.9
25-34 Years	50.8	54.7	45.2***
35-44 Years	15.9	16.8	14.6
45 Years or More	6.5	5.2	8.4**
Average Age (Years)	29.4	29.5	29.3
Ethnicity (%)			
White, Non-Hispanic	13.4	16.7	8.6***
Black, Non-Hispanic	86.3	83.2	91.0***
Other	0.1	0.1	0.0 ^a
Degree Received (%)			
None	50.4	45.1	58.3***
High School or General Equivalency Diploma	49.6	54.9	41.7***
Average Highest Grade Completed	11.0	11.3	10.7***
Marital Status (%)			
Never Married	48.9	42.8	57.8***
Married, Living With Spouse	2.7	3.3	1.8
Married, Not Living With Spouse	25.1	28.8	19.8***
Divorced/Widowed	23.3	25.0	20.8
With Child(ren) (%) ^b			
Less Than 6 Years	53.7	48.5	61.5***
6 to 18 Years	88.7	73.7	61.5***
Average Number of Children			
Less Than 6 Years	0.69	0.58	0.85***
6 to 18 Years	1.34	1.36	1.32

(continued)

TABLE 2.2 (continued)

Characteristic	Total	Applicants	Recipients
Prior AFDC Dependency (%)			
Never on AFDC	36.9	56.3	8.1***
Two Years or Less	32.7	36.6	26.9***
More Than Two Years	30.5	7.1	65.0***
Average Months on AFDC During Two Years Prior to Enrollment	11.0	5.7	18.9***
Average Months Employed During Two Years Prior to Enrollment	5.2	7.8	1.3***
Held Job at Any Time During Four Quarters Prior to Enrollment (%) ^c	22.5	33.1	7.1***
Held Job During Quarter Prior to Enrollment (%) ^c	14.1	21.6	3.2***
Average Earnings During Four Quarters Prior to Enrollment (\$) ^c	615.87	979.71	81.41***
Average Earnings During Quarter Prior to Enrollment (\$) ^c	149.08	232.72	26.20***
For Longest Job Held in Past Two Years ^d			
Average Hourly Wage Rate(\$)	3.78	3.88	3.33***
Average Weekly Hours	33.5	34.3	30.0***
Duration of Job (Months)	18.3	21.8	8.0***
Total Sample ^e	1153	686	467

SOURCE: Calculations from MDRC Client Information Sheets, program tracking records and Unemployment Insurance earnings records from the State of Arkansas.

NOTES: Distributions may not add exactly to 100.0 percent because of rounding.

^a Chi-square test inappropriate owing to low expected cell frequencies.

^b Distributions do not add to 100.0 percent because sample members may have children in more than one category.

^c Calculated from Unemployment Insurance records from the State of Arkansas.

TABLE 2.2 (continued)

^dFor questions concerning longest job, sample sizes are based on the number of sample members who reported a longest job on the Client Information Sheet. Due to missing data for selected characteristics, these sample sizes vary from 420 - 432 for applicants and from 95 - 97 for recipients.

^eFor selected characteristics, sample sizes may vary up to nineteen sample points due to missing data.

A two-tailed t-test was applied to differences between applicants and recipients. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

held a job in the year prior to enrollment, but one-third of the applicants had done so.

Sample members in the two counties also varied considerably in their background characteristics. (See Table 2.3.) There were more recipients in Jefferson County than in Pulaski South (46 and 37 percent, respectively), and compared to Pulaski, Jefferson had a significantly higher proportion of enrollees who had received welfare for two or more years. However, the key employment indicators, the proportion who had held a job in the year and the quarter immediately before random assignment, were similar for the two counties.

Still another subdivision of some interest in this analysis is the three groups formed by the time period in which enrollees entered the sample: June-September, 1983; October-December of that same year; and January-March, 1984. Although the demographic characteristics of the three groups were basically similar (see Table 2.4), there were marked differences in previous employment and, to a lesser extent, previous receipt of welfare. While 27 percent of the October-December enrollees had held a job in the four quarters before enrollment, only about 20 to 21 percent of the other two groups were employed. A significantly larger proportion of October-December enrollees had also held a job in the quarter before random assignment, and on average they had higher earnings in that quarter than the other groups.

In contrast, the average number of months on welfare during the past two years was about the same (11 percent) for sample members enrolled during all three periods. While a significantly higher proportion of enrollees during the January-March period had never had their own AFDC case

TABLE 2.3

ARKANSAS

SELECTED CHARACTERISTICS OF RESEARCH SAMPLE MEMBERS
 AT TIME OF WORK PROGRAM ENROLLMENT, BY COUNTY
 (JUNE 20, 1983 - MARCH 1984 SAMPLE)

Characteristic	Pulaski South	Jefferson
Welfare Status (%)		
Applicant	62.6	54.5***
Recipient	37.4	45.5***
Sex (%)		
Male	3.2	1.1**
Female	96.8	98.9**
Age (%)		
Less Than 19 Years	4.2	1.4**
19-24 Years	21.7	26.9**
25-34 Years	53.0	47.3*
35-44 Years	15.5	16.5
45 Years or More	5.8	7.9
Average Age (Years)	29.3	29.6
Ethnicity (%)		
White, Non-Hispanic	13.2	13.7
Black, Non-Hispanic	86.3	86.3
Other	0.1	0.0 ^a
Degree Received (%)		
None	51.5	48.7
High School or General Equivalency Diploma	48.6	51.2
Average Highest Grade Completed	10.9	11.2**
Marital Status (%)		
Never Married	50.6	46.3
Married, Living With Spouse	1.2	5.1***
Married, Not Living With Spouse	22.8	28.7**
Divorced/Widowed	25.4	19.9**
With Child(ren) (%) ^b		
Less Than 6 Years	51.6	57.1*
6 to 18 Years	70.5	66.0
Average Number of Children		
Less Than 6 Years	0.65	0.75**
6 to 18 Years	1.38	1.30

(continued)

TABLE 2.3 (continued)

Characteristic	Pulaski South	Jefferson
Prior AFDC Dependency (%)		
Never on AFDC	37.8	35.4
Two Years or Less	37.1	25.8***
More Than Two Years	25.1	38.8***
Average Months on AFDC During Two Years Prior to Enrollment	10.5	11.9**
Average Months Employed During Two Years Prior to Enrollment	6.0	3.9***
Held Job at Any Time During Four Quarters Prior to Enrollment ^c	22.6	22.4
Held Job During Quarter Prior to Enrollment (%) ^c	14.6	13.3
Average Earnings During Four Quarters Prior to Enrollment (\$) ^c	584.05	667.05
Average Earnings During Quarter Prior to Enrollment (\$) ^c	151.42	145.31
For Longest Job Held in Past Two Years ^d		
Average Hourly Wage Rate (\$)	3.82	3.67
Average Weekly Hours	32.9	35.2**
Duration of Job (Months)	20.6	16.1
Total Sample ^e	711	442

SOURCE: Calculations from MDRC Client Information Sheets, program tracking records and Unemployment Insurance earnings records from the State of Arkansas.

NOTES: Distributions may not add exactly to 100.0 percent because of rounding.

^a Chi-square test inappropriate owing to low expected cell frequencies.

^b Distributions may not add to 100.0 percent because sample members may have children in more than one category.

^c Calculated from Unemployment Insurance records from the State of Arkansas.

^d For questions concerning longest job, sample sizes are based on the number of sample members who reported a longest job on the Client Information Sheet. Due to missing data for selected characteristics, these sample sizes vary from 374 - 378 in Pulaski South and from 141 - 150 in Jefferson.

TABLE 2.3 (continued)

^aFor selected characteristics, sample sizes may vary up to twenty-three sample points due to missing data.

A two-tailed t-test was applied to differences between Counties. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

TABLE 2.4

ARKANSAS

SELECTED CHARACTERISTICS OF RESEARCH SAMPLE MEMBERS
 AT TIME OF WORK PROGRAM ENROLLMENT, BY PERIOD OF ENROLLMENT
 (JUNE 20, 1983 - MARCH 1984)

Characteristic	June 20-September 1983	October-December 1983	January-March 1984
Welfare Status (%)			
Applicant	58.8	60.3	58.0
Recipient	40.2	39.7	42.0
County (%)			
Pulaski South	61.5	60.0	64.0
Jefferson	38.5	40.0	36.0
Sex (%)			
Male	2.3	1.9	3.2
Female	97.7	98.1	96.8
Age (%)			
Less Than 19 Years	2.1	3.9	4.2
19-24 Years	22.4	24.2	25.5
25-34 Years	53.6	49.8	46.8
35-44 Years	15.0	17.6	15.4
45 Years or More	7.0	4.5	8.0
Average Age (Years)	29.5	29.1	29.4
Ethnicity (%)			
White, Non-Hispanic	13.8	11.8	14.1
Black, Non-Hispanic	86.1	87.4	85.5
Other	0.0	0.3	0.0 ^a
Degree Received (%)			
None	48.8	49.4	54.4
High School or General Equivalency Diploma	51.1	50.7	45.6
Average Highest Grade Completed	11.1	11.2	10.7**
Marital Status (%)			
Never Married	47.8	49.4	50.5
Married, Living With Spouse	1.3	3.5	4.2**
Married, Not Living With Spouse	25.4	24.5	25.1
Divorced/Widowed	25.4	22.6	20.1

(continued)

TABLE 2.4 (continued)

Characteristic	June 20-September 1983	October-December 1983	January-March 1984
With Child(ren) (%) ^b			
Less Than 6 Years	52.2	54.7	55.5
6 to 18 Years	70.3	67.0	67.8
Average Number of Children			
Less Than 6 Years	0.67	0.68	0.73
6 to 18 Years	1.36	1.38	1.27
Prior AFDC Dependency (%)			
Never on AFDC	35.0	34.6	42.8*
Two Years or Less	35.4	36.2	23.7***
More Than Two Years	29.5	29.2	33.6
Average Months on AFDC During Two Years Prior to Enrollment	10.9	11.3	11.0
Average Months Employed During Two Years Prior to Enrollment	5.5	4.6	5.3
Held Job at Any Time During Four Quarters Prior to Enrollment (%) ^c	21.1	27.2	19.9*
Held Job During Quarter Prior to Enrollment (%) ^c	12.2	17.9	13.3*
Average Earnings During Four Quarters Prior to Enrollment (\$) ^c	526.48	718.72	661.67
Average Earnings During Quarter Prior to Enrollment (\$) ^c	115.70	197.10	154.91**
For Longest Job Held in Past Two Years ^d			
Average Hourly Wage Rate (\$)	3.79	3.83	3.70
Average Weekly Hours	33.0	34.4	33.7
Duration of Job (Months)	19.3	15.9	24.1*
Total Sample ^e	532	335	286

SOURCE: Calculations from MDRC Client Information Sheets, program tracking records and Unemployment Insurance earnings records from the State of Arkansas.

NOTES: Distributions may not add exactly to 100.0 percent because of rounding.

^a Chi-square tests inappropriate owing to low expected cell frequencies.

TABLE 2.4 (continued)

^bDistributions may not add to 100.0 percent because sample members may have children in more than one category.

^cCalculated from Unemployment Insurance records from the State of Arkansas.

^dFor questions concerning longest job, sample sizes are based on the number of sample members who reported a longest job on the Client Information Sheet. Due to missing data for selected characteristics these sample sizes vary from 260 - 264 in the first enrollment period, 145 - 153 in the second enrollment period, and 110 - 112 in the third enrollment period.

^eFor selected characteristics, sample sizes may vary up to seventeen sample points due to missing data.

A two-tailed t-test was applied to differences between enrollment periods. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

(43 percent compared to 35 percent for the other two periods), slightly more had had their own case for more than two years.

Women whose youngest child was between the ages of three and five were also important to the program. As shown in Table 2.5, they were younger and slightly more educated than those whose youngest child was aged six or older. On most other measures, however, women with younger children appear to have been more disadvantaged; a greater proportion were welfare recipients (46 percent compared to 34 percent), and, on average, they had been on welfare for over 12 months during the past two years, compared to ten months for the mothers whose youngest child was at least six. The mothers with young children were also less likely to have ever been married.

E. Data Sources

This report uses a number of different data sources to analyze the flow of individuals through the program, to measure employment and welfare outcomes and to estimate program benefits and costs. As indicated in Table 2.6, these sources provide varying lengths of follow-up, depending on the sample member's enrollment period. This section discusses these sources:

- Client Information Sheets (CIS) are MDRC forms which provide information on enrollees' demographic characteristics, such as age, ethnicity, family composition and educational attainment, as well as information on their welfare and employment histories. The data were collected and the forms filled out by WORK Program staff at the point of random assignment. The data were then merged with information on welfare receipt and employment in the final analysis file. The quality of these data was generally good.⁵
- AFDC records supply information on monthly AFDC grants obtained directly from the state. Welfare payments data include the amount of the basic AFDC grant but not the value of Food Stamps or Medicaid.

TABLE 2.5

ARKANSAS

SELECTED CHARACTERISTICS OF RESEARCH SAMPLE MEMBERS
AT TIME OF WORK PROGRAM ENROLLMENT, BY PRESENCE OF CHILD(REN)
UNDER THE AGE OF SIX
(JUNE 20, 1983 - MARCH 1984 SAMPLE)

Characteristic	Enrollees With No Child(ren) Under 6	Enrollees With Child(ren) Under 6
Welfare Status (%)		
Applicant	66.4	53.9***
Recipient	33.6	46.1***
County (%)		
Pulaski South	63.9	58.7*
Jefferson	36.1	41.3*
Sex (%)		
Male	4.2	0.8***
Female	95.8	99.2***
Age (%)		
Less Than 19 Years	4.6	1.5***
19-24 Years	6.0	38.3***
25-34 Years	53.4	48.6
35-44 Years	24.6	8.4***
45 Years or More	11.5	2.1***
Average Age (Years)	32.9	26.4***
Ethnicity (%)		
White, Non-Hispanic	16.1	11.1**
Black, Non-Hispanic	83.7	88.8**
Other	0.2	0.0 ^a
Degree Received (%)		
None	62.1	48.8
High School or General Equivalency Diploma	47.9	51.1
Average Highest Grade Completed	10.8	11.2***
Marital Status (%)		
Never Married	37.3	58.9***
Married, Living With Spouse	2.5	2.8
Married, Not Living With Spouse	28.8	21.1***
Divorced/Widowed	30.4	17.2***
Average Number of Children		
Less Than 6 Years	0.0	1.28***
6 to 18 Years	1.81	0.86***

(continued)

TABLE 2.5 (continued)

Characteristic	Enrollees With No Child(ren) Under 6	Enrollees With Child(ren) Under 6
Prior AFDC Dependency (%)		
Never on AFDC	43.2	31.4***
Two Years or Less	31.3	33.9
More Than Two Years	25.5	34.7***
Average Months on AFDC During Two Years Prior to Enrollment	9.6	12.3***
Average Months Employed During Two Years Prior to Enrollment	6.3	4.5***
Held Job at Any Time During Four Quarters Prior to Enrollment (%) ^b	23.0	22.5
Held Job During Quarter Prior to Enrollment (%)	15.0	13.7
Average Earnings During Four Quarters Prior to Enrollment (\$) ^b	637.63	612.34
Average Earnings During Quarter Prior to Enrollment (\$) ^b	163.77	140.31
For Longest Job Held in Past Two Years ^c		
Average Hourly Wage Rate (\$)	3.89	3.68**
Average Weekly Hours	34.2	32.8
Duration of Job (Months)	23.7	14.9***
Total Sample ^d	521	605

SOURCE: Calculations from MDRC Client Information Sheets, program tracking records and Unemployment Insurance earnings records from the State of Arkansas.

NOTES: Distributions may not add exactly to 100.0 percent because of rounding.

^a Chi-square test inappropriate owing to low expected cell frequencies.

^b Calculated from Unemployment Insurance records from the State of Arkansas.

^c For questions concerning longest job, sample sizes are based on the number of sample members who reported a longest job on the Client Information Sheet. Due to missing data for selected characteristics, these sample sizes vary from 257 - 263 for enrollees with no child(ren) under 6 and from 258 - 264 for enrollees with child(ren) under 6.

TABLE 2.5 (continued)

^d For selected characteristics, sample sizes may vary up to four sample points due to missing data.

A two-tailed t-test was applied to differences between enrollees within children under 6 and those without. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

TABLE 2.6

ARKANSAS

LENGTH OF AVAILABLE FOLLOW-UP, BY DATA SOURCE AND ENROLLMENT PERIOD
(JUNE 20, 1983 - MARCH 1984)

Data Source	Last Date Data Are Available	Point at Which Data Start To be Collected	Length of Follow-Up By Enrollment Period		
			June 20 - September 1983	October - December 1983	January - March 1984
Case File Records	August 1984	Date of Enrollment	Twelve Months	Nine Months	Six Months
Quarterly Employment and Earnings ^{a/b}	Fourth Calendar Quarter of 1984	Four Quarters Prior to Enrollment	Five Quarters After Enrollment	Four Quarters After Enrollment	Three Quarters After Enrollment
Monthly Welfare Grant Payments ^c	January 1985	24 Months Prior to Enrollment	Seventeen Months	Fourteen Months	Eleven Months

NOTES: ^a Employment and earnings data are based on Unemployment Insurance earnings records, which report earnings on a calendar quarter basis.

^b Calendar quarter of enrollment is not considered a follow-up quarter for employment and earnings for the Arkansas evaluation.

^c The first months of follow-up for welfare grant payments includes the month in which an individual is enrolled. Welfare payments were grouped in quarters, so the last available months were generally not utilized.

For comparability in presentation of employment and welfare data, MDRC aggregated monthly data by three-month periods, where the first month of the first quarter of follow-up was the month of enrollment. Some inaccuracies can be expected in the welfare payments, attributable to incomplete data entry or mismatching of sample members with case records. Yet this source of error should not differ across research groups and should therefore not be a source of bias for the impact estimates. Non-matching error is estimated to be low.⁶

- Arkansas State Unemployment Insurance (UI) Earnings Records provide measures of quarterly earnings reported by calendar quarter: e.g., January, February and March; April, May and June. These data were the best available source to measure employment and earnings impacts, but as with most sources, they posed some difficulties.

First, because of the reporting lags typical of the UI wage reporting system, data were available for only three quarters for the entire sample. Second, the use of quarterly data meant that there were varying lengths of follow-up, depending on whether an individual applied for welfare during the first, second or third month of the calendar quarter. Third, even for existing data, there could be some underreporting, for example, because of employers failing to report earnings or people moving out of state. Since these factors should have affected experimental and control group members equally, there is no reason to believe they inflated employment and earnings outcomes for experimentals relative to those of controls. Underreporting of UI earnings can, however, affect findings on program costs relative to benefits.

Finally, in Arkansas employers of agricultural and domestic workers (an occupational category of relevance to this analysis) are not required to report earnings to the UI system. Thus, UI data do not necessarily cover all employment in the research sample.

- Case File Records Study. Case file records were searched to obtain participation and deregistration data for a randomly selected subsample of the 339 program entrants who enrolled from June 20, 1983 to March 31, 1984. In a special case file records study, data on program activity were recorded through the end of August 1984. Thus, for sample members who were randomly assigned in the October-December period, there were nine months of follow-up and for those in the January-March period, there were six months of follow-up. If an enrollee participated in a component more than once, only the first activity was recorded. A similar procedure was followed for deregistration.⁷

Worksite Study. A subset of enrollees who participated in work experience between December 1983 and June 1984 and their supervisors were interviewed by an MDRC field researcher based in Arkansas, who used a standardized survey instrument. Interviews lasted about 45 minutes for participants and almost an hour for supervisors. Responses from 22 participants and their supervisors were tabulated. (Two additional interviews were conducted with supervisors at worksites where the participants were not available because they had left the worksite.) Interviews were conducted in all four counties which operated work experience (Pulaski South, Jefferson, Crawford and Sebastian Counties).

Program. The child age waiver could extend mandatory coverage considerably, since 62 percent of the state's AFDC cases have no children under age three.¹ Non-mandatory applicants and recipients may also volunteer for the program, but voluntary enrollees are fewer than 1 percent of program entrants.

The principal, if obvious, difference between applicants and recipients stems from their grant status. Recipients already receive welfare when they enroll in the WORK Program; applicants do not, and large numbers will never be approved for welfare simply because they do not meet state and federal AFDC eligibility guidelines. Consequently, applicants and recipients should be considered as two quite separate and distinct groups of program enrollees. Each has different demographic characteristics and histories of welfare and work, and each may therefore be affected in quite different ways by the program. The separate analysis of program effects on applicants and recipients will be a major theme of this study, and wherever warranted and feasible, findings for the two samples will be presented separately and compared.

B. Benefits Levels and OBRA Eligibility Rules

Two factors were important in shaping welfare and employment patterns in Arkansas. First, benefit levels have been relatively low. As of October 1982, the state's standard of need ranked 45th in the nation. At the start of this study period, maximum benefit payments as set by Arkansas were 60 percent of the standard of need. Under these regulations, a mother and one child received a maximum monthly payment of \$116. Three children brought the payment up to \$164. The national averages for these family

CHAPTER 3

ENVIRONMENT OF THE EVALUATION

The central question of this evaluation is: What has the WORK Program accomplished? Put another way: How much did it influence and change the work and welfare behavior of the people who enrolled in it? To answer this question, it is first necessary to understand what would have happened to enrollees without the special provision of the WORK Program activities.

This chapter will place WORK Program operations in the context of recent Arkansas welfare policy, AFDC caseload trends and state and federal eligibility regulations. It will then provide some necessary details about the mechanics of enrollment and deregistration and the relationship of the two to a person's tenure on welfare. The chapter concludes by tracing the typical pattern of work and welfare behavior in the absence of WORK Program services for the two important subgroups of WORK Program enrollees: applicants to welfare, classified mandatory; and welfare recipients, recently determined mandatory. In other words, this chapter discusses the behavior of the applicant and recipient control groups.

A. Applicants and Recipients

Not all of the welfare caseload is subject to mandatory participation in WORK Program activities. Prior to the waiver which allowed the state to classify mothers with children aged three to five as mandatory, 37 percent of the state's AFDC cases had individuals who would be required to register with WIN and would therefore be required to enroll in a statewide WORK

sizes in this period were \$266 and \$378, respectively.

Second, federal law enacted under OBRA affected the eligibility of some Arkansas residents for AFDC benefits. Under OBRA, only families with incomes under 150 percent of the state's standard of need are eligible. This means that almost any full-time job -- including one at the minimum wage -- will disqualify a family from welfare in Arkansas. It should not be surprising, therefore, to find that the employment rates of AFDC case heads are extremely low. In fact, for the recipients in the research sample, the Unemployment Insurance system reported that only 7 percent had earnings the year before enrollment into the sample.

Among applicants for AFDC, employment rates in this sample were higher. Some 33 percent had reported earnings in the year before enrollment. But denial or non-completion of applications was also high. In one of the demonstration counties, Pulaski South, less than one-half of the applicants received welfare during the nine months following application.

Two important conclusions can be drawn from this discussion. First, the research sample and the caseload in general will have a high proportion of case heads with poor work histories and weak labor force attachment. In states with high standards of need, many recipients earn substantial amounts while still receiving welfare payments,² but in Arkansas there is less possibility of mixing work and welfare. This leads to the second conclusion: Any gains in employment achieved by the WORK Program ought to be more closely linked to case closings than in other states.

Low employment rates and a firm connection between gains in employment and welfare savings are findings reflected by the data in this report, and

these findings have been influenced by state and national welfare rules. The effects of the WORK Program should therefore be judged against this background. In another state with a different benefit level and standard of need, a similar program could produce different results.

C. Deregistration

As explained above, enrollment and participation in WORK Program activities need not coincide with the start of welfare. Conversely, departure from the program, formally called deregistration, does not necessarily imply exit from welfare. This section will discuss reasons for program deregistration and the extent to which deregistration rates can be used to judge program effectiveness.

When WORK Program staff learn of an enrollee's employment, they record that fact as a placement, a positive outcome. The client's case is referred back to the Income Maintenance office for a recalculation of the grant based on the new earnings level. Should the extra income result in a case closure, WORK Program staff will be notified and remove the person from the list of enrollees. (A person can also be deregistered by sanctioning, or failure to comply with the program requirements.)

Despite this not infrequent connection between the three factors -- employment, case closure and deregistration -- the deregistration rate is an imperfect measure of operational effectiveness. For one, deregistration does not always mean that a client has found employment, or a case has been closed, or a grant payment stopped. (In fact, national studies show that most exits from the welfare rolls do not come about because of employment.)³ Birth of a new child or the return to a parent of a young child

who has been living elsewhere removes a WIN-mandatory status, accounting for many deregistrations. Marriage and remarriage also cause many departures. Thus, because large numbers of deregistrations occur for reasons not connected with the services and best efforts of an employment program, these rates should not be used as measures of program effectiveness. Additionally, the deregistration rate does not pick up some of the positive outcomes that the program does achieve. Enrollees who are placed by program staff but at jobs paying too little to allow them to leave welfare are not deregistered.

D. The Problem of Evaluating Impacts for Applicants

As noted at the outset, to understand what the WORK Program has accomplished, it is necessary to compare the behavior of enrollees to that which might have been found in the absence of the program. While measurement of active enrollees' behavior is straightforward -- data on participation, employment and welfare experiences can be tabulated -- it is more difficult to estimate the enrollees' behavior without the WORK Program. The first important task of the analyst is to establish a proper behavioral benchmark against which to assess outcomes for enrollees.

The problem commands particular attention for applicants in the evaluation of programs that provide immediate services, such as the WORK Program. A serious analytical difficulty exists because applicant enrollees are in the welfare system, but not on welfare. Final determination of eligibility for a welfare grant in Arkansas generally occurs only after someone has enrolled in the program. And, because many applicants either fail to complete the application process or are eventually denied

welfare, their cases are closed and they are deregistered after they have begun program participation. Thus, a number of deregistrations and case closings are sometimes credited to the program when, in fact, these departures may have had nothing to do with the success or failure of the program services.

This analytical problem cannot be solved by eliminating in the calculation of impacts all those applicants who did not proceed with their applications or were not approved for assistance. To do so would ignore the possibility that some applicants who might have been approved were deterred from pursuing their welfare applications or from later participating by the requirement of program participation. Certain withdrawals of applications constitute a true program effect, a deterrent effect, but it is difficult to separate these individuals out from the general applicant withdrawals and denials. Thus, one must seek elsewhere for a properly constructed standard of comparison for determining how many deregistrations and case closings were really caused by the program and not by normal caseload dynamics.

One choice for a standard would be a typical group of mandatory applicants who could have received WORK Program services during the demonstration but did not. In this study, such a group -- the control group -- was selected at random from among applicants and recipients who enrolled in the program during the period from June 20, 1983 through March 31, 1984. These control group members were officially enrolled in the WORK Program, but from the point of enrollment onward were exempted from all program requirements. Staff, in fact, were instructed not to admit any designated control members to an active component, and strong efforts were made to

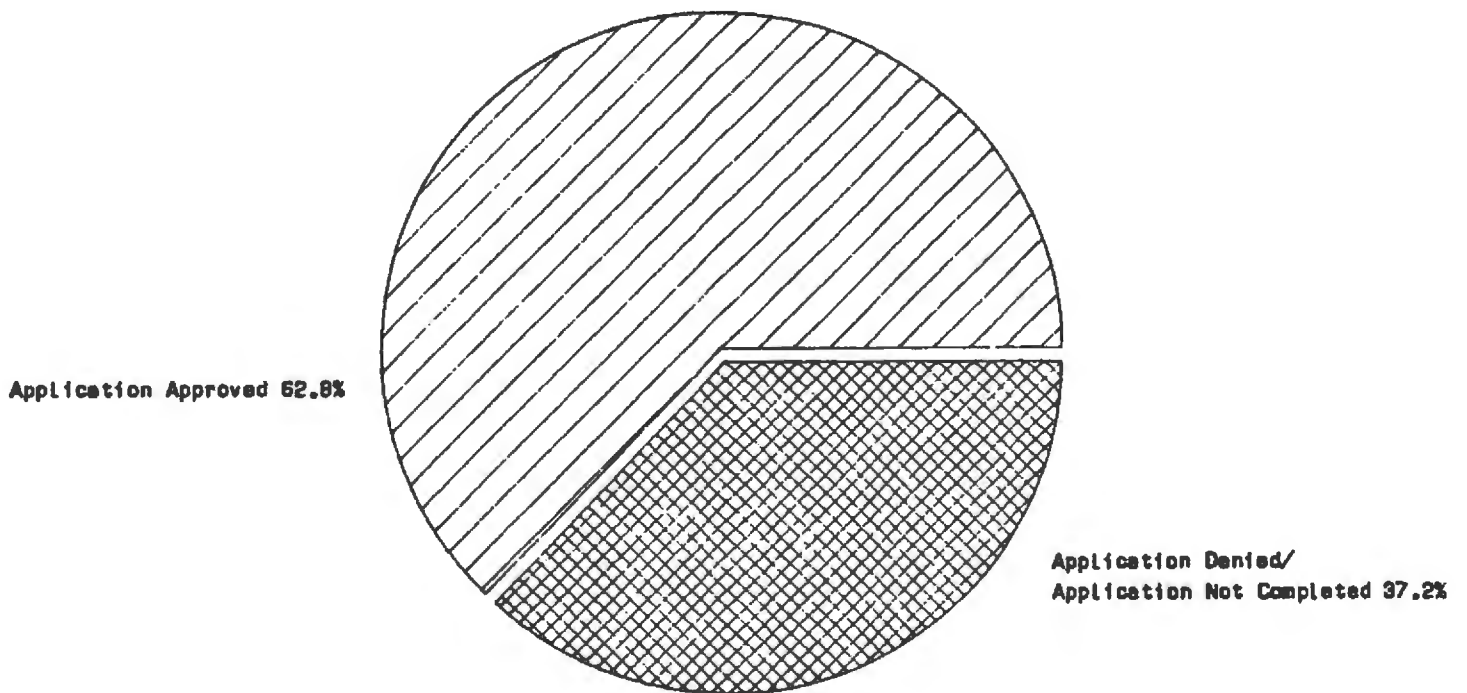
ensure that this policy was strictly followed.

The fact that the applicant controls were randomly selected makes them similar as a group to applicants who were offered program services, and the fact that control applicants received no services implies that their behavior should mirror closely that of the program entrants in the absence of the program. In particular, their rate of welfare approval should represent the norm for that portion of the AFDC population who are eligible for the WORK Program. Thus, the control group -- chosen at random and removed from the sequence of WORK Program activities -- provides a very good standard, or baseline, against which to compare the performance of active enrollees.

To give an idea of how many applicants would normally move out of the welfare system without receiving grants, Figure 3.1 presents the percent of controls who applied for welfare between June 20 and September 1983 and who received any welfare at all during the next nine months. As the figure shows, 37.2 percent of this sample received no welfare payment during this period, and this group was probably deregistered from the program in short order. Clearly, since controls received no program services, this rate represents the normal rate of welfare denial or departure from the WORK Program because of failure to complete the application. A similar proportion of deregistrations and case closings can be expected to occur among enrollees who are exposed to the WORK Program services, and this proportion should thus be deducted from estimates of program effectiveness. The research methodology using a control group as the standard of comparison does exactly that. Welfare receipt rates for experimentals are not viewed in isolation; they are compared to those of controls, and the

FIGURE 3.1

**RATE OF AFDC APPROVAL FOR APPLICANT CONTROLS
(JUNE 20 - SEPTEMBER 1983 SAMPLE)**



APPLICANTS

SOURCE: MDRC calculations from State of Arkansas welfare records.

NOTE: This figure labels "approved" all applicant controls in the sample who received any AFDC payments within nine months of enrollment.

difference between the two rates can be considered the change in welfare receipt due to the program's treatment.

E. The Problem of Caseload Turnover

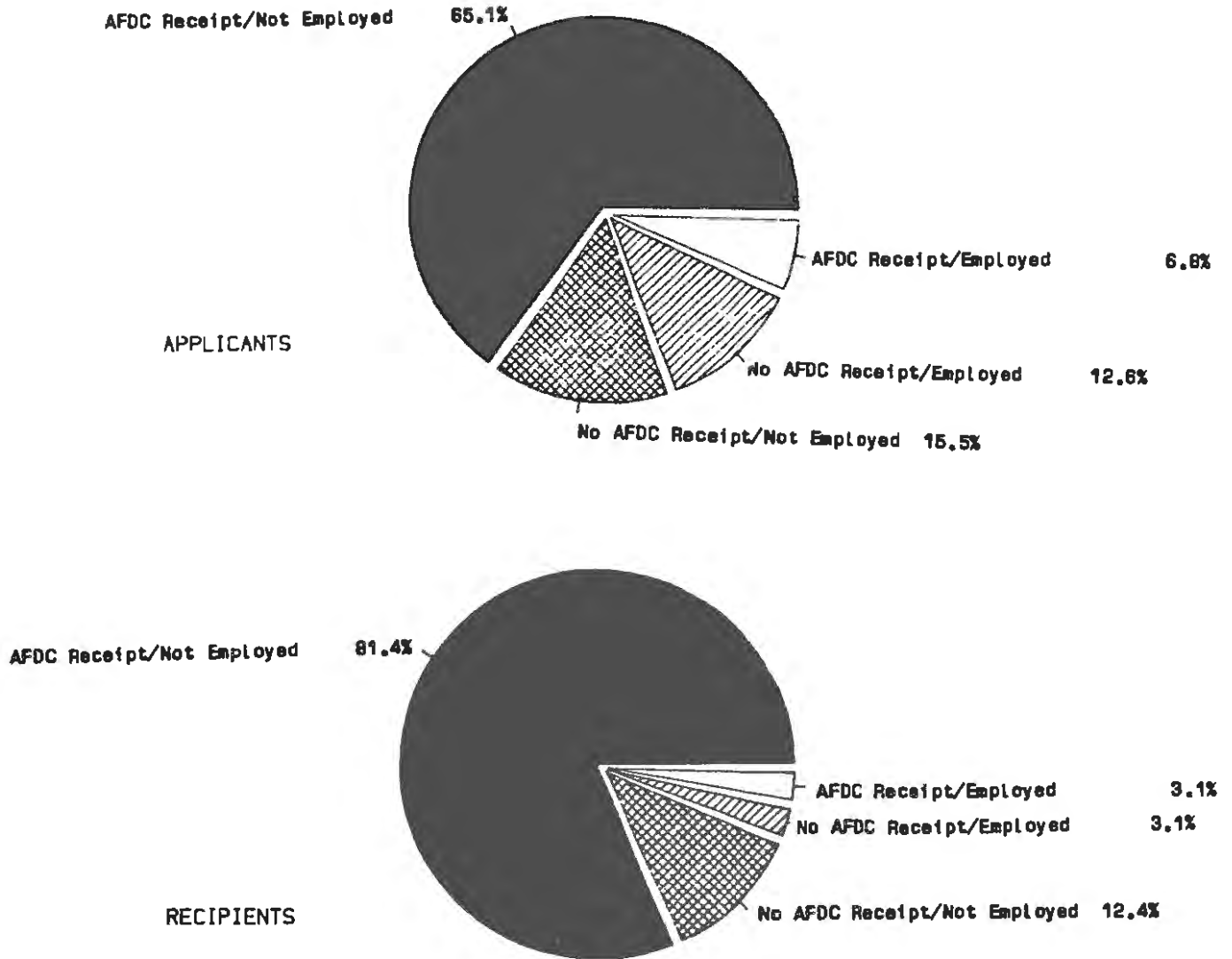
Another complication in establishing a standard for comparison is created by caseload turnover, because it is well known that large numbers of AFDC recipients leave welfare without active intervention of any kind. Many people find jobs independently of program services. Many more become ineligible for welfare through marriage or reconciliation, or obtain child support through the courts. Extra income is sometimes provided by other family members. Additionally, when the youngest child turns 18, a family becomes ineligible for support, and moving out of the state also results in a case closure. Taken together, these various kinds of "normal exits" create caseload turnover, whereby certain proportions of people leave welfare each month.

These patterns invalidate some measures of program performance in judging real program accomplishments. For example, the number of case closings among enrollees overstates a program's success: Much of what the program seemed to accomplish would have happened anyway. Employment rates may also not be too helpful because many "placements" recorded by staff are for people who would have found jobs without program assistance.

Figure 3.2 depicts normal caseload turnover separately for applicants and recipients in the control group. (The only people included, however, are those who received welfare in the nine months after enrollment: 62.8 percent of all applicant controls and 96.0 of all recipient controls.) The figure shows the proportion of controls who were still receiving welfare at

FIGURE 3.2

EMPLOYMENT AND AFDC RECEIPT FIVE QUARTERS FROM TIME OF ENROLLMENT,
FOR ALL CONTROLS RECEIVING WELFARE
(JUNE 20 - SEPTEMBER 1983 SAMPLE)



SOURCE: MDRC calculations from State of Arkansas welfare records and Unemployment Insurance records.

NOTES: This figure reports activity in the fifth quarter of program enrollment for controls who received welfare in nine months following enrollment.

Monthly welfare data, which count the month of enrollment as "month one" were regrouped in quarters that exactly match Unemployment Insurance earnings quarters. The regrouping was performed only for this figure; percentages shown here may not precisely match percentages calculated elsewhere in this report.

the start of their second year after enrollment. It also shows the proportion employed and what proportion of those employed were still receiving welfare.

Several important points emerge from an inspection of this figure. First, when the applicant pie is considered, it is clear that 28.1 percent of the controls who did get on welfare were not receiving assistance after five quarters, even though none had been part of WORK Program activities. This represents natural caseload turnover. Thus, a similar proportion of deregistrations and case closings must be discounted when judging the performance of the WORK Program. The figure also shows that 19.4 percent of applicant controls (12.6 percent who were not on welfare and 6.8 percent who were) were employed a year after enrollment, and two-thirds of those did not receive welfare in the fifth quarter. Since the control sample never received WORK Program services, a similar proportion must be deducted from the total employment rates of WORK Program entrants when measuring their program impacts. The research methodology that uses the randomly assigned control group as the standard of comparison makes these corrections for natural caseload turnover and employment automatically.

A similar kind of natural turnover occurs for recipients. The pie for that group shows that 15.5 percent of recipient controls who received some welfare initially were off the rolls a year later. Although this rate of turnover is about half that of the applicants, failure to account for it would overestimate the program's effectiveness in reducing welfare dependency. Again, the use of controls as a standard of comparison for recipients who did enter the WORK Program sequence corrects for this natural turnover.

One final set of observations is in order. Employment rates for applicant controls still on welfare seem low. Those who are not on welfare have a 44.8 percent employment rate (i.e., 12.6 percent out of 28.1 percent); those on welfare, 9.5 percent (6.8 percent out of 71.9 percent). Less than one in 10 of the applicants who received welfare during the fifth quarter also had earnings. This observation confirms the expectation, presented earlier, that because of the low standard of need in Arkansas, there would be little mixing of work and welfare under OBRA rules.

Finally, more than half of the applicants who started on welfare and then left it were not working when they did get off. This suggests that any employment program for the welfare population must take into account the fact that there will be many exits from public assistance that are not associated with employment.

CHAPTER 4

PATTERNS OF PARTICIPATION

In this chapter, the extent to which eligible enrollees participated in the WORK Program's three major components -- group job search, individual job search, or work experience -- is considered. As noted earlier, a major objective of the WORK Program was to involve a larger number of individuals in employment-related activities than had been the case in the WIN Program. Although WIN also required mandatory applicants to welfare and recipients to register with the program, for most the participation requirement ended there; and WIN served only a small proportion of individuals, those deemed "job-ready." In contrast, both central DHS staff and local operators anticipated that most WORK Program enrollees would participate, although they continued to give priority for services to the more readily employable, only later turning their attention to those with more severe barriers to job-holding.

Evidence from the first Arkansas report suggested that the WORK Program was successful in achieving its aim of surpassing WIN's participation rates. That report found that 40 percent of WORK Program enrollees in the eight counties where the program was operating -- 36 percent of enrollees in Pulaski South and Jefferson Counties -- had participated in job search and/or work experience within three months of entry. While WIN rates are not strictly comparable, it was estimated that no more than 21 and 19 percent of WIN registrants statewide entered WIN work and training components in fiscal years 1980 and 1981.¹

The examination of participation in this report differs from the earlier study along three key dimensions: the enrollee sample, the length of follow-up, and the analysis strategies employed. First, in order to be consistent with the impact analysis, the focus is on the program experience of enrollees in Pulaski South and Jefferson Counties only. Also, while the first report was confined to examining the participation of early enrollees (those entering the program between June 20 and September 30, 1983), this report looks at a sample of individuals who entered the program over a longer time span: the nine months between June 20, 1983 and March 31, 1984. These patterns are therefore more likely to yield a representative picture of program performance. (Data on the program participation of the supplemental sample members, who enrolled prior to June 20, 1983, are contained in Appendix A.)

Second, not only are sample members in this report drawn from a longer enrollment period, they are also followed for a greater length of time. In order to produce the first report in a timely fashion, it was necessary to restrict the follow-up to three months. In this report, the majority of sample members are tracked for nine months after program entry, and a full year of follow-up is available for the early enrollees (those enrolling through September 1983). This extended follow-up is particularly important, given the expectation that the harder-to-employ individuals would participate on a slower timetable.

Third, the analysis of program participation in this chapter both extends and moves beyond that contained in the previous report, measuring participation in two ways rather than one. As in the earlier report, the first important question is:

- What percentage of WORK Program enrollees ever took part in the main program activities?

To answer this question, the June-December enrollee sample is examined over a nine-month follow-up period. But this is done only as part of a larger effort to understand a different, perhaps more policy-relevant, issue: the ability of WORK Program staff to reach more deeply into the caseload by imposing a mandatory participation requirement on a large portion of the welfare caseload. Here, the key question hinges on continuing eligibility and should be phrased:

- How many enrollees at a given point in time remained eligible for the program but had not participated in these activities?

In this report, the point in time considered is nine months after enrollment. And, in seeking an answer to the second question, the considerable degree of movement off welfare -- a factor that characterizes the welfare caseload -- must be taken into account.

A. Nine-Month Indicators of Participation

The analysis begins with the first question: Over nine months, what proportion of enrollees ever participated in program services, defined in this and other analyses as group or individual job search and/or work experience? A case file records search indicated that 38.0 percent of the enrollee sample in Pulaski South and Jefferson took part in these activities within the nine-month period after enrollment.² The same cautionary note sounded about this statistic in the first report bears repeating here: The rate defines the proportion of people who ever participated, but it says nothing about the intensity of that participation. Because the data record only whether an enrollee participated at least one day in a given

activity, those who participated only a few days in a job club and others who remained the entire two weeks would be counted equally. Thus, one cannot assume that those who ever participated fully participated. (In fact, examination of a sample of job club attendance lists indicates that those in the job club component participated an average of seven days.) Moreover, the 38.0 percent statistic is a cumulative figure that represents the proportion of sample members who participated over the nine months. It is not the proportion who were participating at any given point in time. In both of these ways, program participation may be overstated.

Yet the same "ever participated" figure may also understate the level of participation, again for two reasons. First, because enrollees were subject to the WORK Program's participation requirement for as long as they remained in the program, they could be reassigned to any activity -- job club, individual job search or work experience -- after completing the sequence of activities once. The data indicate that such recycling through the job club was common in Pulaski South -- where approximately half the enrollees who participated once also did so a second time -- although it was rare in Jefferson County. However, in answering the first question -- how many ever participated -- only the first episode of participation in a specific activity is recorded, and people who were recycled were counted the same way as those who went through only once.

Second, and more important, participation rates calculated this way -- by following a group of enrollees over a specified period of time and determining which ones "ever participated" -- may understate the program's ability to reach those who were eligible. This is because such rates take a static view of the welfare caseload, suggesting that all nonparticipants

remained eligible over the period, but somehow escaped program participation. But in fact, some nonparticipants were eligible for only a short time. They subsequently left welfare or were deregistered from the program for a number of reasons, as suggested in Chapter 3. In fact, 57.5 percent of the sample of experimentals tracked in this report were deregistered from the program by the end of the nine-month follow-up period. Many of these were applicants who were required to enroll in the program but were subsequently denied aid. (About 40 percent of all applicants in the experimental sample did not receive welfare payments during the follow-up period.) These individuals remained enrolled only until staff members, having learned that their applications had been denied, deregistered them. Those deregistered, of course, were no longer subject to the participation requirement, whether or not they had taken part in job search and/or work experience while they were enrolled.

To gauge more accurately the extent to which individuals eligible for the WORK Program participated in its principal components, it is useful to look at the cumulative participation of enrollees and their program status at a point in time. Table 4.1 does so, summarizing the status of sample members at nine months after they entered the program; Figure 4.1 presents the same data in graphic form. Every individual in the sample fits into one of four categories in the table on the basis of two criteria: deregistered from the WORK Program or still registered; and participated or not in job search and/or work experience during the nine months. Thus, for example, the first row total shows that the 38.0 percent of sample members who participated in these activities fall into two groups: 18.8 percent who were currently participating or had done so previously, and who were still

TABLE 4.1

ARKANSAS

NINE-MONTH PARTICIPATION STATUS OF EXPERIMENTALS,
 BY PROGRAM STATUS AT THE NINTH MONTH AFTER PROGRAM ENROLLMENT
 (JUNE 20, 1983 - DECEMBER 1983 SUBSAMPLE)

Nine-Month Participation Status	Program Status at Ninth Month		Total	Sample Size
	Deregistered	Still Enrolled		
Ever Participated (%)	19.2	18.8	38.0	93
Never Participated (%)	38.3	23.7	62.0	152
Total (%)	57.5	42.5	100.0	245

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimental enrollees.

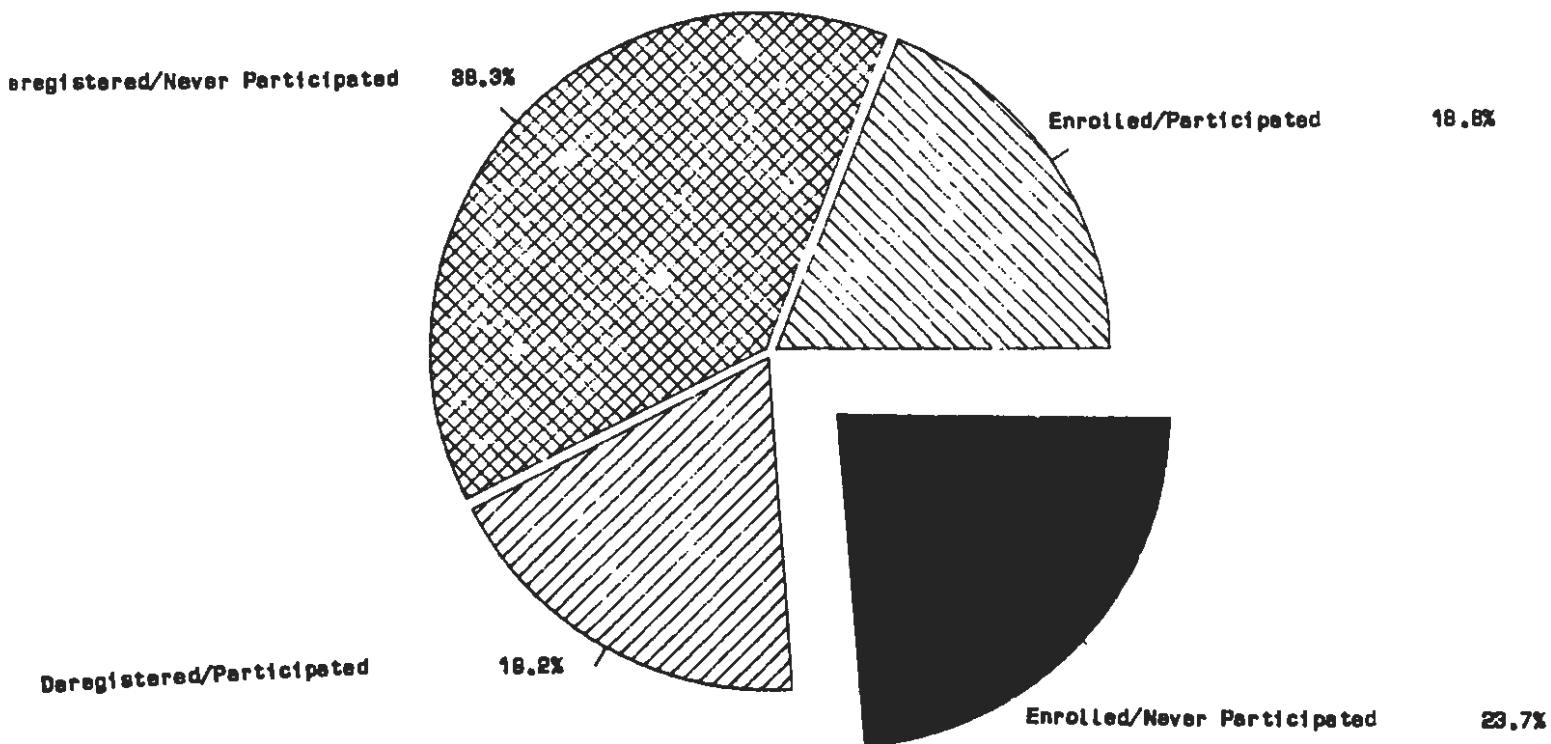
NOTES: Figures on program and participation status are calculated as a percentage of all experimentals in the subsample.

Tests of statistical significance between experimentals of different program and participation status were not calculated.

FIGURE 4.1

ARKANSAS

NINE-MONTH PARTICIPATION STATUS OF EXPERIMENTALS, BY PROGRAM
STATUS AT THE NINTH MONTH AFTER ENROLLMENT



PROGRAM AND PARTICIPATION STATUS
OF APPLICANTS AND RECIPIENTS

SOURCE: See Table 4.1

registered with the program; and another 19.2 percent who had participated but were now deregistered.

The data in the table answer three questions:

- (1) What proportion of sample members remained in the program but had not as yet participated in group job search, individual job search or work experience?

To address this issue, the four categories of sample members were reassembled into two main groups, as follows:

- Individuals Who Participated in a Principal Work Program Component and/or Were Deregistered from the Program (76.3 Percent of the Sample)
 - Individuals who ever participated, now deregistered (19.2 percent)
 - Individuals who ever participated, still in the program (18.8 percent)
 - Individuals who never participated, now deregistered (38.3 percent)

- Individuals Who Never Participated in a Principal Component and Were Still in the Program (23.7 Percent of the Sample)

Thus, about one-quarter of the sample members were still enrolled and eligible for the program, but had not participated by the ninth month after they entered it. While reasons for nonparticipation were not measured, findings from the first report speak to this issue. They suggest that, while the intention was to impose a participation requirement, WORK Program guidelines gave local staff considerable discretion to grant deferrals and de facto exemptions to people who they believed faced such formidable barriers to employment -- including their illness or that of immediate family members, illiteracy, pregnancy, and child care or transportation problems -- that they would not be aided by the program. It is thus likely

that some individuals in the still-enrolled but never-reached group were judged to be unemployable for these reasons. The others may simply have been lost in the administrative shuffle of a large program.

Sanctioning was not a prominent reason for program deregistration. According to state administrative records, among the 1,733 people assessed in Pulaski South through September 1984, there were only 88 sanctions, for a sanctioning rate of 5 percent. The rate of sanctioning in Jefferson County was only 3 percent.

Other questions addressed in the report are:

- (ii) What proportion of those individuals who remained enrolled in the program after nine months had yet to participate in the central components? And conversely, of the individuals who had been deregistered, how many had participated?

Reading down the table columns, one can answer this question by dividing the 18.8 percent who were still enrolled but had participated by the total of 42.5 percent of those who were still enrolled. From that, one can see that less than half (44.2 percent) of the individuals who were left in the WORK Program at the nine-month point had taken part in program activities, while 55.8 percent had yet to participate. Of those deregistered, 33.4 percent had participated at some time, and 66.6 had not. (As noted above, many of the people who were deregistered were eligible for the program for only a short period of time.)

- (iii) What proportion of the individuals who participated in these activities remained enrolled after nine months, and of those who did not participate, what proportion stayed enrolled?

This time, the proportion is obtained by reading across the table's rows, dividing the same 18.8 percent who were still enrolled but had participated by the total 38.0 percent who ever participated. Just less than

half (49.5 percent) of those who had participated remained enrolled in the program. Of those who never participated, 38.2 percent remained enrolled.

All these analyses point to the importance of taking caseload dynamics into account when examining program participation. The patterns suggest that factors other than participation condition much of the movement that takes place in program caseloads. By extension, these patterns also explain much of the turnover in the welfare rolls.

Parallel indicators are next examined for two sets of subgroups within the sample as a whole: applicants vs. recipients; and enrollees in Pulaski South vs. those in Jefferson County.

1. Subgroup Differences

a. Applicants vs. Recipients. The most critical subgroup distinction is between individuals who were applying for welfare when they entered the program and those who were already receiving assistance. Each half of Table 4.2 replicates Table 4.1, showing first the ninth-month status for applicants and then the corresponding data for recipients. Figure 4.2 presents the same data in a bar graph.

Perhaps the most striking difference between the two groups is that, by nine months after enrollment in the WORK Program, 69.4 percent of the applicants, but only 40.6 percent of the recipients, had been deregistered. Two factors probably explain the higher deregistration rate of applicants. First, many of these individuals -- 40 percent -- were never approved for assistance. Second, as Chapter 2 indicated, recipients had much less prior work experience than applicants, as well as greater welfare receipt. It would therefore be expected that recipients would remain on welfare for a longer period of time than the approved applicants.

TABLE 4.2

ARKANSAS

NINE-MONTH PARTICIPATION STATUS OF EXPERIMENTALS, BY PROGRAM STATUS
 AT THE NINTH MONTH AFTER PROGRAM ENROLLMENT AND WELFARE STATUS
 (JUNE 20, 1983 - DECEMBER 1983 SUBSAMPLE)

Nine-Month Participation Status	Program Status at Ninth Month		Total	Sample Size
	Deregistered	Still Enrolled		
Applicants				
Ever Participated (%)	23.6**	13.2***	36.8	53
Never Participated(%)	45.8***	17.4***	63.2	91
Total (%)	69.4***	30.6***	100.0	144
Recipients				
Ever Participated (%)	12.9	26.7	39.6	40
Never Participated(%)	27.7	32.7	60.4	61
Total (%)	40.6	59.4	100.0	101

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimental enrollees.

NOTE: Figures on program and participation status are calculated as a percentage of all experimentals in the subsample of each welfare status.

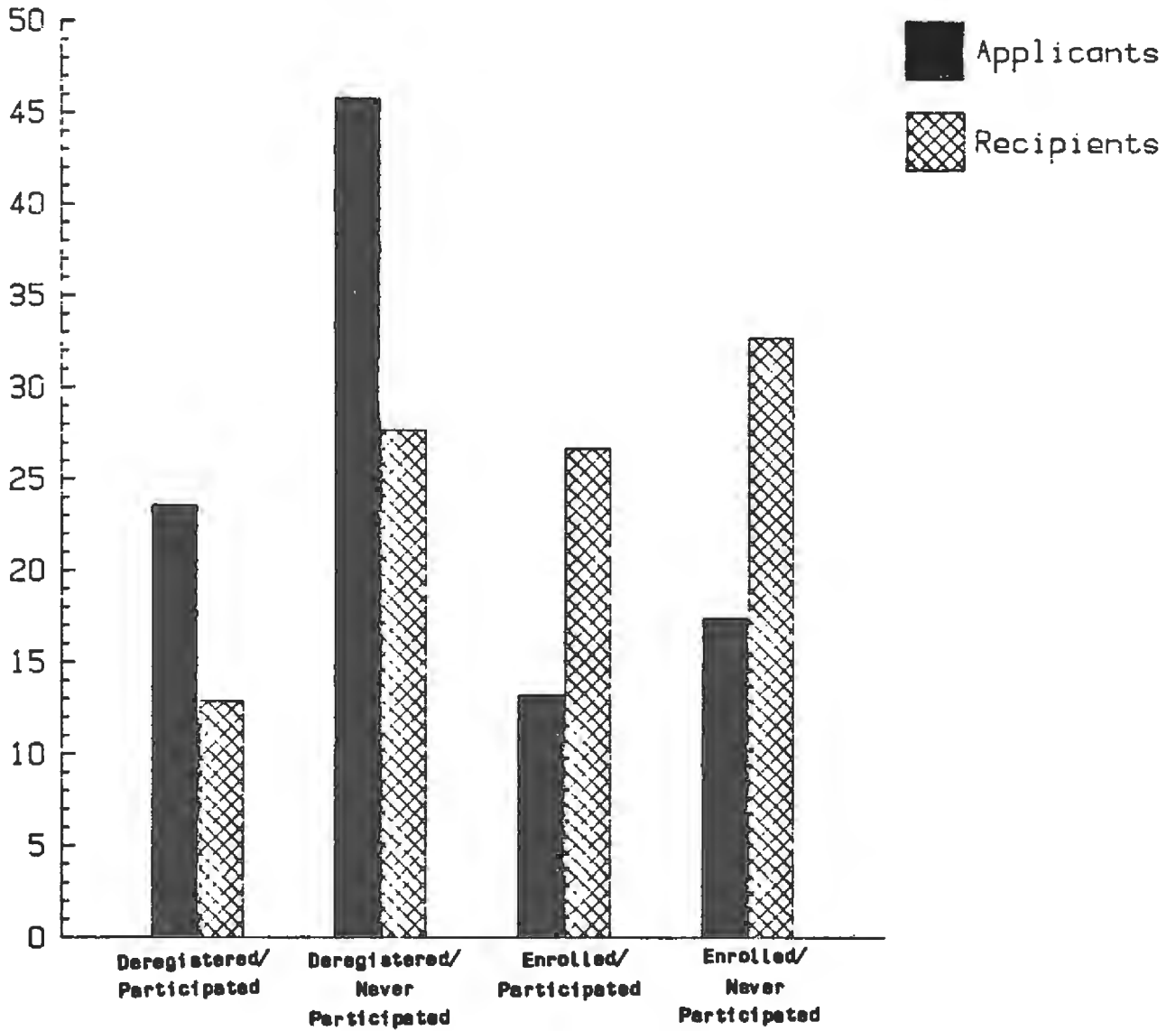
A test was applied to the difference of proportions between applicants and recipients of similar program and participation status. Statistical significance levels are indicated as: ** = 5 percent; *** = 1 percent.

FIGURE 4.2

ARKANSAS

NINE-MONTH PARTICIPATION STATUS OF EXPERIMENTALS, BY PROGRAM STATUS AT THE NINTH MONTH AFTER ENROLLMENT AND WELFARE STATUS

Percent of Enrollees



Program and Participation Status at 9 Months

SOURCE: See Table 4.2

The row totals indicate that 36.8 percent of the applicants and 39.6 percent of the recipients were active in job search activities or work experience within the nine-month period, but the difference between the two rates was not statistically significant. Because applicants could be required to participate in the program before welfare eligibility was determined, the applicant subgroup was further divided into individuals who were denied aid and those who were subsequently entered on the rolls. This allows us to see if individuals who were not approved for welfare had nonetheless participated in the key activities and how high the rates were for the approved applicants. Almost half (49 percent) of the approved applicants participated in job search or work experience, a figure that exceeds (although not significantly) the 39.6 percent participation rate of recipients. This squares with the argument that staff were less likely to require participation of those they considered unemployable, in whose number recipients figured more prominently. A smaller but far from negligible 20 percent of those who were denied aid also participated; the 36.8 percent figure presented earlier represents a weighted average of the two groups. That many denied applicants did take part confirms that these individuals are an integral part of the applicant subgroup and the analysis, even though they did not receive grant payments.

Despite the similar applicant and recipient participation rates, the fact that the applicants were so much more likely to be deregistered than recipients meant that the unserved proportion of recipients who were still in the program at the nine-month point was substantially higher than the corresponding proportion for applicants -- 32.7 percent vs. 17.4 percent.³

b. Pulaski South vs. Jefferson County Enrollees. The importance of caseload dynamics in assessing participation is also evident when a second subgroup distinction is considered: enrollees in Pulaski South vs. those in Jefferson County. Table 4.3 and Figure 4.3 indicate that the proportion of enrollees who ever participated in WORK Program activities was higher in Jefferson County (although not significantly so) than in Pulaski South -- 42.7 percent vs. 34.9 percent. This is largely because Jefferson County applicants were far more likely to receive welfare than those in Pulaski South: 83 percent of the Jefferson County applicant enrollees in this sample received aid compared to 47 percent of those in Pulaski South. And, as stated earlier, applicants approved for welfare were more than twice as likely to participate as those who were denied. However, the participation rates of the two applicant subgroups -- those approved and those denied -- were similar in the two counties. Thus, of applicants approved for aid in Pulaski South, 53 percent participated, while in Jefferson County, the corresponding proportion was 45 percent. Of those denied aid, 20 percent in Pulaski South were active, as were 25 percent in Jefferson County. Neither of those differences is statistically significant.

Overall, deregistration rates in Pulaski South were much higher than in Jefferson: Two-thirds of the sample members in Pulaski South were out of the program at the nine-month mark, compared to less than half (43.7 percent) of the Jefferson sample. As a result, a considerably higher proportion of sample enrollees in Jefferson County remained in the program, still not having participated in job search activities or work experience, than was the case in Pulaski South -- 32.3 percent vs. 18.1 percent.

TABLE 4.3

ARKANSAS

NINE-MONTH PARTICIPATION STATUS OF EXPERIMENTALS, BY PROGRAM STATUS
 AT THE NINTH MONTH AFTER PROGRAM ENROLLMENT AND COUNTY
 (JUNE 20, 1983 - DECEMBER 1983 SUBSAMPLE)

Nine-Month Participation Status	Program Status at Ninth Month		Total	Sample Size
	Deregistered	Still Enrolled		
<u>Pulaski South</u>				
Ever Participated (%)	19.5	15.4*	34.9	52
Never Participated(%)	47.0***	18.1**	65.1	97
Total (%)	66.5***	43.5***	100.0	149
<u>Jefferson</u>				
Ever Participated (%)	18.7	24.0	42.7	41
Never Participated(%)	25.0	32.3	57.3	55
Total (%)	43.7	56.3	100.0	96

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimental enrollees.

NOTES: Figures on program and participation status are calculated as a percentage of all experimentals in the subsample in each county.

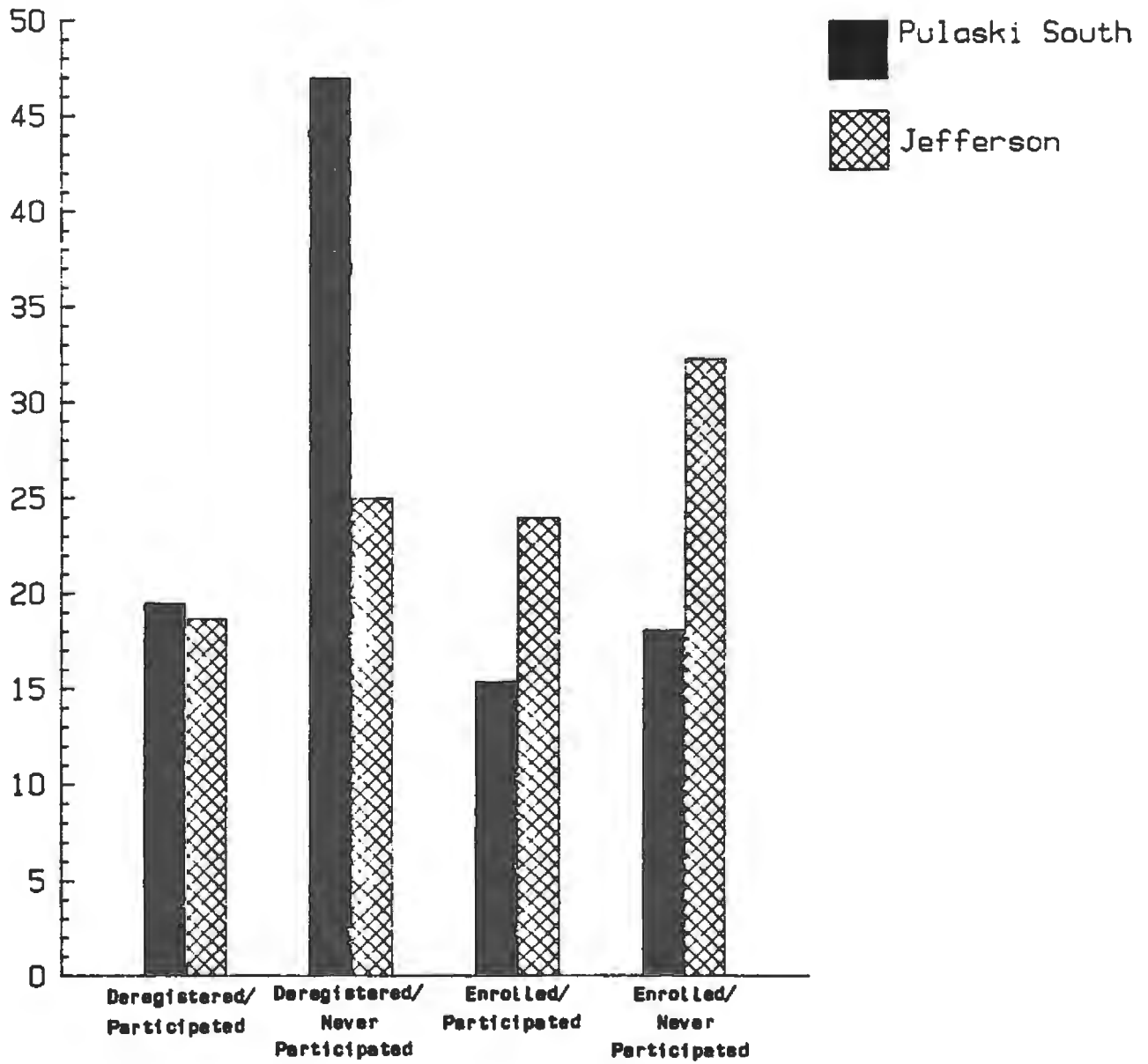
A test was applied to the difference of proportions between enrollees in both counties of similar program and participation status. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

FIGURE 4.3

ARKANSAS

NINE-MONTH PARTICIPATION STATUS OF EXPERIMENTALS, BY PROGRAM STATUS AT THE NINTH MONTH AFTER ENROLLMENT AND COUNTY

Percent of Enrollees



Program and Participation Status at 9 Months

B. Trends in Participation and Deregistration Rates

The analysis above has considered the nine-month participation indicators for the June-December 1983 sample as a whole and for two important sets of subgroups; trends in participation rates for all sample members, including those enrolled in January through March 1984, will now be examined. The analysis has two purposes. First, it compares the participation rates of different groups of program registrants to determine whether the participation and deregistration records of later program entrants resembled those of earlier enrollees. Second, it examines cumulative participation rates to see the extent to which these rates continued to increase, or alternatively, leveled off over time.

Figure 4.4 presents the cumulative participation rates of sample members at one, two, three, six, nine and 12 months after program entry. (Appendix Table D.1 shows the exact rates.) The sample has been broken down into three groups according to the time period during which members enrolled; for each group, a different length of follow-up was available. Thus, early enrollees were followed for 12 months, while those in the January-March group could be tracked for six months.

The figure shows that the participation rate for the last group of enrollees was much higher than that for earlier entrants. After three months, almost half (44.7 percent) of the January-March group had participated, compared to only 31.9 percent of the June-September group. Three factors may help explain the higher participation of later enrollees.

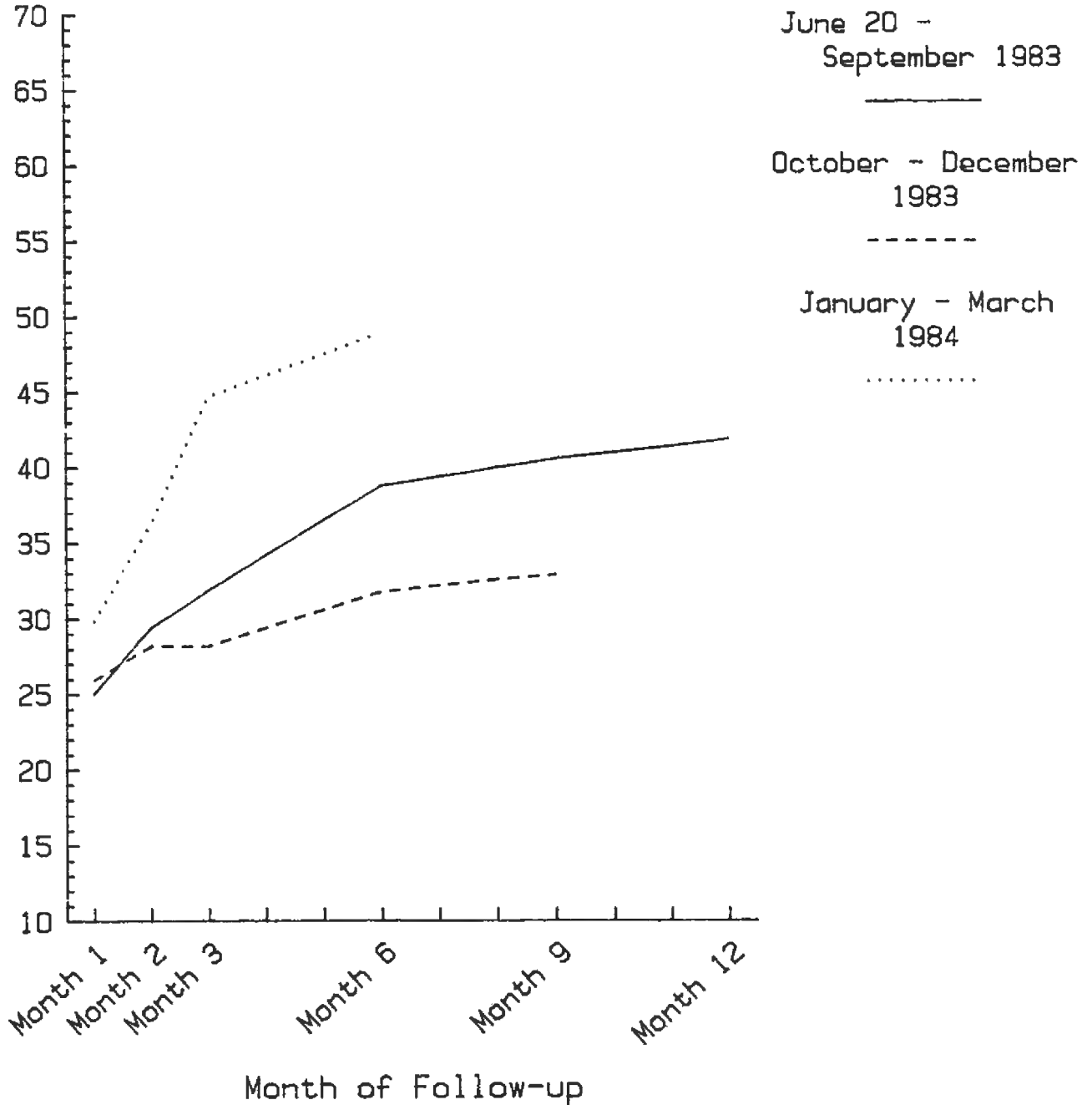
First, as program staff were able to reduce the backlog of people awaiting participation in the key activities, they were better able to

FIGURE 4.4

ARKANSAS

CUMULATIVE PARTICIPATION RATES IN ANY ACTIVITY FOR WORK
PROGRAM ENROLLEES, BY PERIOD OF ENROLLMENT

Participation Rate (%)



SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimentals. See Table D.1.

NOTES: Month 1 is defined as the month of enrollment in the WORK program.

Participation is defined as active in a component for at least one day.

reach incoming enrollees. Second, while, as pointed out in the last chapter, the background characteristics of early and later sample entrants were similar on the whole, those enrolled in the January-March period were significantly less likely to have received welfare previously. Staff may therefore have deemed them more employable, and served them more promptly than earlier enrollees. Third, new guidelines and procedures were issued by central DHS staff in January 1984 in an effort to reduce discretionary decision-making and to increase participation. The higher participation rates of later entrants may reflect staff compliance with these directives.

The figure also indicates that the majority of those who participated did so within the first month after entering the program, but participation did increase thereafter. After six months, these increases had largely leveled off. (Nine-month data for the January-March enrollees were not available.)

Deregistration rates, presented in Figure 4.5, were also higher for later program entrants than for earlier ones. (See Appendix Table D.2 for exact rates.) Six months after enrollment, 61.7 percent of the January-March 1984 enrollees, compared to 39.4 percent of the June-September 1983 entrants, were no longer registered in the program.

Deregistration rates, like participation rates, continued to increase over time. Here, too, the increases in the proportion of those deregistered tapered off in the later months of follow-up, although not as rapidly as was the case with participation rates.

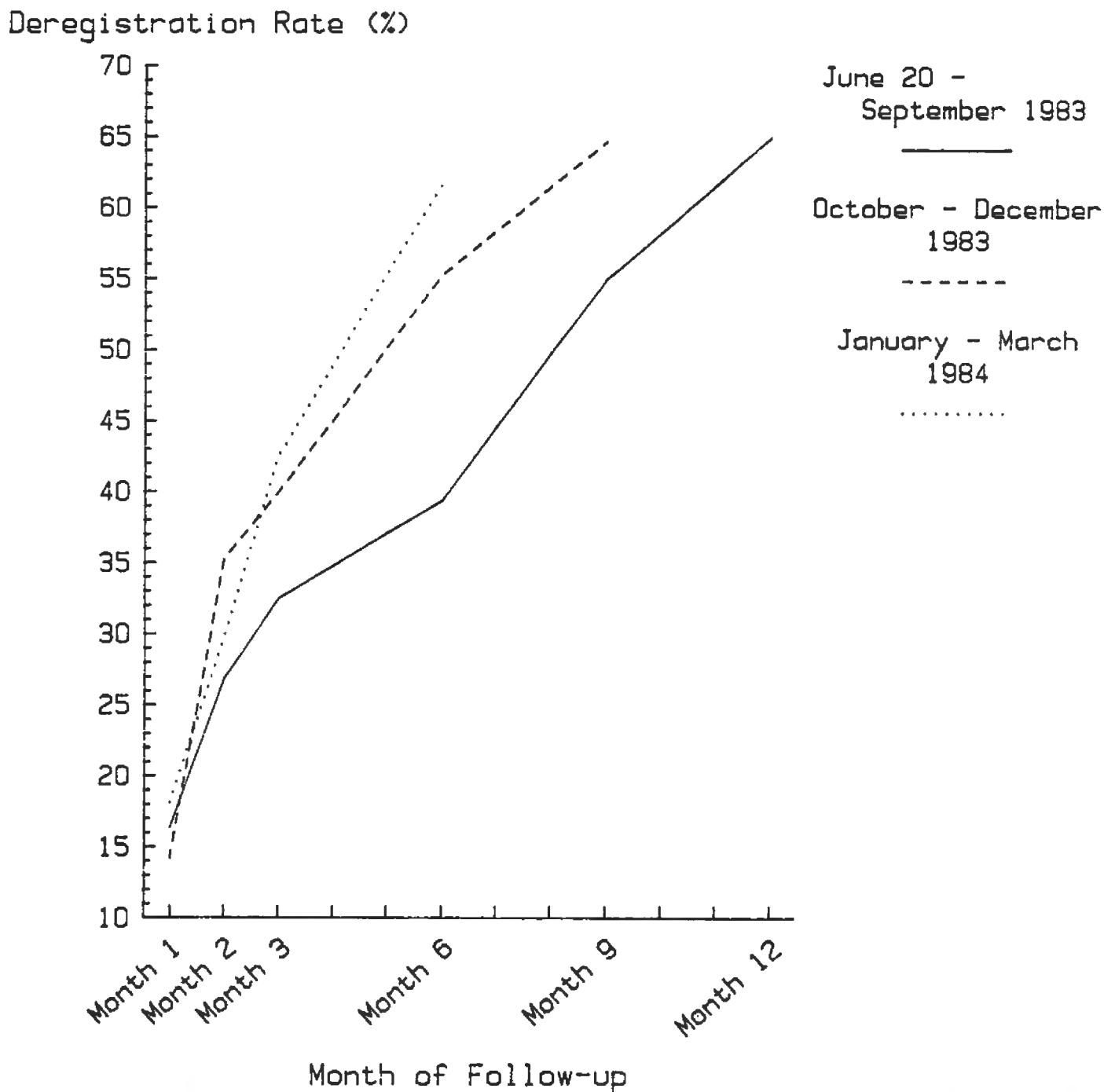
C. Participation in Individual Components

Program guidelines called for enrollees in Pulaski South and Jefferson

FIGURE 4.5

ARKANSAS

CUMULATIVE DEREGISTRATION RATES FOR WORK PROGRAM EXPERIMENTAL ENROLLEES, BY PERIOD OF ENROLLMENT



SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimentals. See Table D.2.

NOTES: Month 1 is defined as the month of enrollment in the WORK Program.

Participation is defined as active in a component for at least one day.

County to proceed through a sequence of activities starting with group job search. If they were unsuccessful in finding employment, they were next assigned to an individual job search component. If they still had not obtained a job, they were to enter a 12-week unpaid work experience position.

1. Participation in Job Search Activities. Job search activities in the WORK Program were of two kinds, group and individual. Group job search, better known as "job club," served two functions. First, it provided instruction in job-seeking skills, covering such topics as how to locate a job lead, prepare a resume and conduct oneself at an interview. Second, it involved group members in intensive job-seeking. On the second day of the two-week class, individuals began making "blind" calls to prospective employers to find out whether they were hiring, or if not, to see if they could come in to complete an application. As is the case in group job search programs generally, job club leaders in Arkansas made special efforts to foster peer support and build participants' confidence.

Participants attended sessions three hours a day and received a \$4 daily allowance, largely to reimburse transportation costs to the WORK Program office. Child care was also available for those who needed it.

A comprehensive, well thought-out job club manual was used throughout the WORK Program areas and made for considerable consistency in the way this component was carried out. This was not the case with individual job search. The component, initially of 90 days duration and subsequently reduced to 60 days, was in theory intended to give enrollees the opportunity to use the job-hunting skills acquired in the job club, while at the same time allowing them to receive supervision and guidance from staff. In

some instances, this undoubtedly occurred. In other cases, staff deviated from the guidelines by assigning those with strong job skills to individual job search rather than the job club at the very outset, so that the job developer could work to place them directly into unsubsidized jobs. In still other cases, individual job search appears to have been used as a "holding" status in which little was required.

Nine-month participation rates for the separate components appear in Table 4.4. Overall, the job club was the most frequently utilized component, with 27.3 percent of the sample participating in that activity during the nine-month follow-up period. As noted above, individuals in this component attended for an average of seven days. However, staff practices in assigning enrollees to components differed in the two counties, as reflected by the fact that in Pulaski South, more people participated in individual job search than in the job club (25.5 vs. 23.5 percent, respectively); in Jefferson County, the opposite was the case (19.8 vs. 33.3 percent). Evidence cited in the first report suggests that in Pulaski South, WORK Program case managers were especially likely to assign enrollees whom they regarded as more employable to individual job search rather than to the job club as their first activity.

Appendix Tables D.3 and D.4 show that participation in the job club and individual job search increased over time, and that the rates of participation in these components were also higher for later program entrants than for earlier ones.

It is worth repeating that the fact of participation in a given component does not speak to the quality or intensity of that participation. For example, in Jefferson County, the position of the job club leader was

TABLE 4.4

ARKANSAS

NINE-MONTH PARTICIPATION RATES FOR WORK PROGRAM
 EXPERIMENTAL ENROLLEES, BY PROGRAM ACTIVITY AND COUNTY
 (JUNE 20, 1983 - DECEMBER 1983 SUBSAMPLE)

Component	Pulaski South	Jefferson	Total
Any Activity (%)	34.9	42.7	38.0
Job Club (%)	23.5	33.3	27.3*
Individual Job Search (%)	25.5	19.8	23.3
Work Experience (%)	4.0	1.0	2.9
Other Activity (%)	2.7	2.1	2.4
Deregistration (%)	66.5	43.7	57.5***
Sample Size	149	96	245

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimentals.

NOTES: Individuals may have participated in more than one program activity. All participation rates are calculated as a percentage of all experimentals in the subsample.

Follow-up for the final month of entry was approximately 1/2 month less than that for the preceding months. A statistical correction produced no change in participation or deregistration rates.

A test was applied to the difference of proportions between the two counties. Statistical significance levels are indicated as: * = 10 percent; *** = 1 percent.

vacant for two months after the first job club leader resigned, and while other staff members sometimes tried to fill in, the consensus was that this was not a very satisfactory solution. Furthermore, it is difficult to say what participation in individual job search actually entailed since the way it was used varied by county. It was also applied differently to different individuals, according to staffs' perceptions of their employability levels.

2. Participation in Work Experience. As noted in the first chapter, Arkansas officials were convinced that the state's low grant levels would preclude effective use of the Community Work Experience Program (CWEP) authorized under OBRA.⁴ Instead, they made use of work experience as authorized under WIN, which limited the number of hours participants could work but set a maximum stay of 13 weeks. Work experience positions in Arkansas were 12 weeks in duration, and individuals worked 20 to 30 hours a week at their assignments. While participating in work experience, enrollees were entitled to out-of-pocket expenses not exceeding \$80 per month (calculated on the same \$4 per day basis as the job club).

Only 3 percent of all sample members were active in work experience over nine months; on average, individuals in this component in Pulaski South spent 197 hours at worksites, while those in Jefferson County worked only 109 hours in their positions. The low rate of participation is notable, even when one bears in mind that many individuals had been deregistered by the time they would have been assigned to worksites. Several factors account for the low utilization of the component. First, guidelines about which clients should be placed into work experience were ambiguous, and staff in Jefferson County initially assigned only

volunteers. Second, the job developer, who was responsible for arranging work experience worksites and overseeing participation, had many competing responsibilities, including unsubsidized job placements and, during much of the study period, supervision of the individual job search component. Finally, local operators were simply not interested in implementing a large-scale, mandatory work experience component, and central DHS staff did not exact from them greater conformity to the program model.

While work experience was not implemented widely in Arkansas, the assignment of welfare recipients to unpaid jobs has aroused considerable debate nationwide. Supporters of the concept have argued that such positions not only acquaint individuals who have limited employment histories with the demands of the labor market and give them experience and references to add to their resumes, but also confer valuable psychological benefits and provide useful community services. Critics, on the other hand, have contended that the jobs are "make-work."

To shed light on this issue, MDRC surveyed a sample of 24 work experience worksites, interviewing both workers (22) and their supervisors, to ascertain how participants performed at these jobs, whether or not the jobs promoted skill development, and how participants responded to their assignments. The results of this study appear in Appendix B. In brief, they indicate that the jobs were in mostly clerical or service occupations, usually in private nonprofit agencies. While the majority of the positions were not make-work and were important to the agencies' day-to-day operations, they required only moderate skills. In these assignments, the ability to get along with co-workers and to work without supervision were

much more important than cognitive skills, such as reading or arithmetic. Still, not all participants were rated by their supervisors as already adequate in these general skills when their assignments began, and while some registered improvement over the course of participation, many, in the view of their supervisors, continued to have problems.

Although participants generally agreed that the idea of a work requirement was fair, almost three-quarters thought that the agency got the better end of the bargain when comparing the usefulness of their work to the amount of money they received in benefits. Given the relatively low level of Arkansas welfare benefits and the fact that participants at most work-sites worked 20 to 30 hours a week, this is not surprising. Still, almost all participants liked their jobs and felt they had learned something from them. Most also said they felt better about getting welfare now that they were working for it.

CHAPTER 5

SHORT-TERM IMPACTS ON EMPLOYMENT, EARNINGS AND WELFARE RECEIPT

This chapter summarizes the short-term employment and earnings impacts, as well as changes in welfare receipt and payments, that were found to result from the WORK Program as it operated in two counties. The chapter begins with an examination of the impacts for the full research sample based on data collected over nine months of follow-up after sample enrollment. It then presents the short-term impacts for the principal subgroups -- applicants, who make up 60 percent of the total sample, and recipients, the other 40 percent. In each case, impacts are also measured for a small, early sample of enrollees tracked for 15 months to look at the trends of program impacts over a longer period. Because of the small sample sizes, the longer-term findings are only suggestive.

The chapter next examines program impacts for two other small but important subgroups -- enrollees by county and by whether or not they are parents of a young child (aged three to five). It concludes by measuring the program effects for enrollees who entered the sample in three different calendar periods to assess the impacts' stability over time. (Discussion of the supplemental sample is presented in Appendix A.)

It should be noted again that because very few experimentals took part in work experience, the impacts resulted almost entirely from the job search activities mandated by the WORK Program.

A. Analysis Issues

As discussed in Chapter 2, an experimental design was used to estimate the impacts of the WORK Program, with random assignment generating two groups of enrollees: an experimental group receiving the program treatment and the control group, which received no special services. Because Chapter 2 showed that random assignment produced groups similar in demographic and measurable background characteristics, any statistically significant differences between the two groups can be considered to result from the program treatment. Observational and other data indicated that the planned service differences between research groups were maintained for the duration of the study.

The research sample consists of a total of 1,119 individuals (667 applicants and 452 recipients) split roughly in half between experimental and control groups.¹ These individuals, who were randomly assigned between June 20, 1983 and March 31, 1984, were all tracked for at least three quarters, a follow-up sufficient to produce short-term impacts.

Throughout this chapter, impacts were calculated by comparing the employment, earnings and welfare outcomes of the full experimental group -- both participants and nonparticipants² -- to those of all controls. Impacts were also estimated separately for certain subgroups -- the important set being applicants and recipients. In order to present the most accurate estimates of all outcomes, key impacts were adjusted using multivariate regression techniques. However, it should be noted that while the size of the total sample was large enough to produce statistically reliable indications of program effects, the estimates of the impacts on employment and welfare receipt should be understood to show direction and probable

magnitude of the effects rather than exact percentages or dollar amounts. In addition, the sample sizes of subgroups are each only a fraction of the full sample, and the estimates of these impacts are therefore less precise.

B. Data Issues

As explained in Chapter 2, Unemployment Insurance earnings records and AFDC payments records, both maintained by the State of Arkansas, were used to measure employment, earnings and welfare impacts. The use of such administrative records offers several advantages as well as some drawbacks. First, collection of these data is less expensive than conducting individual interviews. Second, the data may also be more complete because sample members need not be located months after many have left the program. Third, the technique does not rely on a person's recalling exact dollar amounts either earned or received as welfare payments at some time in the past. Finally, and most importantly from the viewpoint of design validation, records data can be presumed to have fewer problems caused by different response rates for the experimental and control groups, thus reducing the possibility of bias.

Administrative records are, however, restricted in the kinds of outcomes they can measure and often have limitations in completeness and sample coverage. In particular, reported UI earnings should not be equated with the total non-welfare income of a person's family.

1. Welfare Payments Data

To organize the records of AFDC benefit payments for this study, the calendar month when an individual was assessed and randomly assigned was designated as "month one," and each subsequent month was given the next

number in sequence. Welfare "quarters" are groups of three months (one through three; four through six) but do not necessarily coincide with calendar quarters. Quarter three, for example, always refers to the person's outcome two quarters after the assessment quarter, without regard to the calendar date. Payments data for quarters prior to the point of assessment are used for comparative purposes.³

In this analysis, welfare receipt is reported as the proportion of the research group receiving any payment during a follow-up quarter; welfare payments are presented as the average dollar payment, which include zeroes for individuals who received no payment. Welfare payments data indicate the amount of the basic AFDC grant but not the value of Food Stamps or Medicaid.

2. Earnings Data

Unemployment Insurance (UI) earnings data are kept by calendar quarter rather than by month; the first quarter of follow-up can thus include up to two months of pre-program earnings, depending on when in a quarter random assignment occurred. For example, quarter one data for an enrollee assessed and randomly assigned in December 1983 contains earnings for October and November as well as December. For this reason, the first quarter is not considered a true follow-up quarter. The data organization also means that UI and AFDC impact quarters only roughly correspond.

As in computing welfare receipt, employment rates are defined as the proportion of the research group receiving any earnings in a quarter, and average earnings include zeroes for non-earners. Earnings records do not cover all earnings, however. Employers in some segments of the labor market may underreport employees' earnings to UI, and the earnings of

certain groups, such as most agricultural and domestic workers -- the latter an occupational category relevant to this population -- need not be reported in Arkansas. Regular audits of the UI system are, however, carried out by state and federal staffs. Moreover, there is no reason to suspect that underreporting affected experimentals and controls differently, and it is consequently not considered a source of serious bias.⁴

It should be noted that employment impacts are probably more accurately measured than earnings impacts in this data set. A good deal of variation in earnings tends to occur in any study, and this normal variation decreases the precision of earnings impact estimates.⁵ Earnings impacts should therefore be considered less reliable than the other outcome measures: employment, welfare incidence and welfare payments.

Throughout the chapter, impacts will usually be reported for the full three-quarter follow-up period. However, the third quarter alone (or the fifth quarter when it is available) will often be cited as the one of most interest since it represents the furthest point from enrollment. Before quarter three, many enrollees were still participating in job search activities so the full program effect would not yet be evident.

C. Short-Term Impacts for the Full Research Sample

As the first step in determining the impacts of the WORK Program, outcomes for the full sample of experimentals were compared to those of the full sample of controls. As shown in Table 5.1, there was a modest overall improvement in the employment outcomes of experimentals, and a somewhat larger reduction in welfare receipt.

TABLE 5.1

ARKANSAS

SHORT-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT, EARNINGS,
AND AFDC RECEIPT FOR THE RESEARCH SAMPLE DURING THE THREE QUARTER
POST-ENROLLMENT FOLLOW-UP PERIOD
(JUNE 20, 1983 - MARCH 1984 SAMPLE)

Outcome and Follow-Up Period	Experimentals	Controls	Difference
Ever Employed, Quarters 2 - 3 (%) ^a	18.8	14.0	+ 4.8**
Average Number of Quarters With Employment, Quarters 2 - 3 ^a	0.30	0.22	+ 0.08**
Ever Employed (%)			
Quarter of Enrollment	16.1	11.8	+ 4.3**
Quarter 2	14.6	9.6	+ 5.0***
Quarter 3	15.2	12.2	+ 3.1*
Average Total Earnings, Quarters 2-3 (\$) ^a	290.63	212.94	+77.70*
Average Total Earnings (\$)			
Quarter of Enrollment	98.78	83.33	+15.46
Quarter 2	140.77	86.38	+54.39**
Quarter 3	149.86	126.55	+23.31
Ever Received Any AFDC Payment, Quarters 1 - 3 (%)	72.8	75.8	- 3.1
Average Number of Months Receiving AFDC Payments, Quarters 1 - 3	4.96	5.49	- 0.53***
Ever Received Any AFDC Payments (%)			
Quarter of Enrollment	66.6	69.0	- 2.4
Quarter 2	65.6	71.4	- 5.8**
Quarter 3	56.8	63.8	- 6.9***
Average Total AFDC Payments Received, Quarters 1 - 3 (\$)	771.69	864.55	-82.86***
Average AFDC Payments Received (\$)			
Quarter of Enrollment	249.66	258.31	- 8.65
Quarter 2	275.57	316.79	-41.22***
Quarter 3	246.46	289.44	-42.98***
Sample Size	554	565	

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

^a Quarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded from the measures of total follow-up employment and earnings.

In quarters two and three, all of the employment outcomes were uniformly higher for the experimental group. Percent ever employed, number of quarters of employment and average earnings were higher by one-third over controls, and the gains were statistically significant for each of these measures. The "ever employed" rate for experimentals during the second and third quarters was 18.8 percent compared to that of 14.0 percent for controls, a gain, or an impact, of 4.8 percentage points. Combined earnings for quarters two and three rose \$78, from \$213 for controls to \$291 for experimentals. As these numbers suggest, even with this improvement, overall employment and earnings remained very low.

Measures of welfare receipt showed a statistically significant decline for the experimental group. During quarters one through three, controls received payments for an average of 5.49 months compared to 4.96 months for experimentals, a reduction of more than half a month. In the third quarter -- when the difference was largest -- 63.8 percent of controls received welfare compared to 56.8 percent of experimentals, for a 6.9 percentage point impact.

A corresponding decline in welfare payments also occurred. Total benefits paid over the nine months after random assignment amounted to \$865 per control and \$772 per experimental, for a nine-month savings of \$93. As expected, only small and not statistically significant reductions took place in the first quarter, the quarter of WORK Program assessment. By the third quarter, however, welfare savings of \$43 per experimental were being realized, with payments down from the control group level of \$289 to \$246. This represents a 15 percent reduction in benefit expenditures for that quarter.⁶

Three-fourths of these savings came from the reduced incidence of welfare receipt and one-quarter from lower average payments to recipients.⁷ The larger influence of the first factor is not surprising, given the relatively low standard of need in Arkansas. Virtually any steady employment will disqualify a person from welfare.

Earnings impacts are difficult to interpret because the simple difference in average earnings presented in Table 5.1 does not reveal whether the dollar gain was concentrated in a few clients who began working or was spread out over many. Table 5.2 shows the distribution of earnings in the third follow-up quarter as defined in Table 5.1. The table splits the sample into three groups: those with no earnings; those making \$1,300 or less for the quarter (approximately the minimum wage at 30 hours per week); and those earning more than that amount. Only a few individuals in the sample (5 percent or less) earned more than \$1,300.

Table 5.2 also shows that 3.1 percent of the experimental group went from the "no earnings" to one of the positive earnings categories: that is, they became employed, which is the impact shown in Table 5.1 for quarter three. But almost all of this increase in employment -- 2.6 out of 3.1 percentage points -- took place in the lower-earning category. Only a slight increase occurred in the category earning more than \$1,300.

These findings indicate that the WORK Program -- although it appears to affect employment -- does not raise the earnings of persons who do become employed, at least in the short run. Such a conclusion is consistent with the aims of job search assistance programs, which do not attempt to increase basic work skills. Moreover, just as the bulk of the normal movement of controls off welfare was usually not into employment (see

TABLE 5.2

ARKANSAS

SHORT-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM
ON THE DISTRIBUTION OF EARNINGS FOR THE RESEARCH SAMPLE
AT THE THIRD QUARTER OF POST-ENROLLMENT FOLLOW-UP

Outcome Category	Experimentals	Controls	Difference
Average Total Earnings, Quarter 3 (%)			
None	84.8	87.8	- 3.1*
\$1 - 1300	10.1	7.5	+ 2.6*
More Than \$1300	5.0	4.6	+ 0.4
Total	100.0	100.0	0.0
Sample Size	554	565	

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

Distributions may not add exactly to 100.0 percent because of rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

Figure 3.2), so the additional shift off welfare that occurred as a result of the WORK Program was not always accompanied by long-term UI-covered employment. Thus, as shown in Appendix Table E.4, by the third quarter of follow-up, there was a 3.3 percentage point increase in the proportion of experimentals who were working and not on welfare, yet at the same time there was a 4.7 point increase in the group categorized as having "no welfare and no earnings."

D. How Long Do Impacts Last?

Impacts of a program are more important the longer they last. Programs that permanently change behavior achieve more in the long run than programs causing only temporary change. To see whether WORK Program impacts extended beyond the nine-month follow-up period, a supplemental analysis was conducted on the earliest group of enrollees (those who entered the research sample from June through September 1983) who had longer follow-up data than the full sample: five quarters of UI earnings and AFDC payments records.

Impacts on employment and welfare receipt for this early group are presented in Table 5.3. However, because of the much smaller sample sizes, the impact estimates are less precise and less likely to attain statistical significance than those presented for the full sample followed for nine months. In addition, this group entered the WORK Program during its start-up phase, so the sizes of impacts may not be typical of those found for groups enrolled at a later time. But exact size is of less importance than the general movement of impacts over the longer follow-up and what these impacts say about short-term patterns.

TABLE 5.3

ARKANSAS

LONGER-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT, EARNINGS,
AND AFDC RECEIPT FOR THE RESEARCH SAMPLE DURING THE FIVE QUARTER
POST-ENROLLMENT FOLLOW-UP PERIOD
(JUNE 20, 1983 - SEPTEMBER 1983 SAMPLE)

Outcome and Follow-Up Period	Experimentals	Controls	Difference
Ever Employed, Quarters 2 - 5 (%) ^a	22.1	18.2	+ 3.9
Average Number of Quarters With Employment, Quarters 2 - 5 ^a	0.60	0.46	+ 0.13
Ever Employed (%)			
Quarter of Enrollment	12.9	11.9	+ 1.0
Quarter 2	13.9	10.2	+ 3.7
Quarter 3	14.9	11.4	+ 3.5
Quarter 4	13.6	12.3	+ 1.3
Quarter 5	17.3	12.6	+ 4.7*
Average Total Earnings, Quarters 2-5 (\$) ^a	523.63	578.90	-55.26
Average Total Earnings (\$)			
Quarter of Enrollment	74.70	88.23	-13.52
Quarter 2	106.01	107.62	- 1.61
Quarter 3	127.85	138.97	-11.12
Quarter 4	129.37	163.54	-34.17
Quarter 5	160.40	168.76	- 8.36
Ever Received Any AFDC Payment, Quarters 1 - 5 (%)	76.5	78.6	- 2.1
Average Number of Months Receiving AFDC Payments, Quarters 1 - 5	7.98	8.01	- 1.03**
Ever Received Any AFDC Payments (%)			
Quarter of Enrollment	66.8	70.2	- 3.5
Quarter 2	67.8	70.3	- 2.5
Quarter 3	58.8	65.4	- 6.6*
Quarter 4	53.4	63.7	-10.3**
Quarter 5	48.8	59.4	-10.5**
Average Total AFDC Payments Received, Quarters 1 - 5 (\$)	1,197.05	1,391.04	-193.99***
Average AFDC Payments Received (\$)			
Quarter of Enrollment	227.32	242.96	-15.64
Quarter 2	266.76	296.27	-29.50*
Quarter 3	252.76	294.87	-42.10**
Quarter 4	240.05	288.94	-48.89**
Quarter 5	210.15	288.00	-57.85***
Sample Size	253	265	

(continued)

TABLE 5.3 (continued)

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

^aQuarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded from the measures of total follow-up employment and earnings.

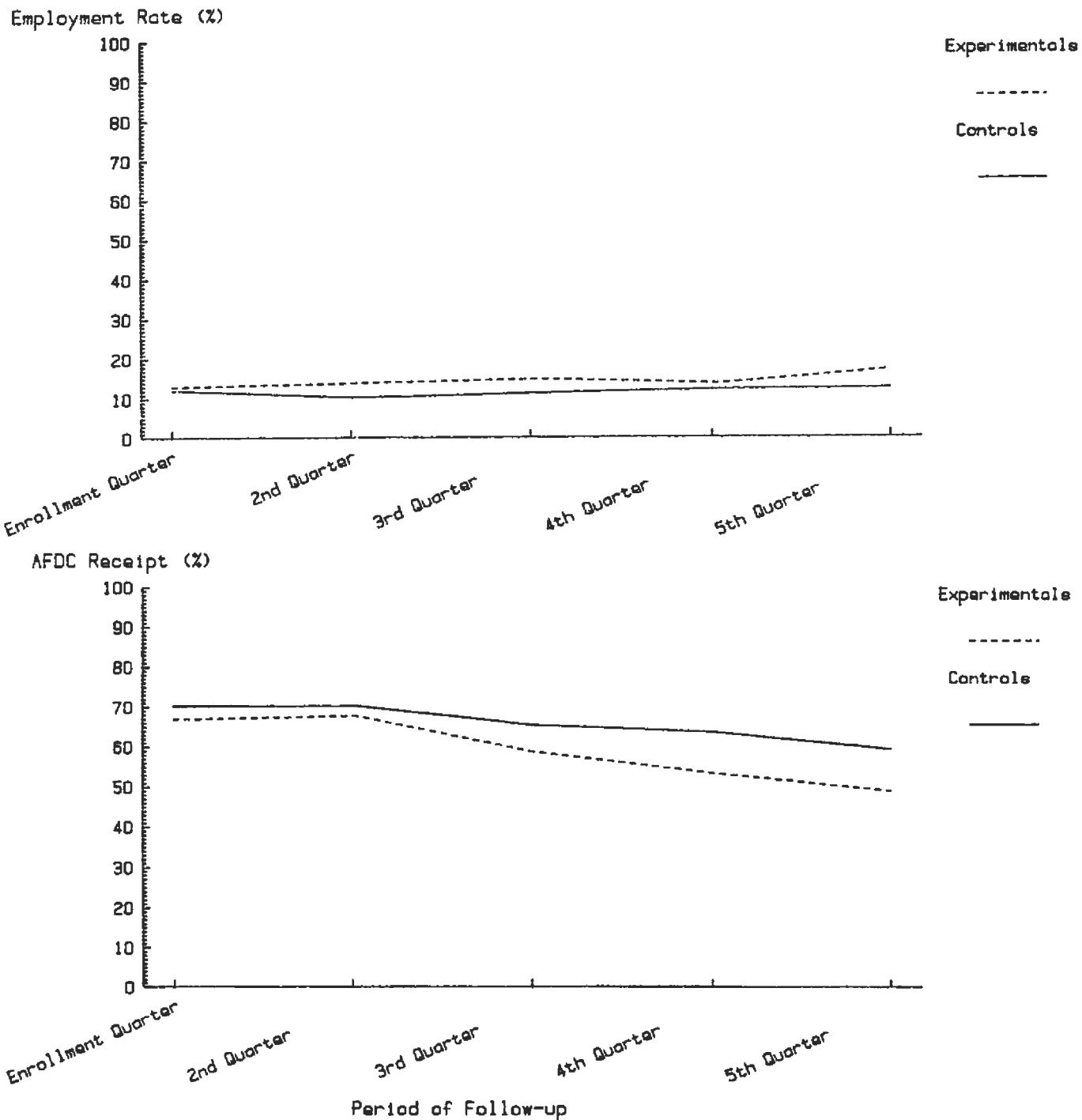
The purpose of this analysis is to answer several key questions suggested by the importance of natural caseload turnover as a benchmark for judging program achievements (see Chapter 3). Inspection of Table 5.3 and the accompanying Figure 5.1 shows that the welfare receipt of controls gradually declines, going down to under 60 percent in quarter five. This process takes place despite the low employment levels of controls and the absence of special services for them. A major question is then: Will controls eventually drop down to the level of experimentals, eliminating the experimental-control difference that constituted the program impact? Or conversely: Will the program's influence on the behavior of experimentals gradually "wear off," causing them to resume normal work and welfare patterns? In the language of employment program evaluations: Do the impacts decay, and if so, how soon?

Interestingly, impacts for the June-September enrollment group as a whole show no clear evidence of decay even as late as the fifth quarter of follow-up. This finding, however, is more definite for the pattern of welfare impacts than for employment impacts. Greater quarter-to-quarter stability and more growth and persistence is evident in welfare than in employment impacts over the longer term.

In examining these trends, one can see that, while the largest employment impact occurred in the last follow-up quarter, this was preceded by a dip in the quarter immediately before. In addition, employment gains were somewhat lower overall than the gains for the full sample, and, paradoxically, earnings impacts were negative. Given the wide variance of the estimates on earnings⁸ and the earlier discussion, the employment measure is considered the more reliable one. However, the discrepancy between the

FIGURE 5.1

LONGER-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON
EMPLOYMENT AND AFDC RECEIPT FOR THE RESEARCH SAMPLE DURING
THE FIVE QUARTER POST-ENROLLMENT FOLLOW-UP PERIOD



SOURCE: See Table 5.3.

employment and earnings estimates does highlight the difficulties inherent in working with earnings in small samples.

The movement of welfare impacts over the five quarters is smoother. Growth is constant throughout the follow-up. The differential in welfare receipt increased steadily until, by the fifth quarter, the impact was 10.5 percentage points. Almost 60 percent of the controls were receiving welfare compared to 48.9 percent of experimentals. Welfare reductions for the experimental group were also greatest in this quarter, with the average welfare payment down from \$268 to \$210. The \$58 difference represents a 22 percent decrease in welfare expenditures during this quarter.

It should also be noted that welfare receipt for both groups was still declining at the end of the follow-up period. It is thus not possible to predict whether this differential will continue or disappear over a longer period of time.

E. Short-Term Impacts for the Applicant and Recipient Subgroups

In this section, impacts are examined separately for the applicant and recipient subgroups, who together make up the full sample: 60 percent are applicants, 40 percent recipients. These subgroups are important to analyze separately because recipients were already established on the welfare rolls at the time of program enrollment and were therefore expected to behave differently from applicants. This was in fact the case: One major finding of the study is that the short-term impacts of the WORK Program largely resulted from the changed behavior of the recipient portion of the sample, with the smaller part of the effects due to the relatively small gains of the applicants.

1. Short-Term Impacts on Applicants

Table 5.4 presents the short-term impacts of the WORK Program on employment, earnings and welfare receipt for applicants to welfare for the June 20, 1983 through March 1984 sample over the nine-month follow-up period. Before discussing these impacts, it is helpful first to examine the recent work and welfare histories for applicants as portrayed in Figure 5.2.⁹

Applicants' pattern of pre-program employment was quite stable, with an employment rate of about 20 percent in each of the four quarters prior to welfare application. Nearly half of the applicants, however, reported having had their own welfare case in the past, and their histories, as shown in the graph, indicate substantial prior welfare receipt. As earlier welfare episodes ended, the rate of receipt and the average welfare payments declined gradually over the year leading to the current application.

For controls, the employment rate dropped sharply at the point of welfare application, suggesting that the loss of a job was the reason for welfare application for some individuals. Employment reached a bottom of 13 percent in the quarter after random assignment¹⁰ and then began to rise toward its former level in the third quarter. Some controls who formerly worked but applied for welfare appeared to regain employment relatively quickly.

The dip in employment at application was less pronounced for experimentals and, at quarter two, the employment rate had increased to 17.9 percent (compared to 12.8 percent for controls), for a statistically significant program impact of 5.1 percentage points. This impact appeared to fade,

TABLE 5.4

ARKANSAS

SHORT-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT, EARNINGS, AND AFDC RECEIPT FOR APPLICANTS DURING THE THREE QUARTER POST-ENROLLMENT FOLLOW-UP PERIOD (JUNE 20, 1983 - MARCH 1984 SAMPLE)

Outcome and Follow-Up Period	Applicants		
	Experimentals	Controls	Difference
Ever Employed, Quarters 2 - 3 (%) ^a	23.7	18.1	+ 4.8*
Average Number of Quarters With Employment, Quarters 2 - 3 ^a	0.36	0.30	+ 0.07
Ever Employed (%)			
Quarter of Enrollment	22.0	16.4	+ 5.6**
Quarter 2	17.8	12.8	+ 5.1**
Quarter 3	18.6	16.8	+ 1.8
Average Total Earnings, Quarters 2-3 (\$) ^a	348.34	302.15	+46.19
Average Total Earnings (\$)			
Quarter of Enrollment	132.94	128.89	+ 4.06
Quarter 2	167.75	115.85	+52.10
Quarter 3	180.58	186.49	- 5.91
Ever Received Any AFDC Payment, Quarters 1 - 3 (%)	58.9	61.8	- 2.9
Average Number of Months Receiving AFDC Payments, Quarters 1 - 3	3.48	3.76	- 0.29
Ever Received Any AFDC Payments (%)			
Quarter of Enrollment	48.8	50.2	- 1.3
Quarter 2	52.6	57.1	- 4.5
Quarter 3	45.2	48.5	- 3.3
Average Total AFDC Payments Received, Quarters 1 - 3 (\$)	559.81	588.86	-28.05
Average AFDC Payments Received (\$)			
Quarter of Enrollment	154.52	144.60	+ 9.92
Quarter 2	218.46	242.05	-22.59
Quarter 3	185.94	202.32	-16.38
Sample Size	332	335	

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

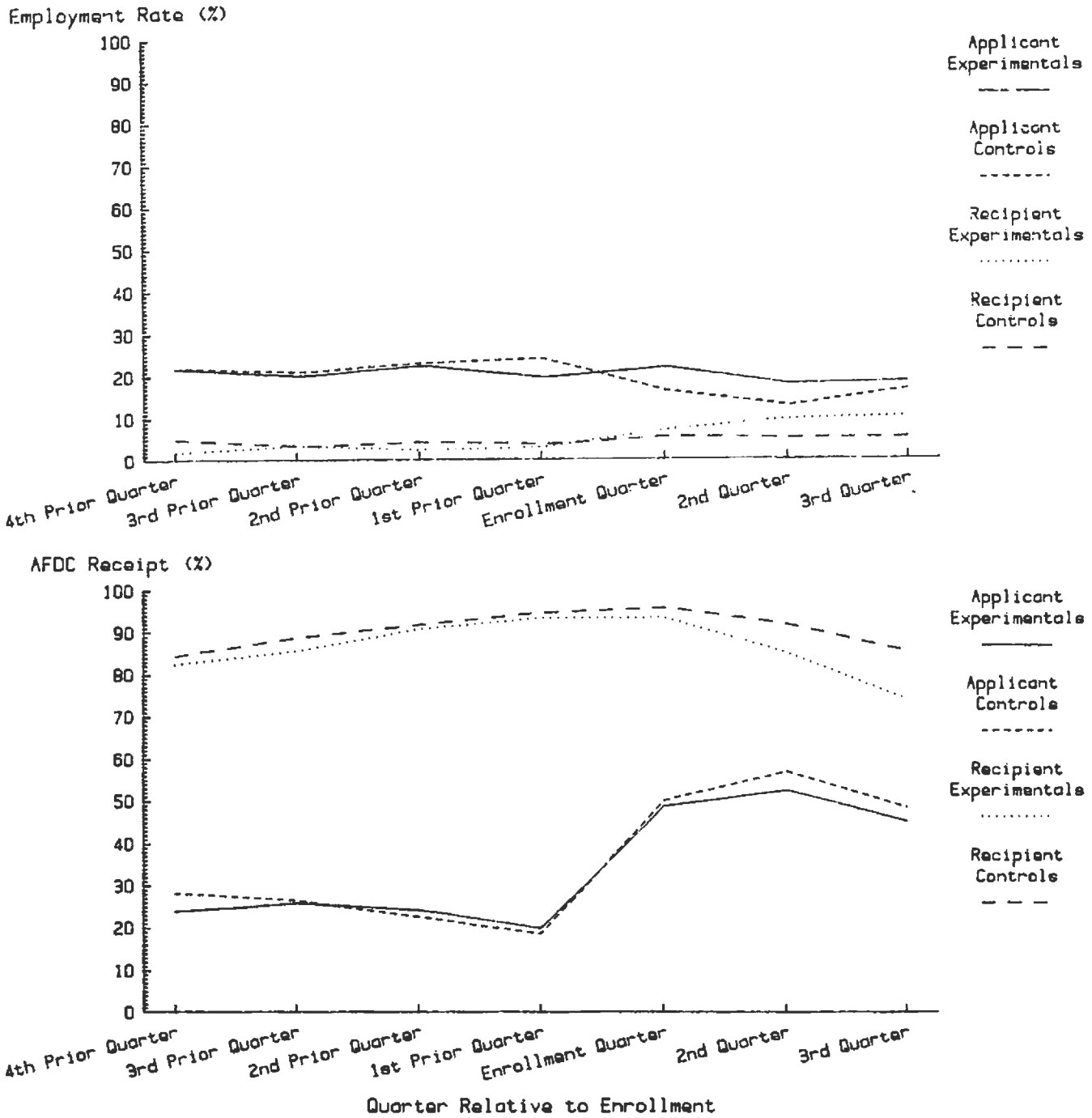
NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

^a Quarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded from the measures of total follow-up employment and earnings.

FIGURE 5.2

PRE- AND POST-ENROLLMENT EMPLOYMENT AND AFDC RECEIPT FOR THE RESEARCH SAMPLE, WITH SHORT-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM IN THE THREE QUARTER FOLLOW-UP PERIOD



SOURCE: See Tables 5.4, 5.5, and E.3.

however, in the next quarter as controls began to find jobs and move toward their former employment levels. This pattern suggests that the WORK Program job search activities shortened the period of unemployment for some applicants, but may not have affected their employment levels over the longer term. This is borne out by the findings that the total quarters with employment and the total earnings for quarters two and three were less affected by the program than the "ever-employed" rate. In fact, there were no statistically significant differences between experimentals and controls on these measures.

About 60 percent of the applicant sample received welfare payments during the nine-month follow-up. This rate was only slightly lower for experimentals (58.9 percent) than for controls (61.8 percent), suggesting that few applicants were deterred from proceeding with their welfare applications; the 2.9 percentage point difference was small and not statistically significant. Reductions in welfare receipt were also small and not statistically significant by quarter. The largest reduction took place in quarter two, with 52.6 percent of the experimentals receiving welfare payments compared to 57.1 percent of controls, for a difference (4.5 percentage points) that was not statistically significant. Average welfare payments for that quarter at \$219 for experimentals compared to \$242 for controls also produced no statistically significant savings; the difference of \$23 amounted to a 9.3 percent reduction in welfare expenditures per experimental for the quarter. Welfare savings for the full nine months were \$29, or 4.9 percent of the control group average.¹¹

2. Short-Term Impacts on Recipients

Recipients, like applicants, exhibited a steady quarterly employment

rate prior to welfare application, but the level was extremely low: only about 3 or 4 percent were working in any quarter. Even a year before enrollment, this group's rate of welfare receipt was over 80 percent, and it rose steadily up to the point of random assignment.

As seen in Table 5.5, controls showed a slight increase in employment at the point of random assignment, and this level remained constant during quarters two and three. Experimentals showed an even larger increase that continued through both follow-up quarters. The result was a consistent and statistically significant program impact on employment for the recipient sample over the short run.

The gain can be seen in all of the measures; for example, the "ever employed" rate for quarters two and three combined increased by 4.8 percentage points, an improvement of exactly the same magnitude as that for the applicants. The gain is most clearly seen, however, by looking at quarters two and three separately: Employment and earnings for experimentals almost doubled compared to controls, an increase from 5.0 percent for controls to 9.7 percent for experimentals in the second quarter, and from 5.3 to 10.3 percent for the experimentals in the third quarter. Number of quarters with employment and total earnings over the follow-up period showed similar improvements, primarily because the employment gain was sustained into quarter three. Controls showed no tendency to "catch up," and the employment rate for experimentals was still rising during this quarter. These positive findings should not obscure the fact that the absolute levels of employment for recipient experimentals continued to be very low.

Alongside the measured employment gains, there were consistent and

TABLE 5.5

ARKANSAS

SHORT-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT, EARNINGS, AND AFDC RECEIPT FOR RECIPIENTS DURING THE THREE QUARTER POST-ENROLLMENT FOLLOW-UP PERIOD (JUNE 20, 1983 - MARCH 1984 SAMPLE)

Outcome and Follow-Up Period	Recipients		
	Experimentals	Controls	Difference
Ever Employed, Quarters 2 - 3 [%] ^a	11.5	6.7	+ 4.8**
Average Number of Quarters With Employment, Quarters 2 - 3 ^a	0.20	0.10	+ 0.10**
Ever Employed [%]			
Quarter of Enrollment	7.0	5.5	+ 1.5
Quarter 2	9.7	5.0	+ 4.7**
Quarter 3	10.3	5.3	+ 5.0**
Average Total Earnings, Quarters 2-3 [\$] ^a	199.80	87.25	+112.65**
Average Total Earnings [\$]			
Quarter of Enrollment	45.86	18.78	+27.08
Quarter 2	98.34	45.71	+52.63*
Quarter 3	101.56	41.54	+60.02**
Ever Received Any AFDC Payment, Quarters 1 - 3 [%]	93.9	95.8	- 1.9
Average Number of Months Receiving AFDC Payments, Quarters 1 - 3	7.20	7.98	- 0.78***
Ever Received Any AFDC Payments [%]			
Quarter of Enrollment	93.7	96.1	- 2.4
Quarter 2	85.3	92.1	- 6.8**
Quarter 3	74.3	85.7	-11.4***
Average Total AFDC Payments Received, Quarters 1 - 3 [\$]	1,091.57	1,262.88	-171.31***
Average AFDC Payments Received [\$]			
Quarter of Enrollment	393.34	422.60	-29.26**
Quarter 2	360.27	424.92	-64.65***
Quarter 3	337.97	415.37	-77.40***
Sample Size	222	230	

SOURCE: MIRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

^a Quarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded from the measures of total follow-up employment and earnings.

statistically significant welfare reductions that increased steadily throughout the three quarters of follow-up. Experimentals left welfare faster than controls. From the first quarter to the third, welfare receipt for controls dropped from 96.1 percent to 85.7 percent, a decline of 10.4 percentage points. At the same time, welfare receipt for experimentals went from 93.7 percent to 74.3 percent, a drop of 19.4 percentage points. The rate of leaving welfare for experimentals was therefore nearly twice that of controls (19.4 versus 10.4 percentage points). The total time experimentals spent on welfare during the nine-month period was also lower, as was the amount of benefits paid to them. Nine-month grant expenditures per control were \$1,263, compared to \$1,092 for experimentals, for a welfare savings of \$171. In quarter three, the dollar difference amounted to an 18.6 percent reduction in benefit expenditures for experimentals versus controls.

It should be pointed out that nearly all short-term reductions in grant expenditures for the WORK Program can be attributed to the recipient sample. The average savings for recipient experimentals over the full nine months were nearly six times higher than those for the applicants (\$171 against \$29, a difference statistically significant at the 5 percent level). Thus, while recipients make up only 40 percent of the research sample, they accounted for 80 percent of the total short-term welfare savings.¹²

These findings take on additional significance when it is recalled that nearly one-third of the recipient experimentals were still registered with the program but unserved at the ninth month of follow-up, compared to half that proportion for applicants (Chapter 4). Larger welfare impacts

were achieved for recipients even though more of them remained in the unserved pool at the end of the follow-up period.

Highlighting these applicant-recipient differences does not mean that program operators should avoid serving new welfare applicants. Several factors argue against that. First, applicants who are approved for welfare become recipients shortly after that. Thus, it is possible that the impacts on applicants may begin to resemble the impacts on recipients over a longer follow-up. In addition, if working with applicants keeps some from becoming entrenched in the welfare system, long-run impacts may be larger than the short-run impacts estimated here.¹³

A second factor is that the costs of working with long-term recipients may be high, both in staff time and support services. Moreover, as the next section will show, there do appear to be objectively identifiable subgroups of applicants who fare worse in the labor market than others and for whom intervention offers the potential for employment gains.

3. Further Subdivision of Applicant and Recipient Subgroups

Tables 5.6 and 5.7 present the results of a further subdivision of these two subgroups. Although more speculative because of the small sample sizes, estimates will be cited here because they speak in part to the applicant/recipient question. They suggest that portions of the applicant subgroup were, in fact, affected by the WORK Program, even in the short run.

Three of the subgroup analyses pertained to employability: Individuals with little recent work experience were compared to those with a more current work record, mothers with children over five years to those whose youngest child was aged three to five, and those with a high school diploma

TABLE 5.6

ARKANSAS

SHORT-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT AND AFDC RECEIPT FOR APPLICANTS
DURING THE THIRD QUARTER OF POST-ENROLLMENT FOLLOW-UP, BY SELECTED CHARACTERISTICS
(JUNE 20, 1983 - MARCH 1984 SAMPLE)

Characteristic	Applicants						
	Percent of Sample	Employed During Third Quarter of Follow-Up (%)			Average AFDC Payments Received During Third Quarter of Follow-Up(\$)		
		Experimental	Control	Difference	Experimental	Control	Difference
County							
Pulaski South	64.8	19.6	17.2	+ 2.4	133.37	153.13 ^{xxx}	-19.76
Jefferson	35.2	16.7	16.7	- 0.0	281.22	288.86	- 7.44
Employed During Year Prior to Enrollment^b							
Yes	33.3	39.3	43.8 ^{xxx}	- 4.6	186.57	180.71	+ 5.86
No	66.7	8.3	3.7	+ 4.6	184.83	210.89	-26.06
Child Less Than Six							
No	51.3	17.2	18.9	- 1.7	192.72	208.13	-15.41
Yes	48.7	20.1	15.1	+ 4.8	177.72	193.16	-15.44
High School Diploma^b							
Yes	55.0	20.3	20.3 ^x	+ 0.0	189.12	185.05	+ 4.07
No	45.0	16.5	13.1	+ 3.4	180.88	220.14	-39.26
Length of Prior Welfare History							
Never Had Own Case	58.2	15.2	17.5	- 2.3	153.37	166.83 ^{xxx}	-13.45
Had Own AFDC Case	43.8	22.9	16.5	+ 6.4	226.52	244.48	-17.96
Number of Own Children^c							
One	42.7	19.3	14.6	+ 4.7	146.52	192.22	-45.70 ^{yy}
Two	30.6	18.6	17.2	+ 1.4	187.13	201.22	-14.10
Three	14.8	17.8	19.8	- 1.9	227.72	210.22	+17.50
Ever Married^d							
Yes	57.1	18.0	13.7 ^x	+ 4.3	174.88	183.08	- 8.21
No	42.9	19.4	21.5	- 2.1	189.43	224.47	-25.04
Sample Sizes	867	332	335		332	335	

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

(continued)

TABLE 5.6 (continued)

"Percent of Sample" may differ slightly from demographic tables of Chapter 2 because 34 cases with any missing data were dropped from the impact sample.

Subgroup impacts are produced from regression coefficients of treatment-subgroup interaction terms. All interactions are simultaneous; estimates for each subgroup category hold constant all other subgroup characteristics.

^a Persons were considered employed during the year prior to enrollment if they had UI earnings for any of the four prior quarters.

^b The high school category includes individuals with a General Equivalency Diploma.

^c Differentials for family size were calculated from a linear interaction term. Estimates are shown only for one, two, and three children, the family sizes nearest the mean. Frequencies therefore do not sum to 100.0 percent.

^d "Ever married" comprises individuals living and not living with spouse, divorced, and widowed.

Within the control group, a two-tailed t-test was applied to differences between categories in each subgroup designation. Statistical significance levels are indicated as: x = 10 percent; xx = 5 percent; xxx = 1 percent.

Another two-tailed t-test was applied to differences in impacts between categories in each subgroup designation. Statistical significance levels are indicated as: y = 10 percent; yy = 5 percent; yyy = 1 percent. No tests were performed for the significance of each impact singly.

TABLE 5.7

ARKANSAS

SHORT-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT AND AFDC RECEIPT FOR RECIPIENTS
DURING THE THIRD QUARTER OF POST-ENROLLMENT FOLLOW-UP, BY SELECTED CHARACTERISTICS
(JUNE 20, 1983 - MARCH 1984 SAMPLE)

Characteristic	Recipients						
	Percent of Sample	Employed During Third Quarter of Follow-Up [%]			Average AFDC Payments Received During Third Quarter of Follow-Up[\$]		
		Experimental	Control	Difference	Experimental	Control	Difference
County							
Pulaski South	56.6	13.3	4.7	+ 8.6 ^y	316.94	413.85	-96.91
Jefferson	43.4	6.7	6.7	+ 0.0	359.35	412.00	-52.65
Employed During Year Prior to Enrollment ^a							
Yes	7.3	52.7	47.6 ^{xxx}	+ 5.1	227.43	301.33 ^{xx}	-73.89
No	92.7	7.1	2.3	+ 4.8	343.84	421.85	-78.00
Child Less Than Six							
No	38.5	12.5	6.2	+ 6.3	333.53	431.92	-98.39
Yes	61.5	8.2	5.2	+ 3.9	336.48	401.23	-64.76
High School Diploma ^b							
Yes	41.8	10.8	6.4	+ 4.4	304.97	401.99	-97.02
No	58.2	10.2	5.0	+ 5.2	357.16	420.99	-63.83
Length of Prior Welfare History							
Own AFDC Case Two Years or Less	35.2	12.9	9.4 ^x	+ 3.5	300.68	371.27 ^{xx}	-70.53
More Than Two Years	64.8	9.1	3.5	+ 5.6	354.18	435.78	-81.60
Number of Own Children ^c							
One	35.0	7.4	4.4	+ 3.0	289.16	345.78 ^{xxx}	-56.63
Two	25.2	9.9	5.3	+ 4.5	326.32	399.90	-73.58
Three	16.4	12.3	6.3	+ 6.0	363.47	454.01	-90.54
Ever Married ^d							
Yes	42.0	10.0	2.4	+ 7.5	371.26	405.53	-34.28 ^y
No	58.0	10.8	7.9	+ 2.9	309.34	418.49	-109.15
Sample Sizes	452	222	230		222	230	

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

(continued)

TABLE 5.7 (continued)

"Percent of Sample" may differ slightly from demographic tables of Chapter 2 because 34 cases with any missing data were dropped from the impact sample.

Subgroup impacts are produced from regression coefficients of treatment-subgroup interaction terms. All interactions are simultaneous; estimates for each subgroup category hold constant all other subgroup characteristics.

^aPersons were considered employed during the year prior to enrollment if they had UI earnings for any of the four prior quarters.

^bThe high school category includes individuals with a General Equivalency Diploma.

^cDifferentials for family size were calculated from a linear interaction term. Estimates are shown only for one, two, and three children, the family sizes nearest the mean. Frequencies therefore do not sum to 100.0 percent.

^d"Ever married" comprises individuals living and not living with spouse, divorced, and widowed.

Within the control group, a two-tailed t-test was applied to differences between categories in each subgroup designation. Statistical significance levels are indicated as: x = 10 percent; xx = 5 percent; xxx = 1 percent.

Another two-tailed t-test was applied to differences in impacts between categories in each subgroup designation. Statistical significance levels are indicated as: y = 10 percent; yy = 5 percent; yyy = 1 percent. No tests were performed for the significance of each impact singly.

or its equivalent were compared to those lacking one. Little recent work experience, having a pre-school child, or not having a diploma each constituted a labor market deficit or a barrier to employment.

Controls with any of these characteristics had lower employment in the third quarter of follow-up than did controls with opposite characteristics. Yet, for applicants, the larger program employment impact was always associated with the lower employability category. For example, controls employed during the year before enrollment had a 43.8 percent employment rate in the third quarter of follow-up; controls without prior employment, only a 3.7 percent rate. But this last subgroup showed a program impact of about the same size as the impact for all recipients in this quarter, while a negative differential was found for the subgroup with prior employment. A similar pattern, though not so pronounced, was observed for the pre-school child and the no-diploma categories. In addition, applicants with a longer welfare history, those with one child, or those who had at some point been married also experienced greater employment impacts.

In each of the cases in the table where the control group had a very low employment level (i.e., the controls were "less employable"), there were employment improvements for the experimentals.¹⁴ The important finding is that these employment impacts were of similar magnitude to the employment impacts for all recipients. The pattern is consistent, although the individual estimates were generally not statistically significant.

Recipients, on the other hand, showed much narrower subgroup differentials. These estimates indicate that recipients responded similarly to program efforts regardless of different demographic characteristics. Applicants were more diverse, and some of that diversity mattered in terms

of the WORK Program's services. Demographic characteristics flag portions of the applicant subgroup who may show nearly as much improvement as recipients in short-term employment outcomes.

F. Other Subgroup Impacts

1. Area Differences

Differences in labor markets, enrollee demographics and program implementation between Pulaski South and Jefferson County raised the possibility that the WORK Program impacts might differ by area. As seen in Tables 5.6 and 5.7, separate impact estimates for third-quarter employment and welfare receipt were prepared for each county as part of the subgroup analysis.

A look first at the experience of controls will help in understanding the different impacts. As shown in the table, employment rates were similar in the two areas for applicant controls. The same is true for recipient controls. Welfare payments to recipients were also similar by county, but large and statistically significant differences were evident in the welfare payments made to the applicant controls. Third-quarter payments in Pulaski South averaged \$153 compared to \$289 in Jefferson.¹⁵

As seen in the table, the WORK Program appears to have been more effective in Pulaski South, although, because of the small samples, the differences between the counties were not, for the most part, statistically significant. All of the employment gains for the total sample came from Pulaski South, since no employment changes at all were evident in Jefferson County. The zero employment impact was accompanied by a negative earnings differential, not shown here.¹⁶ In Pulaski South, there was an applicant impact of 2.4 percentage points and a larger recipient impact of 8.6 per-

centage points. Welfare savings per enrollee in Pulaski South were also larger -- roughly twice those estimated for Jefferson County. Given these differences by counties, it is useful to speculate on what might have caused them.

The regression methodology accounted for the personal characteristics of enrollees, so cross-county differences in demographics are probably not an important part of the explanation. The greater proportion of applicants approved in Jefferson, if anything, could have led to larger welfare reductions because approved applicants are more like recipients. It is also possible that, despite the similarity of control employment rates in the two areas, the more urban labor market of Little Rock and its better public transportation might have facilitated participation in the WORK Program and aided the job search of enrollees.

However, reports of the on-site researcher indicate that the principal factor in the impact differences may have been the more intensive program treatment in Pulaski South. For example, in that area, about half of all the enrollees who entered the job club were eventually routed through that component again, and such recycling was not common in Jefferson. In addition, the Jefferson WORK Program had high staff turnover, at one time operating without a job club leader for at least two months.¹⁷ Individual job search, too, was a relatively unstructured component in Jefferson County. Thus, it may well be that the estimated differences in impacts between Pulaski South and Jefferson were more directly connected to different treatment variations than to differences in enrollees or labor markets.

2. Differences by Age of the Children

Extending participation to parents with young children, ages three to five, meant that the WORK Program could reach a large number of people earlier in their welfare tenure than otherwise would have been the case. Without the federal waiver, enrollment of these individuals would have been deferred for up to three years. Overall, 53.9 percent of the impact sample enrolled in the WORK Program had a child under age six. That fraction was expected to be higher for recipients than applicants, since the principal reason for a mandatory designation among recipients was the fact that the youngest child had turned three.

Taking the demonstration period as a whole, recipients did, in fact, have a higher proportion of mothers with pre-school children -- 61.5 percent compared to 48.7 percent for applicants. That rate rose for recipients to 71.4 percent for the final January-March 1984 enrollment group. This later group is probably more typical of recipients to be enrolled in the future than the earlier groups, which contained some of the start-up backlog of recipients who had been classified mandatory before the start of the research.

These percentages indicate that the successful bid for a federal child-age waiver substantially broadened the reach of the WORK Program and made single parents with pre-school children a large proportion of the enrollment sample. It thus becomes important to try to determine whether employment increases and welfare savings can actually be achieved for this subgroup, and reasons may be adduced for and against the feasibility of obtaining such impacts. On the one hand, working with parents early in their stay on welfare may keep them from becoming permanently entrenched in

the system. On the other hand, the child-care demands on single parents with children who spend no part of the day in school can curtail their chances for employment. Results presented for this subgroup in Tables 5.6 and 5.7 provide some tentative information about the behavioral significance of child age.

First, to see whether having a pre-school child interferes with employment in the absence of WORK Program services, one should examine the employment rates for the controls. As seen in the tables, these rates were lower for the "young child" portion of the sample, but the difference was not as large as for "prior employment" or "diploma" status. Apparently, the difficulties to employment raised by the presence of a pre-school child did not add much to the other barriers already experienced by applicants and recipients in this sample. Welfare dollars were similar for controls with and without young children.

Impact estimates suggest that the program's effects on parents with pre-school children were no different from those on parents with older children. The results for applicants actually show a greater increase in employment for parents with a young child than for those without; welfare impacts were about the same. For recipients, employment gains and welfare reductions were somewhat lower if there was a young child, but the differential was not large. Extension of mandatory coverage therefore allows provision of effective services to the majority of enrollees sooner than would otherwise have been the case.

It should be noted, however, that in this sample mothers with children under six also tended to have more children altogether, and fewer had ever been married. As Tables 5.6 and 5.7 suggest, both number of children and

marital status may have been associated with differential program effectiveness. These factors, then, as well as the presence of a pre-school child, may be important considerations in working with the new group brought into the WORK Program by the child-age waiver. To see whether these other factors influenced findings for the child-age subgroups, simple experimental-control differences were calculated without regression adjustment. The results closely match the adjusted impacts in Tables 5.6 and 5.7.¹⁸

G. Impact Stability

Evaluations of other employment programs have shown that impacts can sometimes vary for sample groups enrolled at different periods of time, depending on differences in program practices, characteristics of the samples and general labor market conditions. This section compares impacts for WORK Program subgroups of the full sample for three enrollment periods: June-September 1983, October-December 1983, and January-March 1984.

Any of several factors could have caused systematic differences in impacts across enrollment groups in Arkansas. The demonstration, which ran from June 1983 through January 1985, began during the WORK Program's start-up phase, with its attendant implementation and coordination problems. A backlog of individuals awaiting enrollment had to be served in a timely manner, making the June-September group much larger than later ones. An administrative directive at the beginning of 1984 cut back local office discretion, and, as noted in Chapter 4, participation rates were greatest for the January-March subgroup. Characteristics of the three groups also differed, as noted in Chapter 2, although not markedly so. Finally, throughout the demonstration period, the continuing recovery from

a national economic recession led to improved job prospects for program enrollees.

Table 5.8 displays separately for each group the estimates of WORK Program impacts on employment rates and welfare measures for quarter three. Employment impacts appear stable; there was no pronounced deviation from the overall estimate presented earlier of a gain of 3.1 percentage points for the quarter. Welfare reductions were somewhat higher for the last group than for the earlier ones. The January-March savings of \$63 per enrollee for the quarter exceeded by more than half the savings of the two preceding groups. The tightening of program operating regulations may have led to an increase in effectiveness.

TABLE 5.8

ARKANSAS

SHORT-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT
AND AFDC RECEIPT FOR THE RESEARCH SAMPLE DURING THE THIRD QUARTER
OF POST-ENROLLMENT FOLLOW-UP, BY ENROLLMENT PERIOD
(JUNE 20, 1983 - MARCH 1984 SAMPLE)

Outcome and Follow-Up Period	Experimentals	Controls	Difference
Employed in Third Quarter (%)			
June 20 - September 1983 Enrollees	15.1	12.0	+ 3.1
October - December 1983 Enrollees	15.6	12.8	+ 2.8
January - March 1984 Enrollees	14.8	11.8	+ 3.2
Total AFDC Payments in Third Quarter of Follow-Up (\$)			
June 20 - September 1983 Enrollees	254.93	294.43 ^z	-39.50**
October - December 1983 Enrollees	265.51	283.30	-27.79
January - March 1984 Enrollees	211.68	274.94	-63.26**
Sample Size			
June 20 - September 1983 Enrollees	253	265	
October - December 1983 Enrollees	155	163	
January - March 1984 Enrollees	146	137	

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

These effects are constrained to equality for all three enrollment groups, so impact estimates for the June 20 - September 1983 group will differ slightly from impacts for that group shown in the long-term follow-up table.

Within the control group, an F-test was used to test for the significance of enrollment period as a factor. Statistical significance levels are indicated as: z = 10 percent; zz = 5 percent; zzz = 1 percent. Also within the control group, the differences between the second enrollment period and the first and between the third period and the first were each tested, but neither was statistically significant.

CHAPTER 6

BENEFIT-COST ANALYSIS

This chapter presents an evaluation of the economic benefits and costs of the WORK Program. Its approach, which is based on techniques developed in previous evaluations of social programs and used in other MDRC studies of employment programs for welfare recipients, allows for the systematic assessment of the program's economic effects on experimentals, taxpayers and society as a whole.

The following discussion addresses the key elements of the analytical approach and the evaluation results. It begins with an overview of the analytical framework, followed by a discussion of the individual benefit and cost components. The next section aggregates these results, and shows their distributional consequences within society. The chapter concludes by considering the policy implications of the findings.¹

Results are presented separately for Pulaski South and Jefferson Counties, as well as for both counties combined. Because of the small sample sizes, however, the county results are less reliable than those for the full sample. Data limitations also preclude separate analyses for other subgroups, such as applicants and recipients.

A. Analytical Approach

1. Components of the Analysis

This assessment of the WORK Program's economic consequences encompasses a wide array of potential benefits and costs. The data come from a

combination of sources including, among others, the AFDC payments and Unemployment Insurance earnings records used for the impact analysis, published statistics compiled by the State of Arkansas, agency expenditure records and staff interviews. On the benefits side, dollar values have been estimated for the program's effect on the experimental group's output in program and non-program jobs, and on their tax payments; changes in their welfare, Medicaid and Unemployment Insurance payments; and changes in the administrative costs of those transfer programs.

The costs included in this analysis have been disaggregated into costs for assessment, the job clubs, individual job search (combined with various other staff activities), program monitoring by the central office of the WORK Program and the Department of Human Services, and allowances and incentive payments for participants. The costs incurred by the local Job Training Partnership Act (JTPA) program in serving enrollees referred by the Pulaski South office were also considered.

All benefits and costs were estimated on a "per experimental" basis and they are incremental -- in other words, above and beyond the benefits and costs attributable to the control group. Thus, the analysis compares the average incremental costs of serving the experimental group with the average incremental benefits those services yield.

It is important to note, however, that the WORK Program may have had effects on experimentals that are not captured by the data available for this study. For example, the analysis did not measure experimental-control differences in the use of Food Stamps or General Assistance.² Moreover, data were not available on the income of other family members, and sample members may have had access to this income. Nor was it possible to

estimate any intangible effects of the program, such as an improvement in experimentals' self-esteem. These exclusions should be borne in mind in assessing the results of this analysis.

2. Extrapolation Beyond the Observation Period

As discussed in Chapter 5, program impacts can endure beyond the end of the data collection period. Similarly, since the treatment is open-ended, program resources may still be invested in participants who remain enrolled after the end of the study period. In order to compare the full benefits and costs of the program, it is therefore necessary to project impacts and costs beyond the limits of the data collection period. This analysis will make such extrapolations using a time horizon of five years from the point of random assignment. This reflects the assumption -- based on recent national research -- that, in the absence of the WORK Program, the average experimental would be off welfare in about this amount of time.³ Predicting experimental-control differences in welfare receipt and employment beyond that point would be more speculative. Moreover, projections of costs beyond five years are unnecessary, since most costs were incurred during the first year after random assignment. However, because of the uncertainties of making projections for even a five-year period, benefit-cost comparisons will be estimated using different assumptions about the stability of program impacts after the observation period.

In order to estimate benefits or costs that occur over time, it is necessary to consider both inflation and foregone investment. If inflation is not controlled, the real value of future benefits will be overstated because of a change in the value of the dollar. In this analysis, the effect of inflation is simply eliminated by projecting future benefits and

costs from a base period in a single fiscal year (1984). Using this method, later benefits and costs are estimated in 1984 dollars.

Even after adjusting for inflation, the value of benefits and costs varies depending on when they occur. For example, because of the opportunity to invest, a benefit received early in the follow-up period is worth more than the same benefit received later.⁴ Therefore, future benefits and costs must be discounted to their value in the base year -- in this case, to fiscal year 1984. The real interest rate (i.e., the rate net of inflation) used for this purpose is 5 percent, a rate which falls within the generally accepted range of from 3 to 10 percent.⁵

3. The Distribution of Gains and Losses

An important question in evaluating social programs is whether one group's gain is another's loss. Thus, to understand the implications of estimated benefits and costs, one must consider the economic consequences of the program separately for the experimental group, for all other people in society (referred to here as the "taxpayers"),⁶ and for both groups combined, which together constitute the whole society.

Table 6.1 illustrates how these groups might be differentially affected if the program had its intended outcomes. Consider, for example, the program's impact on transfer payments, such as welfare. A reduction in transfer payments is a benefit to taxpayers (whose taxes support the payments) but a loss to the experimental group -- effects that, when added together, cancel each other out from the perspective of society as a whole. However, the administrative cost savings that result from such reductions are a gain to taxpayers and have no effect on the well-being of experimentals; thus, the overall effect on society is positive. On the other

TABLE 6.1

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EXPECTED BENEFITS AND COSTS
PER EXPERIMENTAL, BY PERSPECTIVE

Component of Analysis	Perspective		
	Experimentals	Taxpayers	Society
Benefits			
In-Program Output	0	+	+
Earnings	+	0	+
Tax Payments	-	+	0
Transfer Payments	-	+	0
Transfer Program Administration	0	+	+
Costs			
Program Operating Costs	0	-	-
Participant Costs	+	-	0
JTPA Operating Costs	0	-	-

NOTE: Components are listed as benefits and costs according to whether their expected effect is a net benefit or cost from the social perspective. Within each perspective, a positive sign (+) indicates an expected gain to that group, a negative sign (-) indicates an expected loss, and a zero (0) indicates neither a gain nor a loss. For each component, the gain or loss to society is obtained by summing the effects on experimentals and taxpayers.

hand, the operating costs of the WORK Program, which are paid for entirely by the taxpayers, are a loss to society.

Within each perspective, the sum of all gains and losses (discounted to fiscal year 1984 dollars) indicates the program's "net present value." This shows, for each perspective, whether or not the total economic benefits of the program exceed its total costs. It is thus possible to assess the program's effect on experimentals relative to taxpayers, as well as its effect on both groups combined.

B. Benefits

As stated previously, the potential benefits of the WORK Program include an increase in experimentals' output and in the taxes they pay, and a reduction in their use of transfer programs. These outcomes were in fact achieved by the experimental group as a whole, although there were important differences between Pulaski South and Jefferson County. The next few sections describe these results and the basic procedures used in making the estimates.

1. In-Program Output

One way that the WORK Program could increase the amount of goods and services produced by the experimental group relative to the control group was through the jobs to which experimentals were assigned while in the program. These include the work experience positions in both counties, and, in Pulaski South, the JTPA jobs to which six participants were referred. The work experience jobs included aide positions in day care centers and clerical jobs in the Department of Human Services. The JTPA jobs in Pulaski South were in a teachers' aide training program operated by

the Little Rock public school system, where participants took part in training classes and worked as teachers' aides over a period of seven months.

The value of the work performed in these jobs was estimated by determining the compensation that employers would have had to pay for other workers to provide the same services.⁷ The first step was to determine the relative productivity of participants compared to that of regular workers at the same jobs. On the basis of evaluations by the participants' supervisors gathered for the worksite survey,⁸ a ratio comparing the output of participants with that of regular workers was computed. This ratio was multiplied by the average length of stay in work experience jobs (available from program records) to obtain estimates of the time regular workers would take to perform the same amount of work. This, in turn, was multiplied by the regular workers' wage rates (marked up for fringe benefits) to yield an estimate of the total value of participants' work. A similar approach was used in estimating the value of participants' output in the JTPA jobs.⁹

The productivity of work experience participants was assessed to be 97 percent of regular workers' productivity. The hourly value of their work, based on the level of compensation (wages and fringe benefits) that regular workers would have received, was \$3.99. Reflecting the low rate of assignment to work experience (see Chapter 4), the average value of output was only \$19 per experimental. (See Table 6.2.) The greater amount of output in Pulaski South compared to Jefferson County reflects both a relatively higher assignment rate and length of stay in that component. The value of output in JTPA jobs was only \$1 per experimental because of the low numbers assigned to such positions.¹⁰

TABLE 8.2

ARKANSAS

ESTIMATED VALUES PER EXPERIMENTAL
FOR BENEFIT VARIABLES, BY COUNTY

Benefit Variable	Pulaski South	Jefferson	Both
In-Program Output			
Work Experience	\$ 30	\$ 3	\$ 19
JTPA	2	0	1
Earnings			
Regular Employment	780 to 1278	-314 to -503	344 to 570
Tax Payments			
Federal Income Tax	52 to 86	-24 to -38	21 to 36
State Income Tax	8 to 14	-5 to -7	4 to 6
Social Security Tax	44 to 73	-17 to -28	18 to 31
State Sales Tax/Other	14 to 22	-5 to -8	6 to 9
Transfer Payments			
AFDC	-626 to -979	-389 to -619	-535 to -838
Medicaid	-173 to -279	-129 to -207	-155 to -250
Unemployment Insurance	27 to 58	0 to 22	16 to 43
Transfer Program Administration			
AFDC	-138 to -215	-88 to -136	-119 to -183
Medicaid	-8 to -12	-5 to -10	-7 to -11
Unemployment Insurance	2 to 5	0 to 3	2 to 4

(continued)

TABLE 6.2 (continued)

SOURCE: MDRC calculations from WORK Program client records; worksite survey; Unemployment Insurance earnings and payment records; AFDC payment records and published data on welfare and Medicaid costs, tax rates and employee fringa benefits.

NOTES: Results are expressed in 1984 dollars. The analysis is based on a sample of 343 experimentals and 368 controls in Pulaski South, and 227 experimentals and 215 controls in Jefferson.

For benefit variables other than in-program output, estimates reflect alternative assumptions about the change in impacts after data collection ended. The first number of each range assumes that impacts decline annually by 30 percent during the extrapolation period; the second number assumes no decay or increase in impacts.

2. Earnings from Regular Jobs

Regular unsubsidized employment was a much more important source of net output than work experience. The value of this output was determined from the experimental-control difference in earnings.¹¹ Assuming that labor markets are competitive, employers will pay a total compensation equal to the value of a worker's marginal product.¹² Estimated earnings differences were marked up for fringe benefits, which national employment compensation data indicate are about 18 percent of the earnings for the types of low-level jobs held by the experimentals and controls.¹³

One important limitation of the available data used in this analysis is that the estimated earnings impacts are not precise because of the wide variance in the amounts of the earnings. (See Chapter 5.) The reader is therefore advised to interpret the earnings estimates with caution. Another limitation is that they allow only up to five quarters of follow-up. Consequently, to estimate a benefit from earnings for the five-year time horizon, it is necessary to project the size of the program's effect on earnings after data collection ends. These projections are difficult to make on the basis of limited follow-up, since longer-term trends are difficult to detect. Consequently, different assumptions have been used to compute a range of estimates.

One assumption is that the magnitude of the experimental-control difference observed for the last two quarters of follow-up will continue during the extrapolation period. A factor supporting this projection is that no decay in employment impacts for the full sample was evident from the data, as shown in Chapter 5. Indeed, the employment effects for the earliest group of enrollees with the five-quarter follow-up were still

increasing as the end of data collection approached. Other studies provide an additional basis for the assumption of no decay. For example, the research findings from a WIN job search program in Louisville, Kentucky showed that the increase in employment and earnings observed for a female experimental group held up over a two-year follow-up period.¹⁴

Other studies suggest that the effects of some programs similar to the WORK Program do decline with time. For example, according to a national study of the WIN Program, earnings effects decay at a rate of 24 percent annually for female sample members and 90 percent for males.¹⁵ On this basis, an annual decay rate of 30 percent was applied as an alternative assumption in projecting the earnings benefits of the WORK Program, whose enrollees are almost entirely female.

Table 6.2 presents the results of combining the observed earnings impacts with the different projections. For both counties, the range of estimates is from \$344 (assuming a 30 percent decay rate) to \$570 (assuming no change). The table also reveals contrasting county results. While the experimentals in Pulaski South experienced a net increase in earnings, those in Jefferson showed lower earnings than the controls. However, the reader is again reminded of the uncertainty surrounding all estimates of earnings.¹⁶

Because of the additional uncertainty imposed by the short follow-up period, it is useful to compare the extrapolated portion of the overall earnings estimate with the amount that was actually observed. This comparison is presented for the full sample in Table 6.3, which also includes comparisons of other benefit components. As that table illustrates, the extrapolated estimate for each of these variables is almost as large as --

TABLE 8.3

ARKANSAS

ESTIMATED OBSERVED AND EXTRAPOLATED BENEFITS PER EXPERIMENTAL

Benefit Variable	Type of Estimate		
	Observed ^a	Extrapolated, 30% Decline In Impacts ^b	Extrapolated, No Change In Impacts ^c
In-Program Output	\$20	\$0	\$0
Earnings	96	248	474
Tax Payments	10	39	71
Transfer Payments	-272	-404	-770
Transfer Program Administration	-48	-75	-143

SOURCE: MDRC calculations from WORK Program client records; worksite survey; Unemployment Insurance earnings and payment records; AFDC payment records and published data on welfare and Medicaid costs, tax rates and employee fringe benefits.

NOTES: Results are for Pulecki South and Jefferson samples combined and are expressed in 1984 dollars. The total sample includes 570 experimentals and 583 controls.

^aBased on available follow-up data.

^bAssumes program impacts decline 30 percent annually during extrapolation period. Together, observed and extrapolated benefits correspond to a period of five years.

^cAssumes no decay or increase in program impacts after data collection.

or larger than -- the amount actually observed. The results clearly demonstrate the importance of the extrapolated estimates to the overall estimates. (As will be seen, however, the extrapolations do not change the general pattern of results in this analysis.)

3. Tax Payments

The program's effect on earnings was accompanied by an experimental-control difference in tax payments, as can be seen in Table 6.2. Tax payments include federal and state income taxes, Social Security payroll taxes, and state sales and excise taxes. These taxes have been imputed based on experimentals' earnings (total earnings in the case of payroll and sales taxes, earnings over a base amount for income taxes), marital status and number of dependents, the relevant tax rates and average consumption patterns.¹⁷ With the samples from both counties combined, the overall increase in tax payments is from \$49 to \$82 (depending on the assumptions about decay).¹⁸

4. Transfer Payments

Program effects on experimentals' dependence on public transfer programs were estimated for AFDC, Medicaid and Unemployment Insurance. Changes in AFDC receipt were based on the records data used in the impact analysis, while changes in unemployment benefits were estimated from payment records for a randomly selected subsample of 219 experimentals and controls. Although differences in the use of Medicaid could not be directly observed, AFDC eligibility automatically establishes eligibility for Medicaid. Moreover, state and federal regulations allow former AFDC recipients to remain eligible for Medicaid for a specified period of time following their exit from welfare. Through October 1984, that limit was

four months. It was therefore possible to compute the average experimental-control difference for the total months of statutory Medicaid eligibility from the data on receipt of AFDC payments. This average was then multiplied by the average monthly Medicaid payments to welfare recipients in Arkansas to estimate the value of the experimental-control difference in the use of Medicaid.

For the sample as a whole, and within each county, the WORK Program led to a reduction in the amount of transfer payments received by experimentals. As shown in Table 6.2, the largest reductions were in welfare payments, where the decrease was in the range of from \$535 to \$836. There was a slight increase in Unemployment Insurance payments, offsetting -- by approximately 3 percent -- the total reduction in AFDC and Medicaid. This increase probably resulted in part from the program's employment effects in Pulaski South: Individuals who work are more likely to be eligible for those benefits when they become unemployed. The change in Unemployment Insurance payments in Jefferson was smaller, and the direction uncertain.

Changes in the administrative costs incurred by the three transfer programs were estimated by multiplying the experimental-control differences in transfer payments by the estimated average administrative cost per dollar of transfer. The administrative cost figures for AFDC and Medicaid were derived from 1984 administrative expenditure data maintained by the State of Arkansas, while the administrative costs for Unemployment Insurance were federal government estimates for the same period.

As indicated in Table 6.2, the pattern of results mirrors the findings for transfer payments. Overall, the estimated administrative cost savings for both counties is from \$123 to \$190 per experimental, most of which is

due to the reduction in AFDC costs.

C. Costs

WORK Program costs include both program operating costs and payments for clients' participation-related expenses. With the exception of the assessment process, which was conducted for controls as well as experimentals, all of these costs are attributable to the experimental group. In addition, the Pulaski South office generated a small experimental-control difference in the expenditure of JTPA funds through direct referral of six participants to the local JTPA program. All of these costs were considered in estimating the net value of resources expended for the experimental group.

1. Program Operating Costs

Net operating costs were estimated separately for four major program components -- assessment, job club, work experience, and a combination of individual job search and other staff activities -- and for program monitoring by the central office of the WORK Program and the Division of Economic Security of the Department of Human Services. The general approach within each of these areas was first to estimate the "unit cost" of each service -- that is, the average cost of providing the service for one individual for one unit of time. (Different units were used, depending on the component. To illustrate, job club unit costs were estimated as the cost per participant day, while these costs for work experience were estimated using the cost per participant hour.) Next, the unit cost was multiplied by the average amount of time that experimentals received the service, yielding the average cost of the service per experimental.

Unit costs are based on data from the period of January through June 1984. The preceding months are not included because they cover program start-up, typically a period when significant resources are expended for setting up and refining operating procedures and for which costs may not accurately reflect the level of resources used for direct services. The period after June 1984 was also excluded. With random assignment having ended in March, the proportion of research sample members within the total group of program enrollees was declining. If service intensity differed substantially for research and non-research enrollees, cost estimates for serving experimentals would be biased.

To determine the separate unit costs of the different service areas, the portion of direct labor costs (i.e., staff salaries) allocated to each had to be estimated. To do this, staff interviews and a time study of work activities in the county offices were utilized. The time study was conducted during a two-week period in March 1984 when staff, using a modified version of the regular time sheets, recorded the time they devoted to various functions. The pertinent wage rates were then multiplied by the proportion of time spent on given activities to yield a percentage breakdown of direct labor costs by function.

For both counties, the bulk of staff time -- 72 percent for non-administrative staff in Pulaski South and 62 percent in Jefferson -- was devoted to "individual job search/other" activities. This is a broad category that includes contacting and counseling enrollees, monitoring compliance with program rules, attempting to resolve barriers to employment (e.g., arranging for day care), developing unsubsidized jobs and preparing case narratives. While it would have been desirable to separate out staff time

for some of these activities, the overlap among them was considerable.

Staff interviews revealed that, at the central office, the two program managers spent 100 percent of their time on the WORK Program, and all of this was allocated to central administrative costs. Such costs also accounted for 10 percent of the time of the Director of Economic Security, who monitored the program for the Department of Human Services. Because these administrators also had responsibilities for monitoring WORK Program offices other than Pulaski South and Jefferson, their central administration costs were prorated for these two counties.

For each service area, the estimated proportion of direct labor costs was multiplied by the relevant staff salaries paid during a specified time period to yield the total dollars spent on direct labor. When these sums were divided by the total number of participation units for that service during the same time period, the result was the direct labor unit cost for that function. These estimates were then marked up for fringe benefits, leave time (e.g., vacation, holidays, sick days) and local administration and non-personnel expenses. A further adjustment was made to exclude the amount of staff resources devoted to research-related tasks that were not a part of ongoing operations.¹⁹ The adjusted unit costs were then multiplied by the average net time spent by experimentals in each service area to get the average cost of those services per experimental. (Length-of-stay estimates were made from a variety of data sources and are discussed in detail in Appendix F.)

As with benefits, some costs of operating the WORK Program are likely to be incurred beyond the point that follow-up data are available. When data collection ended, a substantial portion of experimentals were still

enrolled in the program and receiving services. From qualitative information on program operations, it appears that, after a year in the program, those who were not deregistered and who received any services at all were most likely to receive staff counseling, telephone contacts and individual job search assistance. Moreover, they continued to generate central administrative costs. With some exceptions, costs associated with the job club and work experience were incurred during the first year of program enrollment.²⁰ Likewise, participation-related expenditures, which were made primarily while enrollees were in the job club or work experience, were almost entirely paid during the first year of enrollment. Consequently, cost extrapolations have been made only for the "individual job search/other" category and for central administration.²¹

The results, presented in Table 6.4, show that in both counties the "individual job search/other" category accounts for roughly 40 percent of all costs. The net costs of assessment are particularly low, since controls were also assessed. (Note that the extra counseling and planning generally given to the experimental group during assessment interviews were allocated by the time study to the "individual job search/other" category.) The higher expenditures on work experience in Pulaski South compared to those in Jefferson primarily reflect the experimental group's higher level of participation in that county.

2. Participation-Related Expenses and JTPA Operating Costs

The WORK Program offered several kinds of financial assistance. Funding was available to pay for child care in licensed day-care centers, and enrollees in both the job club and work experience were given a \$4 per day allowance to defray the costs of transportation and lunch. In

TABLE 8.4

ARKANSAS

ESTIMATED NET PROGRAM COSTS PER EXPERIMENTAL, BY COUNTY

Cost Variable	County		
	Pulaski South	Jefferson	Both
Operating Costs			
Assessment	\$ 4	\$ 0	\$ 2
Job Club	12	15	19
Work Experience	17	1	11
Individual Job Search/Other	74	55	67
Central Administration	5	9	7
Participation-Related Expenses			
Incentive Payments, Child Care, Allowances	20	15	18
Use of Other Programs			
JTPA Operating Costs	67	0	40

SOURCE: MDRC calculations from WORK Program client records and fiscal records; JTPA fiscal records; and published data on average duration of welfare receipt.

NOTE: Results are expressed in 1984 dollars. The results are based on a sample of 343 experimentals and 368 controls in Pulaski South, and 227 experimentals and 215 controls in Jefferson.

addition, an incentive payment of \$50 was paid to individuals who found a full-time job, either before entering the job club or during the component. People had to remain in those jobs for at least 30 days to receive the payment, which could be made only once each calendar year.

Table 6.4 shows the average participation-related expenses per experimental, which were estimated to be \$20 for Pulaski South and \$15 for Jefferson. According to additional information on Pulaski South, almost half (47 percent) of these costs went for child care, while 32 percent went to allowances during job club participation, 3 percent to the employment incentive, and 18 percent for work experience expenses.

The estimated per experimental operating cost of JTPA in Pulaski South was \$67. Expense allowances were not provided, with the exception of bus fare. Since the per experimental cost of that allowance was negligible, it was excluded from this analysis.

Overall, the estimated resources invested per experimental -- including both operating and participation-related expenses -- were quite low. For both counties, the average cost was \$158 per experimental: \$199 for Pulaski South and \$95 for Jefferson. As Table 6.4 suggests, the relatively higher cost in Pulaski South reflects the additional cost of JTPA services, and the greater cost of work experience and of the "individual job search/other" services.

While it is necessary to estimate costs on a per experimental basis -- since benefits are estimated in the same way -- it is important to remember that not all experimentals received substantial amounts of program services. Indeed, if only the enrollees active in the program at some time are considered, the average per person costs would be higher. To

illustrate this, net costs were re-estimated excluding experimentals who never participated in the job clubs, individual job search, work experience or JTPA jobs. (It is assumed that virtually all experimentals were monitored by the program or received some informal counseling.) For the full sample, the average cost per person increased to \$249. In Pulaski South it rose to \$343, while in Jefferson it increased only marginally to \$108.

Still, the costs of the WORK Program appear low. There are several possible explanations for this. One may simply be that services were not especially intensive for the average enrollee. Few people received work experience, and individual job search was not very time-consuming to administer to an average enrollee. Also, the number of staff members in each county was fairly low (approximately nine in Pulaski South and six in Jefferson during the period under study).

D. The Distribution of Benefits and Costs

This section discusses how the estimated benefits and costs discussed above differentially affect experimentals, taxpayers and society as a whole. Also, the gains and losses are added together to show the net present value of the program from each of the three perspectives.

Table 6.5 shows the effects of the major cost and benefit components on experimentals, taxpayers and society, combining the results of both counties. Looking at the first category, one can see that the output generated during work experience and JTPA jobs, though small, is a benefit to taxpayers, since it increases the goods and services available to them without requiring direct payment for the labor used. The net output

TABLE 6.5

ARKANSAS

ESTIMATED BENEFITS AND COSTS PER EXPERIMENTAL, BY PERSPECTIVE

Component of Analysis	Perspective		
	Experimentals	Taxpayers	Society
Benefits			
In-Program Output	\$ 0	\$ 20	\$ 20
Earnings	344 to 570	0	344 to 570
Tax Payments	-49 to -81	49 to 81	0
Transfer Payments	-676 to -1042	676 to 1042	0
Transfer Program Administration	0	124 to 192	124 to 192
Costs			
Program Operating Costs	0	-100	-100
Participation Expenses	18	-18	0
JTPA Operating Costs	0	-40	-40
Net Value	-363 to -535	711 to 1177	348 to 642

SOURCE: MDRC calculations from WORK Program case file records; worksite survey; Unemployment Insurance earnings and payments records; AFDC payments records; WORK and JTPA fiscal records; and published data on welfare and Medicaid costs, tax rates and employee fringe benefits.

NOTES: Costs were estimated for the same five year period as benefits although most costs were incurred in the first year after random assignment.

Components are listed as benefits or costs according to prior expectations regarding their value from the social perspective. The results presented here, however, reflect actual outcomes.

Within each perspective, positive numbers indicate gains to that group and negative numbers indicate losses.

Results are for Pulaski South and Jefferson samples combined and are expressed in 1984 dollars. The total sample includes 570 experimentals and 583 controls.

For benefits other than in-program output, estimates reflect alternative assumptions about the change in impacts after data collection ended. The first number of each range assumed that impacts decline annually by 30 percent during the extrapolation period; the second number assumed no decay or increase in impacts.

produced by experimentals in jobs obtained after leaving the program is a benefit to the experimentals because it increases their earnings and other compensation. While this output also increases the goods and services available to taxpayers, they must purchase them directly, so the net value to them is zero.

Due to the program's employment effects, experimentals paid a net increase in taxes, which from their perspective, was a loss. However, that loss was a direct gain for taxpayers.

The net reduction in transfer payments (due to the reductions in welfare and Medicaid payments) is similarly a gain for taxpayers, whose taxes fund those programs, but a loss for the experimental group. The reduction in associated administrative costs is also a benefit to taxpayers, but it does not affect the well-being of experimentals.

Experimentals are similarly unaffected by the operating costs of the program; these are paid entirely by the taxpayers, as are participation-related expenses. Those expenses, however, are counted as a benefit to the experimental group, which receives those payments and allowances. JTPA operating costs, like the WORK Program's operating costs, are a loss to taxpayers but leave experimentals unaffected.

The general picture that emerges for the full sample -- no matter which assumption is used for extrapolation -- is that the WORK Program generated a net gain to taxpayers which was partly offset by a net loss to experimentals. When these two effects are added together, they imply a net gain for society as a whole. In assessing these results, it is important to remember that experimentals may have had access to other resources to compensate for these losses, such as support from family members,

unreported earnings, Food Stamps and General Assistance. However, these could not be measured.

The results, however, vary substantially by county, as can be seen in Table 6.6. While taxpayers' gains outweigh the experimental group's losses in Pulaski South, just the opposite is true for Jefferson, and there the effect on society as a whole appears to be negative.

For Pulaski South, the experimental group's increased output from regular jobs was the most important factor contributing to the positive net present value from the societal perspective. However, for the experimentals themselves, these benefits were more than offset by increased taxes and reductions in welfare and Medicaid payments. Yet these effects on taxes and transfer payments -- plus reduced administrative costs -- account for the overall gains to taxpayers. And while the taxpayers had to pay for the WORK Program, those costs were not large.

In Jefferson County, experimentals show a net loss of earnings and fringe benefits from regular jobs, along with a reduction in welfare and Medicaid. Taxpayers benefited from the lower transfer payments and the reduction in administrative costs associated with them. With these effects substantially exceeding WORK Program costs, the overall net value for taxpayers is positive. However, since this gain is smaller than the apparent loss for the experimental group, the net effect on society as a whole appears to be negative.

As mentioned earlier, because of small sample sizes, the relative magnitude of the program's effects within each county must be interpreted cautiously. Nevertheless, the analysis does suggest that the overall results were more positive in Pulaski South than in Jefferson.

TABLE 8.6

ARKANSAS

ESTIMATED BENEFITS AND COSTS PER EXPERIMENTAL, BY PERSPECTIVE AND COUNTY

County and Component of Analysis	Perspective		
	Experimentals	Taxpayers	Society
<u>Pulaski South</u>			
Benefits			
In-Program Output	\$ 0	\$ 32	\$32
Earnings	780 to 1279	0	780 to 1279
Tax Payments	-117 to -194	117 to 194	0
Transfer Payments	-774 to -1199	774 to 1199	0
Transfer Program Administration	0	144 to 223	144 to 223
Costs			
Program Operating Costs	0	-112	-112
Participation Expenses	20	- 20	0
JTPA Operating Costs	0	- 67	- 67
Net Value	-81 to -94	868 to 1449	777 to 1355
<u>Jefferson</u>			
Benefits			
In-Program Output	0	3	3
Earnings	-314 to -503	0	-314 to -503
Tax Payments	53 to 82	-53 to -82	0
Transfer Payments	-528 to -804	528 to 804	0
Transfer Program Administration	0	84 to 145	84 to 145
Costs			
Program Operating Costs	0	- 80	-80
Participation Expenses	15	- 15	0
JTPA Operating Costs	0	0	0
Net Value	-774 to -1210	477 to 775	-297 to -435

TABLE 6.8 (continued)

SOURCES: MDRC calculations from WORK Program client records; worksite survey; Unemployment Insurance earnings and payment records; AFDC payment records; WORK and JTPA fiscal records; and published data on welfare receipt, Medicaid costs, tax rates and employee fringe benefits.

NOTES: Costs were estimated for the same five year period as benefits although most costs were incurred in the first year after random assignment.

Components are listed as benefits or costs according to prior expectations regarding their value from the social perspective. The results presented here, however, reflect actual outcomes.

Within each perspective, positive numbers indicate gains to that group and negative numbers indicate losses.

Results are expressed in 1984 dollars. The results are based on a sample of 343 experimentals and 368 controls in Pulaski South, and 227 experimentals and 215 controls in Jefferson.

For benefits other than in-program output, estimates reflect alternative assumptions about the change in impacts after data collection ended. The first number of each range assumes that impacts decline by 30 percent annually during the extrapolation period; the second number assumes no decay or increase in impacts.

The net value of the WORK Program was also estimated from a governmental, or budgetary, perspective. It is important to note that this is not the same as the taxpayer perspective because the government budget, unlike the taxpayer, does not directly benefit from output produced in program-related jobs. However, the program's effect on the government budget can be determined by simply excluding the value of work experience and JTPA output from the net value estimate for taxpayers. With this adjustment, the governmental value of the program was estimated to be between \$691 to \$1,157. This range is actually quite similar to the program value estimated for taxpayers, because the difference between the two figures -- value of output from work experience and JTPA -- was small (\$20 per experimental for the full sample).

Tables 6.5 and 6.6 show that the alternative assumptions about program impacts during the extrapolation period affect the magnitude but not the pattern of results. As a further test of the sensitivity of these results to extrapolation assumptions, the distribution of gains and losses was re-estimated using only the benefits and costs that were actually observed during follow-up. This, of course, implies that there were no benefits after follow-up: i.e., a 100 percent decay rate, an extreme assumption. Again, however, the size of the results was affected, but not the pattern. For the full sample, a net loss of \$168 was observed for the experimental group and a net gain of \$209 for taxpayers. For society as a whole, a net gain of \$41 was observed.

E. Some Benefit-Cost Conclusions

This chapter has emphasized that the net value estimates should not be

considered exact, especially given the short period of follow-up and the uncertainty of the program's earnings effects. Despite these limitations, the analysis does suggest several broad conclusions.

The most certain one is that taxpayers experience a net gain from the program. This finding holds true no matter what assumptions are made about extrapolation, and it is consistent across counties. It is also unaffected by any imprecision in the earnings impacts, since taxpayers are not greatly affected by experimentals' earnings.

A second conclusion is that experimentals seem to fare less well than taxpayers, primarily because the losses in AFDC and Medicaid payments are not exceeded by gains in earnings. Whether this means that the overall economic circumstances of experimentals decline is unknown. As previously discussed, other possible sources of support (such as from family members, earnings not reported in the UI system, Food Stamps and General Assistance) could not be measured. Nonetheless, there is no evidence from this study to suggest that the group's economic circumstances are improved by the program.

Finally, it appears that Pulaski South was more successful than Jefferson. Despite the somewhat higher cost of the program per experimental, the net value from the taxpayer perspective was considerably larger for that county.

In attempting to draw policy lessons from this analysis, it is important to remember that the WORK Program may generate a number of benefits and costs that are not easily measured. For example, one such benefit might be an increase in self-esteem among those individuals about to enter into, or already receiving welfare, whose employment opportunities

are improved. Alternatively, there may be negative consequences associated with reducing the care of children by their parents -- even when alternative child care is available -- in order for the parents to participate in program activities. Or, there may be positive benefits to children in having working mothers as role models. Intangible benefits and costs such as these are beyond the scope of this analysis, although they should be taken into account in judging the overall merits of the WORK Program.

CHAPTER 7

SUMMARY AND CONCLUSIONS

The development of effective employment programs for AFDC beneficiaries has been a national policy objective throughout this country's ongoing effort to reform the welfare system. The Arkansas WORK Program, designed to implement mandatory structured job search, both group and individual, as well as work experience, represents one approach that produced modest increases in employment and reductions in welfare receipt for people applying for or receiving AFDC.

A. The Experiment

The Arkansas WORK Program evaluation in Pulaski South and Jefferson Counties tested a program model providing mostly female AFDC applicants and recipients with a sequence of group job search followed by individual job search. Unpaid work experience was planned as a third component for enrollees who were unsuccessful in securing employment through job search, but it was, in fact, little used. The three distinctive elements of the treatment were:

- The use, for the first time in Arkansas, of group job search ("job clubs") on a large scale for the WIN-mandatory AFDC population;
- The stipulation of a fixed sequence of components to increase the delivery of employability services to portions of the mandatory caseload that administrators felt had not been reached under WIN; and
- The extension of WIN-mandatory status to parents whose youngest child was aged three to five.

The program participation requirement covered both recipients newly required to register with WIN and applicants who were subject to the WIN registration requirement.

This report extends the research in the first report to address several issues of participation and program effectiveness:

- The level of participation in components of the job search sequence; and the program's reach or coverage -- as indicated by the number of eligibles at a point in time who remained in the program but had not yet participated;
- The impact of the WORK Program on employment and welfare receipt for enrollees; and
- The projected benefits and costs of the program for experimentals, all other taxpayers, and society as a whole.

To answer these questions, an experimental design was put in place in two of the original WORK counties, Pulaski South and Jefferson. WORK Program enrollees were randomly assigned and designated as experimentals (subject to all program participation requirements) or as controls (exempt from program participation requirements and barred also from voluntary participation). Random assignment ran from June 20, 1983 through March 31, 1984, while data collection began with random assignment and continued through January 31, 1985.

Enrollment with the WORK Program and compliance with assignments were legal requirements for AFDC grant receipt for WIN-mandatory clients. Welfare applicants judged mandatory were expected to enroll and begin participation before the approval process was complete. Welfare recipients entered when they were newly determined WIN-mandatory, usually when their youngest child turned three. Enrollees who left welfare left the program, but those who remained on welfare could also leave the program for a number

of reasons, such as the birth of a new child.

The principal research sample for this report contained 1,153 enrollees, 60 percent applicants and 40 percent recipients. Nearly all were female (98 percent), and a high proportion, 86 percent, were black. Rates of previous employment were very low. Earnings during the year preceding enrollment were recorded for only 33 percent of applicants and 7 percent of recipients.

B. Participation in WORK Program Components

The process research in this report examined the levels of participation in job search and work experience that were achieved by the WORK Program and the extent to which the program requirement reached into the enrollment sample. Analysis of program participation patterns revealed that the WORK Program succeeded in surpassing the activity rates achieved under the WIN Program -- a major goal of the program.

All told, 38.0 percent of enrollees participated in some active component -- almost entirely the job club and individual job search -- within a nine-month follow-up period. Participation in work experience was only 3 percent. Compliance with program requirements was gained without much sanctioning and increased gradually over time, although the majority of those who participated did so in the first month. Rates were highest for the last group of the sample enrolled, perhaps because the program's revised operating guidelines were issued in January 1984.

The 38 percent participation rate just cited in one sense understates the program's accomplishments. A large number of enrollees did not participate simply because they were in the welfare system only briefly. In

fact, the majority (57.6 percent) of the sample members did not remain registered in the program -- and were therefore not eligible to participate -- for the full nine months. One reason is that 40 percent of the applicants who entered the program, both controls and experimentals, were never approved for welfare and were subject to immediate deregistration. Within the follow-up period, many of the approved applicants and those who were already recipients at enrollment left the rolls on their own without being active, through the normal process of caseload turnover. Nevertheless, at the nine-month mark, 23.7 percent of the sample were still enrolled but had never participated, representing about 56 percent of all those who remained in the program at the nine-month point. On the basis of these key indicators, it appears fair to conclude that coverage of the sample was broad but far from universal.

By the end of nine-month follow-up, participation had mostly slackened its upward movement, although deregistrations were still increasing. At the same time, it was observed that, at least in Pulaski South, staff were making efforts to recycle through the job clubs people who had completed a first round of participation without finding jobs. At that point too, there were other enrollees who had not taken part in the job club even once. These patterns suggest that there were significant elements of the enrollment sample with whom staff could not or would not work. This study, however, cannot determine whether de facto exemptions came about mostly because staff accurately appraised such individuals as incapable of participating or benefiting from participation, or because staff preferred not to work with these individuals, or because they lacked the resources to do so.

C. Overall Impact Findings

The WORK Program provides services to a welfare population with a low level of employment, particularly those who are already receiving welfare payments at the time of enrollment. For the main impact sample, modest employment gains were realized against that low employment level. During the second and third quarters of follow-up, employment rates of experimentals rose 4.8 percentage points to a 18.8 percent employment level against a control group employment level of 14.0 percent. This gain is similar in absolute magnitude to the employment impacts of job search programs evaluated in other states.¹ Increases in other labor market measures were of corresponding size. Despite these gains, overall unsubsidized employment remained low.

Reductions in welfare receipt were larger and more stable, growing steadily through the third and last quarter of follow-up. At that point, controls were on average receiving \$289 per quarter in welfare benefits compared to \$246 for experimentals. Savings of \$43 per person were estimated, amounting to a reduction in benefit expenditures of 15 percent for the quarter. Consistent with the state's relatively low standard of need and grant amounts, three-fourths of that savings came through reduced incidence of receipt and the rest through lower average payments to families still receiving welfare. For the June-September 1983 enrollment group, tracked for 15 months after program entry, welfare savings were still growing even at the fifth quarter.

Short-term welfare savings for recipients were much higher than for applicants. Over the full nine months of follow-up, recipients experienced

on average nearly six times the welfare reduction of applicants (\$171 versus \$29, a difference that is statistically significant at the 5 percent level). Although only 40 percent of the sample, recipients as a group accounted for almost 80 percent of all welfare savings achieved by the WORK Program in the nine-month follow-up period.

D. Program Benefits and Costs

Because controls received virtually no services beyond assessment, estimates of the incremental costs of the WORK Program may be interpreted as essentially its full cost. Overall, the estimated resources invested, including operating and participation-related expenses, were quite low compared to similar programs run elsewhere: \$158 per experimental. Individual job search (which also included costs of activities other than the job club or work experience) was intensive in staff time because of the large numbers served and accounted for more than 40 percent of the total cost. Incentive payments, child-care reimbursements and other allowances came to just over 10 percent.

Evidence on program benefits supports two basic sets of conclusions. The first set pertains to a "taxpayer" perspective -- in other words, the benefits accruing to all members of society except experimentals. Here the findings are clear: Regardless of the extrapolation assumptions used, the WORK Program succeeded in reducing the net cost of welfare to taxpayers, one of the policy goals of the program. Total savings over a five-year projection period were estimated to fall in the range of from \$209 to \$1,177 per experimental enrollee, depending on the assumption used. Nearly all those savings were attributable to reductions in AFDC benefit payments,

associated Medicaid and Food Stamp transfers and the administrative costs of those programs.

Conclusions on benefits to experimentals must of necessity be less certain since estimates of net earnings gains are the least precise of the four impact estimates -- employment, earnings, welfare incidence and welfare amount. Nevertheless, it was found that the higher earnings of experimentals did not replace their losses in AFDC and Medicaid payments, regardless of the choice of extrapolation assumption. Over the five-year projection period, that loss was placed at from \$168 to \$535 per experimental, depending on the assumption used. Because those losses did not exceed the gains to taxpayers, society as a whole (defined to include experimentals and taxpayers) gained. County differences, however, were extreme. In Pulaski South, the impact on earnings was sufficient to return 85 percent or more of the lost AFDC payments. In Jefferson, a net loss in earnings was recorded.

E. General Lessons

The evaluation of the WORK Program contributes to the steady accumulation of research showing that group and individual job search can produce some real gains in employment and reductions in welfare receipt for portions of the AFDC population.

The evaluation has also suggested that the statutory environment of AFDC employment programs can be critical in determining the make-up of the group they work with. In Arkansas, it seems likely that the relatively low state standard of need and grant levels led to an enrollee population with very little previous employment history.

The extension of WIN-mandatory status to mothers whose youngest child was aged three to five demonstrated that it is reasonable to expect some effect from working with this group. Indeed, evidence suggests that this group did as well as mothers with older children, and it may be thus advantageous to offer them help at an earlier point than under the WIN rules.

Some implementation lessons have emerged that might well be considered for future programs. First, implementation appeared to be most complete for the most structured component, the one that demanded the least allocation of staff time for an average enrollee, and the one that came first in the sequence: namely, the job club. Job club leaders had little experience with this activity, but they were issued a carefully thought-out manual, tried and tested by WIN in another region of the country. Also, the job clubs were the only responsibility of their leaders.

In contrast, individual job search and the monitoring of its enrollees, was one of several tasks demanding the attention of WORK Program job developers. For much of the demonstration, they also had to develop jobs for people ready for immediate unsubsidized placement, as well as work experience positions. Participation per se in individual job search sometimes took less priority. And, because central DHS staff tended to emphasize placements (and the subsequent case closures) more than the other program outcomes, job developers had a powerful incentive to devote their time to finding and filling such openings. Thus, individual job search in many areas was more a holding status than an active treatment, while work experience was infrequently used and often not in the sequence envisioned in the program model.

During the study period, staff discretion at the local office level contributed to wide variation in program implementation across the eight counties. In part, local discretion arose in response to a lack of clarity in exemption and deferral criteria and in program guidelines and handbooks promulgated by the central office. However, central office staff also intended to give local managers latitude in setting their own goals and participant quotas. As a result, local staff exercised considerable freedom in deciding which people were suitable for which components and how mandatory participation would be.

The study also suggests some lessons on program targeting. It indicates that, for certain subgroups, a significant change in behavior may still end up in an employment level lower than that for other subgroups who have changed little. In the Arkansas WORK Program, applicants, judging by their previous employment and educational levels as well as the age of their children, were more "job-ready" than recipients. As a result, they attained the higher post-enrollment rates; fewer were also left enrolled but never active at the end of the follow-up. Yet the program achieved nearly all of its short-term welfare savings from its impacts on recipients. Employment gains may also have been more sustained for recipients. This suggests that assigning priority to the most job-ready individuals can draw staff attention away from some subgroups with greater potential for immediate improvement in labor market and welfare outcomes.

In the final analysis, it can be said that many factors, both internal and external, shaped the Arkansas WORK Program. Weak labor markets in certain areas; the relatively low level of program resources; a statutory environment with relatively low grant levels that ensured a highly disad-

vantaged population -- all challenged the program's capacity to work actively with and place a large segment of the enrolled group. The wide latitude given to local staff in goal-setting and the conflicting job developer responsibilities reduced uniformity of program implementation. And, though not conclusively proved, the emphasis on working first with the most "job-ready" may have meant that staff time was not used as well as it could have been.

Notwithstanding these limitations, the WORK Program was shown to be effective in producing savings in AFDC benefit expenditures for taxpayers at a cost substantially below that of similar job search programs in other states. The program did result in increases in employment for enrollees. However, the associated increase in the enrollees' own earnings does not appear to have fully replaced the loss in welfare benefits to family income.

APPENDIX 1

APPENDIX A

SUPPLEMENTAL SAMPLE OF ENROLLEES

A. Introduction

This appendix reports on the background characteristics, participation patterns and program impacts of the supplemental sample in the WORK Program. This sample was developed by randomly assigning some of the mandatory applicants and recipients who were enrolled in the program between January 1 and June 19, 1983. The sample comprised individuals who had been assessed by WORK Program staff as having barriers to employability and who were part of the "backlog," that is, had not participated in WORK Program activities as of the start of the research. People judged to have no barriers were excluded from the sample even if they had not yet participated because state officials wanted to ensure that the program served those individuals judged to have the best chance of program participation and eventual job placement, and hence did not want any of these people assigned to a control group. In addition, anyone who had already begun participation could not be randomly assigned because that person could not have been placed in a "no treatment" control group. There was thus a substantial group of backlog enrollees not in the research who had a higher priority for services than experimentals in the supplemental sample.

A total of 463 controls and 477 experimentals were randomly assigned to the supplemental sample. While the enrollees in the analysis sample described in the main text (i.e., those randomly assigned after June 19)

constitute a cross-section of new WIN mandatories, supplemental sample members are a special group who might be predicted to be less employable. As shown in Table A.1, they were longer-term welfare recipients with a greater history of welfare receipt and significantly less employment before random assignment than members of the main sample.

B. Participation

The cumulative participation rates for the supplemental sample are given in Table A.2. As expected, the rates were lower than for the main sample. By the ninth month only 16.6 percent of the supplemental sample (as compared with 38.0 percent of the main sample) had participated in some activity. Job club and individual job search were used equally: about 10 percent of the supplemental sample had participated in each by the ninth month. By that time, slightly more than a fifth of the sample had been deregistered.

Interestingly, participation did not taper off in the later follow-up periods. The proportion participating in any activity increased by 3 percentage points from the sixth month to the ninth month after enrollment and by 4 percentage points from nine months to a year. Apparently, the program did begin to serve this group, as planned, but at a lower priority and a later date. It is, however, unlikely that impacts associated with this later activity would have manifested themselves within the available follow-up.

TABLE A.1

ARKANSAS

SELECTED CHARACTERISTICS OF RESEARCH AND SUPPLEMENTAL RESEARCH SAMPLE MEMBERS
 AT TIME OF WORK PROGRAM ENROLLMENT, BY SAMPLE GROUP
 (JANUARY 1, 1983 - MARCH 1984 SAMPLE)

Characteristic	Supplemental Research Sample	Research Sample
Welfare Status (%)		
Applicant	38.6	59.5***
Recipient	61.4	40.5***
County (%)		
Pulaski South	54.8	81.7***
Jefferson	45.2	38.3***
Sex (%)		
Male	2.2	2.4
Female	97.8	97.6
Age (%)		
Less Than 19 Years	2.8	3.1
19-24 Years	18.0	23.7***
25-34 Years	51.1	50.8
35-44 Years	19.3	15.9**
45 Years or More	8.9	6.5**
Average Age (Years)	30.8	29.4***
Ethnicity (%)		
White, Non-Hispanic	13.5	13.4
Black, Non-Hispanic	85.5	86.3
Other	0.9	0.1 ^a
Degree Received (%)		
None	53.1	50.4
High School or General Equivalency Diploma	46.9	49.6
Average Highest Grade Completed	10.6	11.0***
Marital Status (%)		
Never Married	50.1	48.9
Married, Living With Spouse	2.7	2.7
Married, Not Living With Spouse	24.6	25.1
Divorced/Widowed	22.6	23.3
With Child(ren) (%)^{b/c}		
Less Than 5 Years	57.6	53.7*
6 to 18 Years	72.1	68.7

(continued)

TABLE A.1 (continued)

Characteristic	Supplemental Research Sample	Research Sample
Average Number of Children		
Less Than 6 Years	0.80	0.89***
6 to 18 Years	1.54	1.34***
Prior AFDC Dependency (%)		
Never on AFDC	21.5	36.9***
Two Years or Less	27.9	32.7***
More Than Two Years	50.5	30.5***
Average Months on AFDC During Two Years Prior to Enrollment	15.4	11.0***
Average Months Employed During Two Years Prior to Enrollment	3.6	5.2***
Held Job at Any Time During Four Quarters Prior to Enrollment	12.3	22.5***
Held Job During Quarter Prior to Enrollment (%)	6.7	14.1***
Average Earnings During Four Quarters Prior to Enrollment (\$)	255.66	615.87***
Average Earnings During Quarter Prior to Enrollment (\$)	48.98	149.08***
For Longest Job Held in Past Two Years ^e		
Average Hourly Wage Rate (\$)	3.74	3.78
Average Weekly Hours	34.5	33.5
Duration of Job (Months)	20.0	19.3
Total Sample ^f	940	1153

SOURCE: Calculations from MDRC Client Information Sheets, program tracking records and Unemployment Insurance earnings records from the State of Arkansas.

NOTES: The Supplemental Research Sample consists of enrollees prior to June 20, 1983. The Research Sample includes all enrollees from June 20, 1983 - March 1984.

Distributions may not add exactly to 100.0 percent because of rounding.

^a Chi-square test inappropriate owing to low expected cell frequencies.

^b Distributions may not add to 100.0 percent because sample members may have children in more than one category.

TABLE A.1 [continued]

^c For Supplemental Research Sample members, the Client Information sheet requested information on the presence of children less than 7 years and between 7 to 18 years. The form was changed as of June 20, 1983 to request information concerning children less than 6 years and between 6 to 18 years.

^d Calculated from Unemployment Insurance records from the State of Arkansas.

^e For questions concerning longest job, sample sizes are based on the number of sample members who reported a longest job on the Client Information Sheet. Due to missing data for selected characteristics these sample sizes vary from 342 - 348 for the Supplemental Sample and from 515 - 528 for the Research Sample.

^f For selected characteristics, sample sizes may vary up to thirty-three sample points due to missing data.

A two-tailed t-test was applied to differences between the two research samples. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

TABLE A.2

ARKANSAS

CUMULATIVE PARTICIPATION RATES FOR THE SUPPLEMENTAL SAMPLE
OF WORK PROGRAM EXPERIMENTAL ENROLLEES, BY ACTIVITY
(JANUARY 1 - JUNE 20, 1983 SUBSAMPLE)

Component	Participation Rate Within (%)						Sample Size
	1 Month	2 Months	3 Months	6 Months	9 Months	12 Months	
Any Activity (%)	6.2	7.3	9.4	13.5	16.6	20.8	
Job Club (%)	4.2	5.2	6.3	8.3	10.4	16.8	
Individual Job Search (%)	1.0	2.1	3.1	7.3	9.4	9.4	
Deregistration (%)	10.4	11.5	16.7	19.8	22.9	28.1	
Total Sample							96

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimentals.

NOTES: Individuals may have participated in more than one program activity. All participation rates are calculated as a percentage of all experimentals in the subsample.

C. Impacts

The inclusion of the supplemental sample in the analysis offered an opportunity to further test a generalization that has emerged elsewhere in studies of employment programs for the welfare population: that those enrollee subgroups who are the hardest to work with -- that is, who appear to be the least likely to secure and maintain employment -- are often those for whom an intervention can achieve the largest impacts. Because the supplemental sample was marked by program staff as less job-ready, it was hypothesized that impacts would have been larger for them, had they participated in the program at levels comparable to those of enrollees in the main sample. It was also of interest to see to what extent and how quickly this group would be reached by the program.

As it turned out, these issues could not be given a fair test. Service levels were very low for the supplemental sample, too low to lead to much program effect. In part, those low levels merely reflect the sample's low priority for services, especially because they entered the program during the start-up, when there were large numbers of other "back-log" people with higher priority than they. Supporting this conclusion is the fact that participation rates for the supplemental sample did appear to pick up the longer they remained in the sample. The low rates of participation could have also been caused by initial assessment of these individuals revealing problems that made their taking part in the program infeasible or inappropriate.

Five quarters of impact data were available for the sample, and impact estimates are presented in Table A.3. They show no program effects. Some very slight differences between experimentals and controls exist in employ-

TABLE A.3

ARKANSAS

LONGER-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT,
EARNINGS, AND AFDC RECEIPT DURING THE FIVE QUARTER
POST-ENROLLMENT FOLLOW-UP PERIOD, FOR THE SUPPLEMENTAL RESEARCH SAMPLE
(JANUARY 1 - JUNE 20, 1983 SAMPLE)

Outcome and Follow-Up Period	Supplemental Research Sample		
	Experimentals	Controls	Difference
Ever Employed, Quarters 2 - 5 (%) ^a	16.4	17.0	- 0.6
Average Number of Quarters With Employment, Quarters 2 - 5 ^a	0.45	0.45	+ 0.00
Ever Employed (%)			
Quarter of Enrollment	8.8	9.8	- 1.0
Quarter 2	10.4	10.9	- 0.5
Quarter 3	12.5	11.4	+ 1.1
Quarter 4	11.2	11.0	+ 0.2
Quarter 5	11.1	11.4	- 0.3
Average Total Earnings, Quarters 2-5 (\$) ^a	561.35	524.04	+37.30
Average Total Earnings (\$)			
Quarter of Enrollment	76.83	80.20	- 3.37
Quarter 2	123.19	114.98	+ 8.21
Quarter 3	161.08	129.01	+32.07
Quarter 4	135.29	129.05	+ 6.24
Quarter 5	141.83	151.04	- 8.21
Ever Received Any AFDC Payment, Quarters 1 - 5 (%)	71.7	71.3	+ 0.4
Average Number of Months Receiving AFDC Payments, Quarters 1 - 5	8.54	8.71	- 0.17
Ever Received Any AFDC Payments (%)			
Quarter of Enrollment	70.0	68.2	+ 1.8
Quarter 2	82.6	83.7	- 1.2
Quarter 3	57.5	59.4	- 1.9
Quarter 4	55.6	57.8	- 2.1
Quarter 5	53.3	55.0	- 1.7
Average Total AFDC Payments Received, Quarters 1 - 5 (\$)	1,308.07	1,319.80	-10.73
Average AFDC Payments Received (\$)			
Quarter of Enrollment	272.05	271.38	+ 0.69
Quarter 2	253.52	253.68	- 0.16
Quarter 3	259.22	263.76	- 4.54
Quarter 4	271.97	275.43	- 3.47
Quarter 5	262.32	255.57	- 3.25
Sample Size	461	451	

TABLE A.3 (continued)

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Differences were not statistically significant.

^a Quarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded from the measure of total follow-up employment and earnings.

ment and welfare measures for most quarters and for summary measures, but they are so small that they could be the result of chance and are nowhere statistically significant. The low treatment level provided to this group evidently did not produce measurable effects.

D. Benefits and Costs

Even though impacts did not appear for experimentals in the supplemental sample, their enrollment in the program meant that costs were incurred for them. These costs were roughly similar to those estimated for the main analysis sample. While participation rates in job club and work experience were lower, the average length of enrollment in the program was almost twice as long. This generated proportionately higher costs for the "individual job search/other" component, which includes monitoring and a variety of other functions.

Benefits and costs for experimentals in the sample were compared over a five-year time horizon. With minimum impact on earnings and welfare receipt, the estimated net present value of the program was negative for both the experimental group and taxpayers alike, and thus for society as a whole. This estimate assumes, however, that impacts will not begin to appear after the observed follow-up. If the increase in participation apparent by the end of the follow-up period eventually does begin to produce impacts, the benefit-cost results of this analysis would change.

APPENDIX B

APPENDIX B

RESULTS FROM THE WORKSITE SURVEY

Participant Performance and Experiences at the Worksites

This appendix is based primarily on interviews with a random sample of 22 work experience participants and 24 work supervisors. (There are more supervisors than participants because in two cases the interviewer was unable to arrange an appointment with the participant before the person stopped working at the worksite.) The survey, a standardized instrument designed by MDRC, is being conducted in all programs in the Work/Welfare Demonstration that offer unpaid work experience. Its purpose is to examine the kinds of jobs held by the participants, the extent to which skills and work habits improved, and participant attitudes about the fairness of the work-for-benefits approach.

The survey was conducted by an MDRC field researcher based in Arkansas. Interviews lasted about 45 minutes for participants and almost an hour for supervisors. The sample was drawn from participants who worked from December 1983 to June 1984 in any of the four counties in the demonstration which operated work experience (Pulaski South, Jefferson, Crawford and Sebastian). Work assignments were similar across counties, reducing the likelihood that the inclusion of Crawford and Sebastian participants in the survey would bias statements about the experiences of Pulaski South and Jefferson participants made in this report.

A. Types of Jobs Held

All but one of the jobs in the sample of 24 work experience assignments were either clerical (11) or service (12), commonly day-care services. Private nonprofit agencies were the most common work sponsor.

Some typical job descriptions are:

- Day-care worker at a church-sponsored day care center.
- Clerk in the county clerk's office: writing receipts, filming records and mailing notices.
- Secretary/receptionist at the county Department of Social Services: answering phones, referring clients to the correct supervisor, reading applications to clients, filing, typing.

As these descriptions suggest, most of the jobs required only moderate skills. An additional indicator of the level of a job is the wage rate it would command in the labor market. Supervisors were asked to estimate what their agency's wage rate would be if the position had been a regular job. According to them, one of the job assignments would have paid less than minimum wage, 12 would have paid the minimum wage (\$3.35 per hour), five would have been above minimum wage but less than \$4.00 per hour, and six would have been \$4.00 or more per hour, with a ceiling of \$5.00 per hour. The average wage an assignment would have paid was \$3.65 per hour.

B. Importance of the Work to Sponsoring Agency

The modest skill level of most of the positions does not necessarily mean that the jobs were "make-work," i.e., of no particular importance to the agency. When supervisors and participants were asked to choose from a series of statements describing the value of the work to the agency, almost all jobs were described as "a necessary part of the day-to-day business of

the agency." (See Table B.1.)

Supervisors were also asked if the tasks currently assigned to participants would be carried out if the program ceased to exist. All said that they would. Supervisors were also asked who would perform the work. (They could give more than one response.) All supervisors mentioned existing regular employees; other subsidized workers and volunteers were mentioned less often (by ten and six supervisors, respectively). Only four of the supervisors mentioned hiring new regular employees. This suggests that the work was important enough to continue but not so demanding as to overwhelm current staff.

C. Productivity

Another way to consider the importance of the work performed is to examine productivity. Supervisors were asked to compare the amount of work the participant did in a typical day to the amount performed by a new regular employee. To do so, they were offered a range of choices -- from one-tenth as much to the same amount. The possibility that the participant did more than a new regular employee was not offered as a choice, but the response was recorded if the supervisor volunteered it. Sixteen of the respondents thought the participants did as much as a new employee and three volunteered that participants did more. One participant was rated half as efficient as a new employee, with the remaining five rated from 60 to 80 percent as efficient.

Overall, the responses of supervisors present a picture of work assignments that contribute to the agency's functioning and are not "make-work," and of participants who are as efficient as regular employees

TABLE B.1

ARKANSAS

CHARACTERIZATION BY WORKSITE SUPERVISORS AND PARTICIPANTS
OF WORK EXPERIENCE JOBS IN TERMS OF IMPORTANCE TO THE AGENCY

Degree of Importance	Number of Participants
<u>Supervisors' Perception</u>	
Necessary Work	19
Work Can Wait, But Eventually Needs to be Done	4
Helps if Work is Done	1
Work is Not Particularly Important to Agency	0
Total Number of Sampled Work Experience Supervisors	24
<u>Participants' Perception</u>	
Necessary Work	17
Work Can Wait, But Eventually Needs to be Done	2
Helps if Work is Done	3
Work is Not Particularly Important to Agency	0
Total Number of Sampled Work Experience Participants	22

SOURCE: Interviews conducted by MDRC Field Research Staff with a random sample of participants in work experience jobs between December 1983 and June 1984 and their worksite supervisors.

with comparable assignments. The next section considers the value of the jobs to the participants.

D. Skills Development

Work experience programs are typically expected to help participants gain good work habits and to teach them how to interact with co-workers and supervisors. These might be called "job-holding skills," in contrast to more specific occupational skills, which the programs usually do not emphasize.

Supervisors were asked about two groups of general job-holding skills -- cognitive and general working skills -- and which of them were important for the job in question. Additionally, as a very rough proxy of job complexity, supervisors were asked which kind of tools or equipment were important to a job. Skills in the two groups and the types of tools are listed below.

Cognitive Skills

- ability to read and write;
- arithmetic skills.

General Working Skills

- communicating well;
- cooperating with co-workers;
- dealing with the public;
- using initiative;
- working well without close supervision.

Ability to Use Tools

- simple tools;
- tools requiring dexterity;
- simple machines;
- complex machines.

When the skill levels of these jobs are compared to those that

supervisors say are required at worksites elsewhere in MDRC's Work/Welfare Demonstration, it appears that they call for a considerable number of skills. General skills -- particularly the ability to communicate well, to cooperate with co-workers, and to work well without supervision -- were required in almost all the jobs. Cognitive skills were needed less often, arithmetic skills were considered important in only three of the jobs, and reading or writing was important in less than half of them.

For each type of general working skill considered important to the job, supervisors were asked about the participant's level of adequacy both when the assignment began and at the time of the interview. Supervisors were also asked to judge adequacy in the following seven work habits, which apply to all jobs and work settings:

- attendance and punctuality;
- concentrating on tasks;
- working quickly and in a timely fashion;
- following instructions;
- calling in when sick or late;
- completing tasks thoroughly;
- learning from mistakes or constructive criticism.

There are a number of limitations on how much skill development can occur in a job. Obviously, if the skill is not important for the work, opportunities for development are limited. Also, people who are less than adequate in a skill when they start an assignment have a greater potential to show improvement than those who are already adequate. Looking at these criteria, it appears that the 24 worksites analyzed in Arkansas have some potential for skill improvement: First, most required skills. Second, when participants began the assignment, about one-third of them were inadequate in general skills, and a smaller minority had inadequate work habits. (See Table B.2.)

TABLE B.2

ARKANSAS

ADEQUACY OF WORK EXPERIENCE PARTICIPANTS IN SELECTED SKILLS AND WORK HABITS
IMPORTANT IN THEIR JOBS, AT THE START OF THEIR JOBS
AND AT TIME OF INTERVIEWS, AS JUDGED BY THEIR WORKSITE SUPERVISORS

Type of Skill or Work Habit	Number of Work Experience Jobs Where Skill is Important	Number of Participants Who Were: ^a		
		Adequate or More Than Adequate at Start of Work Experience Job	Inadequate at Start of Work Experience Job	Inadequate at Time of Interview
Cognitive Skills				
Reading/Writing	11	11	0	0
Arithmetic	3	3	0	0
General Skills				
Communicates Well	24	17	7	1
Cooperates with Co-Workers	24	24	0	0
Deals With Public	23	16	7	5
Uses Own Initiative	15	8	7	6
Works Without Supervision	21	17	4	1
Ability to Use Tools				
Simple Tools	9	9	0	0
Tools Requiring Dexterity	15	14	1	0
Simple Machines	20	14	6	0
Complex Machines	10	6	4	0
Work Habits				
Attendance	N/A	22	2	0
Concentrates on Task	N/A	22 ^b	2	2
Works Quickly	N/A	21 ^b	2	1
Follows Instructions	N/A	22	2	0
Calls in Sick	N/A	17	7	3
Completes Tasks	N/A	21 ^c	3	1
Learns From Mistakes	N/A	18 ^c	5	2

SOURCE: Interviews conducted by MDRC Field Research staff with the worksite supervisors of a random sample of participants in work experience jobs between December 1983 and June 1984.

NOTES: N/A indicates not applicable because all supervisors were asked to rate the adequacy of the participant.

^a A total of 24 supervisors were interviewed. Numbers are based only on those jobs in which the supervisor indicated that the skill was important.

^b Not a relevant factor for one interviewed supervisor.

^c Data from one interview is missing for this question.

According to supervisors, improvement was registered among those who were initially less than adequate in their use of tools, but the majority of women in the sample who were inadequate in general skills remained less than adequate at the time of the interview. A few women were judged inadequate in work habits at the outset. While some of these showed improvement, many, in the eyes of their supervisors, continued to have problems.

In addition to supervisors, participants themselves were questioned about learning on the job. They were asked if they strongly agreed, somewhat agreed, somewhat disagreed, or strongly disagreed with the statement, "I have not learned anything on this job." They responded as follows:

Number of Participants

Strongly disagree.....	18
Somewhat disagree.....	1
Somewhat agree.....	2
Strongly agree.....	1

In contrast to the responses from supervisors, 19 of the 22 participants felt they had learned something on the job.

In summary, the worksites showed potential for skills improvement. While some was made, a considerable portion of the participants remained inadequate at the time of the interview.

E. Fairness of the Requirement

The responses that participants gave to questions about the fairness of working for benefits indicate that they were generally positive toward work experience. (See Table B.3.) This accords with the views found in

TABLE B.3

ARKANSAS

WORK EXPERIENCE PARTICIPANT RESPONSES TO QUESTIONS
CONCERNING THE FAIRNESS OF A WORK REQUIREMENT
IN THE PROGRAM

Question	Number of Participants
How satisfied are you about receiving welfare benefits like this - that is, tied to a job, instead of simply receiving your benefits?	
Very Satisfied	4
Somewhat Satisfied	12
Somewhat Dissatisfied	6
Not Satisfied at All	0
I feel better about receiving welfare now that I am working for it.	
Strongly Agree	10
Somewhat Agree	7
Somewhat Disagree	2
Strongly Disagree	3
I'd like to ask you how useful your work is to the agency. Let's say you <u>compare the usefulness of your work to the amount of money you receive in benefits</u> - who would you say probably is getting the better end of the deal: <u>you</u> , or the <u>agency</u> ? ^a	
Me	3
Neither One	2
Agency	16
Does participant understand that participation is mandatory?	
Yes	20
No	2
Total Number of Work Experience Participants Interviewed	22

SOURCE: Interviews conducted by MDRC Field Research staff with a random sample of participants in work experience jobs between December 1983 and June 1984.

NOTE: ^a Total does not add to 22 due to missing response.

other demonstration states.¹

Sixteen of the 22 survey participants said they were satisfied with receiving benefits tied to a job instead of just receiving benefits. When asked if they agreed or disagreed with a slightly different question, most participants said they felt better about receiving welfare now that they were working for it.

A third question dealt with the issue of fairness in terms of financial equity. Although participants generally said the work requirement was fair, when they compared the usefulness of their work to the amount of money they received in benefits, almost three-fourths indicated that they thought the agency got the better end of the bargain.

Twenty of the respondents felt that their grants would be reduced if they did not meet the work requirement, either by refusing to take the job or by quitting. In other words, almost all of the women were aware that participation was mandatory.

It is possible that participants could think that the requirement was fair, but not be satisfied with the job itself. Several of the questions which examine this issue are presented in Table B.4. In the most straightforward one, participants were asked if they agreed or disagreed with the statement, "Overall, I like my job." Only two participants disagreed, and 17 said they agreed strongly. Over 90 percent said that most mornings they looked forward to going to work, and all who answered felt that they were part of the worksite and viewed as regular staff. (One participant could not speak to this question because she did not work with regular staff.) Lastly, almost all felt that the assignment would help get them a job with reasonable pay at a later point.

TABLE 8.4

ARKANSAS

WORK EXPERIENCE PARTICIPANT RESPONSES TO QUESTIONS
CONCERNING JOB SATISFACTION AT WORKSITES

Question	Number of Participants
Overall, I like my job. Strongly Disagree Somewhat Disagree Somewhat Agree Strongly Agree	 1 1 3 17
Generally speaking, how do you feel most days about coming to work here? In other words, most days do you: Look forward to coming to work? Not care one way or the other? Hate the thought of coming to work?	 20 2 0
What about your supervisor and other regular employees here -- do you feel they look on you as part of the regular staff? ^a Yes No	 21 0
The kind of work I'm doing will help me to get a decent-paying job later. Strongly Disagree Somewhat Disagree Somewhat Agree Strongly Agree	 2 2 10 8
I have not learned anything new on this job. Strongly Disagree Somewhat Disagree Somewhat Agree Strongly Agree	 18 1 2 1
Total Number of Work Experience Participants Interviewed	22

SOURCE: Interviews conducted by MDRC Field Research Staff with a random sample of participants in work experience jobs between December 1983 and June 1984.

NOTE: ^a Distribution does not add to 22 due to missing response.

The responses to a number of different questions about their work, only some of which have been discussed here, generally reflect high levels of job satisfaction. Such responses are consistent with other general findings that welfare recipients, like most people, want to work and prefer working to not working.

APPENDIX C

TABLE C.1

ARKANSAS

SELECTED CHARACTERISTICS OF RESEARCH SAMPLE MEMBERS
 AT TIME OF WORK PROGRAM ENROLLMENT, BY RESEARCH GROUP
 (JUNE 20, 1983 - MARCH 1984 SAMPLE)

Characteristic	Control	Experimental
Welfare Status (%)		
Applicant	59.0	60.0
Recipient	41.0	40.0
County (%)		
Pulaski South	63.1	60.2
Jefferson	36.9	39.8
Sex (%)		
Male	1.4	3.4**
Female	98.6	96.6**
Age (%)		
Less Than 18 Years	2.9	3.3
18-24 Years	21.6	25.8
25-34 Years	52.8	48.8
35-44 Years	15.8	16.0
45 Years or More	6.9	6.1
Average Age (Years)	29.7	29.1
Ethnicity (%)		
White, Non-Hispanic	12.5	14.4
Black, Non-Hispanic	87.5	85.1
Other	0.0	0.2 ^a
Degree Received (%)		
None	52.5	48.3
High School or General Equivalency Diploma	47.5	51.7
Average Highest Grade Completed	11.0	11.0
Marital Status (%)		
Never Married	49.8	48.0
Married, Living With Spouse	2.3	3.1
Married, Not Living With Spouse	23.5	26.7
Divorced/Widowed	24.4	22.2
With Child(ren) (%) ^b		
Less Than 6 Years	53.1	54.4
6 to 18 Years	72.1	65.4**

(continued)

TABLE C.1 (continued)

Characteristic	Control	Experimental
Average Number of Children		
Less Than 6 Years	0.68	0.70
6 to 18 Years	1.34	1.32
Prior AFDC Dependency (%)		
Never on AFDC	36.0	37.7
Two Years or Less	30.6	34.8
More Than Two Years	33.4	27.5**
Average Months on AFDC During Two Years Prior to Enrollment	11.6	10.5*
Average Months Employed During Two Years Prior to Enrollment	5.3	5.1
Held Job at Any Time During Four Quarters Prior to Enrollment (%) ^c	22.6	22.5
Held Job During Quarter Prior to Enrollment (%) ^c	15.3	13.0
Average Earnings During Four Quarters Prior to Enrollment (\$) ^c	836.84	594.43
Average Earnings During Quarter Prior to Enrollment (\$) ^c	155.74	142.26
For Longest Job Held in Past Two Years ^a		
Average Hourly Wage Rate (\$)	3.77	3.78
Average Weekly Hours	33.6	33.5
Duration of Job (Months)	19.6	19.0
Total Sample ^e	583	570

SOURCE: Calculations from MDRC Client Information Sheets, program tracking records and Unemployment Insurance earnings records from the State of Arkansas.

NOTES: Distributions may not add exactly to 100.0 percent because of rounding.

^a Chi-square test inappropriate owing to low expected cell frequencies.

^b Distributions do not add to 100.0 percent because sample members may have children in more than one category.

^c Calculated from Unemployment Insurance records from the State of Arkansas.

(continued)

TABLE C.1 (continued)

^d For questions concerning longest job, sample sizes are based on the number of sample members who reported a longest job on the Client Information Sheet. Due to missing data for selected characteristics these sample sizes vary from 260 - 263 for the Controls and from 255 - 264 for the Experimentals.

^e For selected characteristics, sample sizes may vary up to seventeen sample points due to missing data.

A two-tailed t-test was applied to differences between research groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

APPENDIX D

TABLE D.1

ARKANSAS

CUMULATIVE PARTICIPATION RATES IN ANY ACTIVITY
FOR WORK PROGRAM EXPERIMENTAL ENROLLEES, BY PERIOD OF ENROLLMENT
(JUNE 20, 1983 - MARCH 1984 SUBSAMPLE)

Period of Enrollment	Participation Rate Within (%)						Sample Size
	1 Month	2 Months	3 Months	6 Months	9 Months	12 Months	
June 20 - September 1983	25.0	28.4	31.8	38.8	40.6	41.9 ^a	160
October - December 1983	25.8	28.2	28.2	31.8	32.9 ^a	N/A	85
January - March 1984	29.8	36.2	44.7	48.9 ^a	N/A	N/A	94

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimentals.

NOTES: Participation rates are calculated as a percentage of all experimentals in the indicated enrollment period.

Tests of statistical significance between experimentals of different enrollment periods were not calculated.

N/A denotes not applicable due to the absence of extended follow-up for enrollees entering the sample after September 1983.

^aFollow-up for the final month of entry was approximately 1/2 month less than that for the preceding months. A statistical correction produced no change in participation rates.

TABLE D.2

ARKANSAS

CUMULATIVE DEREGISTRATION RATES
FOR WORK PROGRAM EXPERIMENTAL ENROLLEES, BY PERIOD OF ENROLLMENT
{JUNE 20, 1983 - MARCH 1984 SUBSAMPLE}

Period of Enrollment	Deregistration Rate Within (%)						Sample Size
	1 Month	2 Months	3 Months	6 Months	9 Months ^b	12 Months	
June 20 - September 1983	16.3	26.9	32.5	39.4	55.0	65.0 ^b	160
October - December 1983	14.1	35.5	40.0	55.3	64.7 ^b	N/A	85
January - March 1984	18.1	29.8	42.6	61.7 ^b	N/A	N/A	94

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimentals.

NOTES: Deregistration rates are calculated as a percentage of all experimentals in the indicated enrollment period.

Tests of statistical significance between experimentals of different enrollment periods were not calculated.

N/A denotes not applicable due to the absence of extended follow-up for enrollees entering the sample after September 1983.

^aNine month deregistration rates in this table are slightly higher than those shown in Table 4.1. The percent deregistered in Table 4.1 does not include enrollees who were active after their first deregistration, while this table includes this group as deregistered.

^bFollow-up for the final month of entry was approximately 1/2 month less than that for the preceding months. A statistical correction produced no change in participation rates.

TABLE D.3

ARKANSAS

CUMULATIVE PARTICIPATION RATES IN JOB CLUB
FOR WORK PROGRAM EXPERIMENTAL ENROLLEES, BY PERIOD OF ENROLLMENT
[JUNE 20, 1983 - MARCH 1984 SUBSAMPLE]

Period of Enrollment	Participation Rate Within (%)						Sample Size
	1 Month	2 Months	3 Months	6 Months	9 Months	12 Months	
June 20 - September 1983	15.0	19.4	22.5	28.1	30.0	31.3 ^a	160
October - December 1983	12.9	15.3	15.3	21.2	22.4 ^a	N/A	85
January - March 1984	17.0	25.5	29.8	34.0 ^a	N/A	N/A	94

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimentals.

NOTES: Participation rates are calculated as a percentage of all experimentals in the indicated enrollment period.

Tests of statistical significance between experimentals of different enrollment periods were not calculated.

N/A denotes not applicable due to the absence of extended follow-up for enrollees entering the sample after September 1983.

^aFollow-up for the final month of entry was approximately 1/2 month less than that for the preceding months. A statistical correction produced no change in participation rates.

TABLE D.4

ARKANSAS

CUMULATIVE PARTICIPATION RATES IN INDIVIDUAL JOB SEARCH
FOR WORK PROGRAM EXPERIMENTAL ENROLLEES, BY PERIOD OF ENROLLMENT
(JUNE 20, 1983 - MARCH 1984 SUBSAMPLE)

Period of Enrollment	Participation Rate Within (%)						Sample Size
	1 Month	2 Months	3 Months	6 Months	9 Months	12 Months	
June 20 - September 1983	11.3	16.9	18.1	23.1	24.4	25.0 ^a	160
October - December 1983	10.6	16.5	16.5	20.0	21.2 ^a	N/A	85
January - March 1984	10.6	19.1	19.1	26.6 ^a	N/A	N/A	94

SOURCE: MDRC calculations from program activity data collected from Case File Records of a random subsample of experimentals.

NOTES: Participation rates are calculated as a percentage of all experimentals in the indicated enrollment period.

Tests of statistical significance between experimentals of different enrollment periods were not calculated.

N/A denotes not applicable due to the absence of extended follow-up for enrollees entering the sample after September 1983.

^a Follow-up for the final month of entry was approximately 1/2 month less than that for the preceding months. A statistical correction produced no change in participation rates.

APPENDIX B

TABLE E.1

ARKANSAS

LONGER-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT, EARNINGS, AND AFDC
RECEIPT FOR APPLICANTS DURING THE FIVE QUARTER POST-ENROLLMENT FOLLOW-UP PERIOD
(JUNE 20, 1983 - DECEMBER 1983 SAMPLE)

Outcome and Follow-Up Period	Applicants		
	Experimentals	Controls	Difference
Ever Employed, Quarters 2 - 5 (%) ^a	28.0	22.8	+ 5.1
Average Number of Quarters With Employment, Quarters 2 - 5 ^a	0.74	0.60	+ 0.14
Ever Employed (%)			
Quarter of Enrollment	16.2	15.9	+ 0.3
Quarter 2	16.2	12.8	+ 3.4
Quarter 3	16.7	14.8	+ 1.9
Quarter 4	18.0	15.6	+ 2.4
Quarter 5	22.7	16.7	+ 6.0
Average Total Earnings, Quarters 2-5 (\$) ^a	632.58	813.13	-180.56
Average Total Earnings (\$)			
Quarter of Enrollment	94.57	136.97	-42.40
Quarter 2	111.42	140.48	-29.06
Quarter 3	146.08	208.73	-62.65
Quarter 4	164.59	224.76	-60.17
Quarter 5	210.29	238.98	-28.69
Ever Received Any AFDC Payment, Quarters 1 - 5 (%)	63.1	65.8	- 2.5
Average Number of Months Receiving AFDC Payments, Quarters 1 - 5	5.86	6.55	- 0.69
Ever Received Any AFDC Payments (%)			
Quarter of Enrollment	47.9	51.8	- 3.9
Quarter 2	54.5	55.7	- 1.2
Quarter 3	48.0	51.2	- 3.2
Quarter 4	42.9	50.3	- 7.4
Quarter 5	37.7	47.6	- 9.9*
Average Total AFDC Payments Received, Quarters 1 - 5 (\$)	876.81	1,022.10	-145.18
Average AFDC Payments Received (\$)			
Quarter of Enrollment	127.58	137.98	-10.40
Quarter 2	213.25	228.14	-14.89
Quarter 3	194.68	220.25	-25.57
Quarter 4	188.68	224.51	-35.84
Quarter 5	152.72	211.21	-58.49**
Sample Size	148	164	

(continued)

TABLE E.1 (continued)

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

^aQuarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded from the measures of total follow-up employment and earnings.

TABLE E.2

ARKANSAS

LONGER-TERM IMPACTS OF THE ARKANSAS WORK PROGRAM ON EMPLOYMENT, EARNINGS, AND AFDC RECEIPT FOR RECIPIENTS DURING THE FIVE QUARTER POST-ENROLLMENT FOLLOW-UP PERIOD (JUNE 20, 1983 - SEPTEMBER 1983 SAMPLE)

Outcome and Follow-Up Period	Recipients		
	Experimentals	Controls	Difference
Ever Employed, Quarters 2 - 5 (%) ^a	13.2	11.1	+ 2.1
Average Number of Quarters With Employment, Quarters 2 - 5 ^a	0.39	0.26	+ 0.13
Ever Employed (%)			
Quarter of Enrollment	7.8	5.7	+ 2.1
Quarter 2	10.5	6.1	+ 4.4
Quarter 3	12.3	6.0	+ 6.3*
Quarter 4	7.0	7.6	- 0.6
Quarter 5	9.4	6.2	+ 3.2
Average Total Earnings, Quarters 2-5 (\$) ^a	348.94	219.33	+130.62
Average Total Earnings (\$)			
Quarter of Enrollment	39.28	16.77	+22.51
Quarter 2	99.34	53.24	+46.10
Quarter 3	94.82	32.64	+62.18*
Quarter 4	71.41	72.82	- 1.41
Quarter 5	84.38	60.62	+23.76
Ever Received Any AFDC Payment, Quarters 1 - 5 (%)	97.7	97.4	+ 0.3
Average Number of Months Receiving AFDC Payments, Quarters 1 - 5	11.27	12.67	- 1.40**
Ever Received Any AFDC Payments (%)			
Quarter of Enrollment	96.8	96.3	+ 0.6
Quarter 2	88.6	92.1	- 3.5
Quarter 3	75.7	86.6	-10.9**
Quarter 4	70.2	83.5	-13.3**
Quarter 5	66.0	76.9	-10.9*
Average Total AFDC Payments Received, Quarters 1 - 5 (\$)	1,697.91	1,938.95	-241.04**
Average AFDC Payments Received (\$)			
Quarter of Enrollment	384.01	396.68	-12.67
Quarter 2	350.40	398.44	-48.04**
Quarter 3	344.12	406.26	-62.15**
Quarter 4	322.07	383.70	-61.63**
Quarter 5	297.31	353.86	-56.56*
Sample Size	105	97	

TABLE E.2 (continued)

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding.

A two-tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

^aQuarter 1, the quarter of enrollment, may contain some earnings from the period prior to enrollment and is therefore excluded from the measures of total follow-up employment and earnings.

TABLE E.3

ARKANSAS

PRE-PROGRAM EMPLOYMENT AND AFDC RECEIPT FOR THE RESEARCH SAMPLE
IN THE FOUR QUARTERS PRIOR TO ENROLLMENT, BY WELFARE STATUS
(JUNE 20, 1983 - MARCH 1984 SAMPLE)

Outcome and Prior Period	Experimentals	Controls
Applicants		
Ever Employed (%)		
4th Prior Quarter	21.6	21.8
3rd Prior Quarter	19.9	20.9
2nd Prior Quarter	22.4	23.1
Quarter Before Enrollment	19.5	24.2
Ever Received Any AFDC Payments (%)		
4th Prior Quarter	23.8	28.1
3rd Prior Quarter	25.8	26.3
2nd Prior Quarter	24.0	22.4
Quarter Before Enrollment	19.7	18.4
Sample Size	332	335
Recipients		
Ever Employed (%)		
4th Prior Quarter	1.8	4.8
3rd Prior Quarter	3.4	3.2
2nd Prior Quarter	2.3	4.3
Quarter Before Enrollment	3.0	3.6
Ever Received Any AFDC Payments (%)		
4th Prior Quarter	82.4	84.4
3rd Prior Quarter	85.6	88.8
2nd Prior Quarter	90.9	81.9
Quarter Before Enrollment	83.8	84.8
Sample Size	222	230

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTE: These data include zero values for sample members not employed and for sample members not receiving welfare. These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. Prior employment was excluded as a control variable.

Values here represent the source of Figure 5.2; tests of significance were not applied.

TABLE E.4

ARKANSAS

DISTRIBUTION OF THE RESEARCH SAMPLE, BY EMPLOYMENT AND WELFARE STATUS
 DURING THE THIRD QUARTER AFTER RANDOM ASSIGNMENT^a
 (JUNE 20, 1983 - MARCH 1984 SAMPLE)

Employment and Welfare Status	Full Sample		
	Experimentals	Controls	Difference
Had <u>No</u> Earnings, Received <u>No</u> AFDC Payments	31.5	28.8	+4.7*
Had <u>Some</u> Earnings, Received <u>No</u> AFDC Payments	9.9	6.6	+3.3**
Had <u>No</u> Earnings, Received <u>Some</u> AFDC Payments	53.3	81.0	-7.7***
Had <u>Some</u> Earnings, Received <u>Some</u> AFDC Payments	5.3	5.6	-0.3
Total	100.0	100.0	0.0
Sample Size	554	565	

SOURCE: NDRC calculations from State of Arkansas Welfare and Unemployment Insurance records.

NOTES: These data are regression-adjusted using ordinary least squares, controlling for pre-enrollment characteristics of sample members. There may be some discrepancies in calculating Experimental-Control differences due to rounding. Distributions may not add exactly to 100.0 percent because of rounding.

^aMonthly welfare data, which count the month of random assignment as "month one," were regrouped into quarters that exactly match UI earnings quarters. Percentages receiving welfare will therefore not precisely match main text tables.

A two tailed t-test was applied to differences between Experimental and Control groups. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent. The four differences are not, however, strictly independent.

TABLE E.5

ARKANSAS

ESTIMATED COEFFICIENTS FOR INDEPENDENT VARIABLES
 USED IN REGRESSIONS FOR EMPLOYMENT, EARNINGS AND AFDC RECEIPT
 DURING THE THIRD QUARTER OF POST-ENROLLMENT FOLLOW-UP
 [JUNE 20, 1983 - MARCH 1984 SAMPLE]

Independent Variables	Dependent Variables			
	Employed(%)	Earnings(\$)	Received Welfare(%)	Welfare Amount(\$)
Experimental Group Member	3.05* (1.83)	23.31 (25.83)	-8.93*** (2.85)	-42.98*** (12.80)
Recipient	-0.36 (2.53)	-15.33 (35.65)	17.44*** (3.85)	102.53*** (17.67)
County				
Jefferson	-2.30 (1.90)	6.84 (26.87)	21.28*** (2.75)	89.08*** (13.31)
Pulaski South	---	---	---	---
Ever Employed in Four Quarters Prior to Enrollment	37.32*** (2.31)	348.95*** (32.65)	1.41 (3.34)	-22.98 (16.18)
High School Diploma or Equivalent	3.40* (1.89)	60.33** (26.72)	-5.42** (2.74)	-23.00* (13.24)
Prior AFDC Dependency				
Never Had Own AFDC Case	---	---	---	---
Less Than Two Years	4.03* (2.29)	43.15 (32.30)	13.07*** (3.31)	52.38*** (16.01)
More Than Two Years	1.31 (2.98)	4.92 (42.12)	22.61*** (4.32)	81.86*** (20.87)
Number of Children	0.95 (0.78)	21.39* (11.02)	0.95 (1.13)	40.57*** (5.46)
Child Less Than Six	-1.81 (2.10)	-18.07 (29.64)	-3.39 (3.04)	-28.78* (14.89)
Ever Married	-3.70* (2.14)	4.51 (30.25)	-5.94* (3.10)	-19.59 (14.99)

[continued]

TABLE E.5 (continued)

Independent Variables	Dependent Variables			
	Employed(%)	Earnings(\$)	Received Welfare(%)	Welfare Amount(\$)
Age				
24 Years or Less	-0.87 (2.54)	10.51 (35.85)	1.82 (3.67)	19.98 (17.78)
25 to 34 Years	---	---	---	---
35 Years or More	0.63 (2.44)	44.25 (34.49)	-5.50 (3.53)	-51.12*** (17.09)
Non-White	-1.57 (2.88)	-25.63 (40.38)	11.84*** (4.14)	50.80** (20.01)
Constant	3.84 (3.88)	-22.42 (54.76)	33.07*** (5.81)	88.67*** (27.14)
Unadjusted R ²	.2283	.1248	.2038	.2537
Model F	25.1	12.1	21.6	28.9
Dependent Variable Mean	13.67	138.09	60.32	288.17
Sample Size	1,119			

SOURCE: MDRC calculations from State of Arkansas welfare and Unemployment Insurance records.

NOTES: These data include zero values for sample members not employed and for sample members not receiving welfare. Coefficients are estimated by ordinary least squares. Numbers in parentheses are estimated standard errors.

"Employment" and "Receiving Welfare" are dichotomous dummy variables. Their coefficients are multiplied by 100 to yield percentages. "Earnings" and "Welfare Amount" are dollar variables and include cases with zero values.

Where ambiguous, reference categories for dummy variables are shown in the table with dashes. All reference categories are (a) control group (b) applicant (c) Pulaski South (d) not employed in four quarters prior to enrollment (e) no diploma or equivalent (f) never had own AFDC case (g) no child less than six (h) never married (i) age 25 to 34 (j) white. Thus, for example, the coefficient of "ever married" is the increment to the dependent variable for the trait "ever married" versus "never married," with all other traits controlled for.

A two-tailed t-test was applied to all coefficients. Statistical significance levels are indicated as: * = 10 percent; ** = 5 percent; *** = 1 percent.

APPENDIX B

APPENDIX F

TECHNICAL ASPECTS OF THE BENEFIT-COST ANALYSIS

This appendix describes the data sources and strategies used in estimating the economic benefits and costs of the WORK Program. It focuses on selected analytical issues requiring fuller discussion than could be presented in Chapter 6.

A. The General Approach

Fundamentally, the value of each category of benefits and costs is the product of two variables: a "behavioral variable," which is the size of the experimental-control difference in an activity or outcome, and a "shadow price," which represents the dollar value of one unit of that activity or outcome. To illustrate, in estimating the value of output from work experience jobs in Pulaski South, the behavioral variable is the average amount of time that experimentals spent in work experience (7.5 hours) minus the average for the control group, which was zero, since except for assessment, controls did not receive services. The shadow price is the estimated per hour dollar value of that output, which was \$3.99. The product of these two numbers (7.5 hours x \$3.99 per hour) equals the total value of that output per experimental (\$30).

Similarly, the cost of work experience was determined by multiplying the behavioral variable, which is the net number of hours spent in work experience per experimental, by the shadow price, the average cost of that activity per participant-hour. Using the Pulaski South example, where the

net time in work experience was 7.5 hours at a cost of \$2.23 per participant-hour, the average cost of this component was \$17 per experimental. Table F.1 presents the behavioral variable and corresponding shadow price variable, along with data sources, for each type of benefit included in the analysis. Table F.2 presents similar information for each category of program costs.

As explained in Chapter 6, some program benefits and costs are likely to occur beyond the point at which data collection for this study ended. It was therefore necessary to estimate the future value of those effects and expenditures by extrapolating from the available follow-up data. The next section discusses the procedures for extrapolating benefits, while Section C explains the approach for projecting costs.

B. Issues in Estimating Program Benefits

1. Extrapolating Benefits

Post-observation benefits were estimated using an extrapolation procedure with four components: the base estimate, time horizon, decay rate and discount rate. The base estimate is the observed impact from which the future impact is extrapolated. The base estimate that was used for this analysis was the experimental-control impact difference (e.g., in earnings and AFDC payments) for the last two quarters of available follow-up data. This period is short enough so that the latest evidence is used, but long enough so that the extrapolation is not based upon a single quarter that might be unrepresentative.

The time horizon, which is the timeframe over which the benefits were extrapolated, was five years in this evaluation. This period includes both

TABLE F.1

ARKANSAS

DATA SOURCES FOR THE BEHAVIORAL VARIABLES AND
SHADOW PRICES OF BENEFIT COMPONENTS

Benefit Component	Behavioral Variable	Data Sources	Shadow Price	Data Sources
Work Experience Output	Average hours in work experience per experimental	Case Files	Average hourly wage and fringe benefit costs if regular workers were used	Worksite Study
JTPA Output	Average hours in JTPA jobs per experimental	Program Records	(Same as work experience shadow price)	(same as above)
Earnings	N/A ^B	N/A	Net earnings per experimental	Quarterly UI earnings records
Federal Income Tax	N/A ^B	N/A	12% of net taxable earnings per experimental	<u>The U.S. Master Tax Guide</u> ^D
State Income Tax	N/A ^B	N/A	2% of net taxable earnings per experimental	<u>State Tax Guide</u> ^C
Social Security Tax	N/A ^B	N/A	6% of net taxable earnings per experimental	<u>The U.S. Master Tax Guide</u> ^D
State Sales Tax/ Other	N/A ^B	N/A	2% of net taxable earnings per experimental	<u>State Tax Guide</u> ; ^C average consumption data from BLS
AFDC Payments	N/A ^B	N/A	Net AFDC dollars per experimental	AFDC monthly payment records
Medicaid Payments	Net months of Medicaid eligibility per experimental	AFDC monthly payment records	Average Medicaid dollars received per month by AFDC clients	<u>DSS Annual Report</u> ^E

(continued)

TABLE F.1 (continued)

Benefit Component	Behavioral Variable	Data Sources	Shadow Price	Data Sources
Unemployment Insurance	N/A ^a	N/A	Net UI dollars per experimental	Weekly UI payment records for subsample of experimentals and controls
AFDC Administration	Net AFDC dollars per experimental	AFDC monthly payment records	Administrative cost per dollar of AFDC payment	DSS <u>Annual Report</u> ^b
Medicaid Administration	Net Medicaid dollars per experimental	Months eligible times average monthly payments (see above)	Administrative cost per dollar of Medicaid payment	DSS <u>Annual Report</u> ^b
UI Administration	Net UI dollars per experimental	UI weekly payment records	Administrative cost per dollar of UI payment	<u>U.S. Budget Appendix</u> ^f

NOTES: ^a Where the shadow price itself is expressed per experimental, a separate behavioral variable is unnecessary.

^b The U.S. Master Tax Guide, 1983. New York: Commerce House, 1983.

^c State Tax Guide. New York: Commerce Clearinghouse, 1983.

^d Three Budgets for an Urban Family of Four. Supplement to Bulletin 1570, Bureau of Labor Statistics, 1970.

^e Arkansas Social Services Annual Report, Fiscal Year 1984.

^f Budget of the U.S. Government. Appendix: Fiscal Year 1983. Washington, D.C.: U.S. Government Printing Office, 1984.

TABLE F.2

ARKANSAS

DATA SOURCES FOR BEHAVIORAL VARIABLES AND SHADOW PRICES OF COST COMPONENTS

Cost Component	Behavioral Variable	Data Source	Shadow Price	Data Source
Assesment	Average minutes of assesment, marked up for probability of reassesment, per experimental	Staff time study; log of participant-days in job club, March 12-23, 1984	Program expenditures per participant-minute of assesment	Program fiscal records
Job Club	Average days in job club per experimental	Job club attendance records, September 1983-March 1984	Program expenditures per participant-day of job club	Program fiscal records; staff time study; log of participant-days in job club, March 12-23, 1984
Work Experience	Average hours in work experience per experimental	Case files	Program expenditures per participant-hour in work experience	Program fiscal records; staff time study; case files
Individual Job Search/ Other	Average months in WORK Program per experimental	Case files; national data (Bane and Ellwood, 1983)	Program expenditures per IJS/other, per participant month in WORK Program	Program fiscal records; staff time study; monthly Case Status reports
Central Administration	Average months in WORK Program per experimental	(See IJS/Other)	Program expenditures on central administration per participant-month in WORK Program	Program fiscal records; staff time study; monthly Case Status Reports
Participation-Related Expenses	Average months in WORK Program per experimental	(See IJS/Other)	Program expenditures on child-care, incentive payments and work experience expenses per participant-month in WORK Program	Program fiscal records
JTPA Operating Costs	Net JTPA participation rate per experimental	Program records	Average JTPA expenditures per JTPA client	Little Rock School District's JTPA budget, FY 1984

[continued]

TABLE F.2 (continued)

NOTES: Program fiscal records for each cost category include monthly "Statement of Expenditure and Request for Funds," and "Accounting/Federal Grants Management System."

^aIn Pulaski South, the rate of reassessment equals the rate of recycling through job club. Reassessments were conducted whenever clients re-entered job club.

the observation period of three to five quarters (depending on when the sample members enrolled and thus the amount of follow-up information available), and the post-observation period of 15 to 17 quarters. The five-year period was chosen, as explained in Chapter 6, because based on recent research, it is approximately the average length of time that experimentals are likely to remain on AFDC. Projecting beyond this period would therefore be extremely speculative.

The decay rate is the rate at which impacts from the base period were assumed to change over time. This analysis uses two alternative assumptions about the decay rate of impacts in the WORK Program. As indicated in Chapter 6, there was no evidence of decay in the impact estimates made for the observation period, and thus one set of estimates assumes that the decay rate was zero. However, while some empirical evidence suggests that impacts of programs like the WORK Program do not decay or decay very slightly, there is other evidence to suggest substantial decay.¹ This underlies the alternative decay rate assumption of 30 percent used in this analysis, an assumption based on the rate of decay in earnings observed in a national study of the WIN Program.²

Finally, the discount rate is used to convert post-observation benefit estimates into present values. A discount rate of 5 percent, which is roughly the real rate of return on medium- and long-term United States Treasury securities at the time of random assignment, was used in the analysis.

The latter three of these components were combined in an overall extrapolation factor. This factor was then multiplied by the first component --

the base estimate -- to obtain the estimate of the post-observation benefit.

2. Estimating Changes in Medicaid Payments

A family receiving AFDC payments is automatically eligible for Medicaid. Under the rules that governed Medicaid until October 1984, a family that went off AFDC remained eligible for Medicaid for four months. (It is possible that a family could stay eligible for Medicaid even longer if it met a state's "medically needy" requirements but it appears that this was rare.)³

Under these assumptions, the change in Medicaid participation months due to the WORK Program has been estimated as the experimental-control difference in months, with zero AFDC payments starting four months after AFDC receipt first ended. In other words, only those months of zero AFDC receipt that occur after a string of four months with no payments were counted in computing the experimental-control difference. This procedure assumes that former AFDC recipients are not medically needy, that Medicaid eligibility is correctly determined by program staff, and that strings of more than four months of zero payments are not due to missing data. With this difference having been estimated, Medicaid participation months (the behavioral variable) were then valued using the estimated costs of payments and administration per participant-month (the shadow price).

However, since the onset of this study there has been a statutory increase in extended Medicaid eligibility from four to nine months after leaving AFDC. This presents some additional uncertainty in estimating the reduction of Medicaid during the extrapolation period, particularly for those sample members still receiving AFDC after October 1984. Among those

individuals, the actual experimental-control difference in months eligible for Medicaid during the five-year time horizon may be somewhat less than projected. Yet, even if true, this difference would not change the general conclusions of this study, since it pertains only to the extrapolated portion of the program's estimated effect on Medicaid. If Medicaid payments received only during the observation period are considered, there is still a reduction in benefits. Moreover, Medicaid reductions constitute only about a quarter of the overall change in transfer payments.

C. Issues in Estimating Program Costs

Like benefits, program costs were determined by multiplying the behavioral variable for each cost component by the appropriate shadow price. However, several intermediate calculations and numerous data sources were necessary to produce these values. These are discussed in the next two sections.

1. Determining Behavioral Variables for Cost Estimates

To obtain costs on a per experimental basis, the value of each behavioral variable was determined by multiplying the probability that an experimental would receive a given service by the net average duration of the service for those actually receiving it. The probability of being assessed was, of course, 100 percent since all individuals who were randomly assigned were assessed. The net amount of time spent in assessment by the experimental group (beyond the time spent by controls) was determined from the study of staff time sheets described in Chapter 6.

The probability of receiving services in the "individual job search/other" category was also considered to be 100 percent. As explained

in Chapter 6, this category was defined to include a wide variety of services -- including contacting and counseling enrollees -- that could not be easily distinguished from other forms of individual job search assistance. It was assumed that all experimentals had at least some contact with staff members and therefore received some of the services in this category.

The probability of experimentals participating in job club and work experience was derived from the special case file study used for the analysis of program implementation. (See Chapter 4.) However, the estimates used for the benefit-cost analysis -- unlike those used in the process analysis -- reflect the behavior of the entire experimental sample (June 1983-March 1984 enrollees). This is because benefits and costs are difficult to disaggregate for sample members who enrolled in the program at different times.

In Pulaski South, participants were often recycled through job club. While the probability of this recycling is not precisely known, an approximation was made by calculating, from an attendance log, the proportion of repeaters to first-time participants in job club during a two-week cycle in March 1984. It was estimated that 53 percent of the Pulaski South experimentals who ever participated in job club repeated it, a figure in accord with staff perceptions reported to MDRC. To take recycling into account, the probability of participating in job club was therefore marked up by 53 percent. Because Jefferson staff reported that virtually no enrollees repeated job club during the study period, no adjustment for recycling was made in that county's estimates.

The duration of participation in each program component was derived from other data sources. Average days in job club were estimated from

program attendance records covering the period September 1983 through March 1984. Average days in work experience were estimated from a special case file search (separate from that used for participation rates), covering the period from the beginning of the program through August 1984. For "individual job search/other" -- a residual category including general counseling and all services other than assessment, job search and work experience -- the average duration of participation was assumed to be equivalent to the average length of stay in the WORK Program. Because services in this category could take place throughout a person's tenure in the program, experimentals are considered to be receiving such services as long as they remained enrolled, up to a maximum of three years. People enrolled in the WORK Program for longer than three years are presumed in this analysis not to receive any notable services after the third year. (See Chapter 6 and the discussion of length of stay below.)

The behavioral variable for central administrative and participation-related expenses (i.e., child care, allowances, incentive payments) is the average length of time in the WORK Program per experimental. As with "individual job search/other," all experimentals are considered to be affected by oversight from the central office of the WORK Program and the Department of Human Services as long as they remain enrolled, up to a maximum of three years.

Experimentals receive participation-related payments in the course of taking part in job search and work experience. Because that participation occurs primarily during the first year, length of stay in the program during the first year is the appropriate behavioral variable.

For JTPA expenditures in Pulaski South, the behavioral variable is

simply the probability of enrolling in JTPA (i.e., the number of experimentals who entered that program divided by the total number of experimentals in the WORK Program). The number of experimentals in JTPA was obtained from records kept by the WORK Program staff in Pulaski South.

2. Determining Shadow Prices for Cost Estimates

As explained in Chapter 6, the shadow price for each cost component was estimated by first dividing the proportion of total staff salaries spent on a given activity during the last two quarters of the state fiscal year 1984 by the total units of participation in that activity during that period (participant-hours, participant-days, or participant-months, depending on the component) to produce direct unit costs. These direct unit costs were then marked up for fringe benefits, leave time, non-personnel expenses and the cost of local administration. Local administration was defined as 100 percent of the cost of the office supervisor and clerk. All of these data were available from fiscal records kept by the WORK Program.

Data on participation units for each cost category came from other sources. Participant-days in job club in Pulaski South were obtained from the same attendance logs used for estimating the rate of recycling. In Jefferson, where such logs were unavailable, participant-days were based upon staff estimates of the average number of people in job club per day for the same two-week period over which the Pulaski South estimates were made. For work experience, participant-hours were obtained through the same case file search on which the estimated rates of participation were based.

For three variables -- "individual job search/other," central administration and participation-related expenses -- enrollment months (the

participation units used for these components) were based upon the WORK Program's monthly Case Status Reports. These reports present the number of people who are registered, assessed and deregistered each month in each program office. By first estimating the total number of assessed individuals who were in the WORK Program in each county at the end of December 1983 (which was provided from program records from one of the program managers), and then adding in for each subsequent month through June 1984, the number of new registrants who had been assessed, an estimate of the total participant-months in the WORK Program during the steady-state period was determined. For each month, the number of new registrants was estimated with the following formula, which attempted to exclude clients who were deregistered before they were assessed:

$$(A) - (A/R) (D)$$

where A is the number of new assessments for a given month; R is the number of new registrations; and D is the number of new deregistrations.

For the JTPA shadow price, it was not necessary to estimate participation-units. The shadow price obtained from the Little Rock School District's JTPA budget was already expressed as an average cost per JTPA participant.

3. Average Length of Stay in the WORK Program

To determine the costs of "individual job search/other," central administration and participation-related expenses, it was necessary to estimate the average length of stay in the WORK Program. Moreover, because of the expected decline in future service intensity for longer-term enrollees, separate estimates had to be made for each of the first three years following random assignment.

The general approach for computing average length of stay was to divide the experimental group's total number of participant-months by the number of experimentals in the sample. This was complicated, however, by the fact that many experimentals were still enrolled in the program beyond the point of available follow-up data. It was thus necessary to project the number of participant-months likely to accrue during the post-observation period. This was done by using estimated "exit probabilities" -- defined here as the average likelihood that an experimental would leave the program within a specified period of time (e.g., within the subsequent 12 months), given the length of time that that individual had already been in the program. These estimates can be derived from information on program departure rates.

The probability of remaining in the program for that period is simply 100 percent minus the exit probability. When this probability of remaining in the program is then multiplied by the number of experimentals enrolled at the beginning of that time period, an estimate of the number enrolled at the end of the period is obtained. This estimate is in turn multiplied by the number of months in that time period, yielding the number of participant-months. Dividing participant-months by the number of experimentals enrolled at the start of the period gives the average length of stay for that period.

As an illustration, suppose 100 clients were in the program at the start of year 1, and the probability that they would exit the program within the next 12 months was 60 percent. The average length of stay during that year would be:

$$(1.00 - .60)(100)(12)/(100) = 4.8 \text{ months}$$

The exit probabilities used for this report were derived from two sources. For the October 1983-March 1984 sample of enrollees who had less than one year of actual follow-up from the case file study, exit probabilities for the remainder of the first year after random assignment were based on rates that were predicted from the follow-up data on the full sample of enrollees. The probability of deregistration from the WORK Program within the subsequent four quarters was predicted to be 64 percent for the full sample. Thus, the predicted exit probability for the one quarter of the first year for which the October-December 1983 enrollees had no follow-up data was estimated to be $.64/4 = .16$. Similarly, the exit probability for the half of the first year for which the January-March 1984 enrollees had no follow-up was $.64/2 = .32$. For the first year, then, the participant-months used in estimating average length of stay were based entirely on observed data from the case file study for the June-September 1983 enrollees, and on a combination of observed and predicted participant-months for later enrollees.

After the first year, when follow-up data were no longer available, length-of-stay estimates had to be based entirely on predicted participant-months. One approach was to use AFDC exit probabilities calculated for a national sample of welfare recipients by Bane and Ellwood (1983). While it is recognized that this national sample differed in some ways from the research sample for the WORK Program evaluation, it is a reasonable alternative.

Although these values were used for the computations reported in Chapter 6, second- and third-year exit probabilities were also predicted from first-year case file data for the WORK Program using multiple

regression analysis. These estimates were extremely similar to those produced using the exit probabilities from Bane and Ellwood, suggesting that the latter estimates were indeed reasonable.

Once the average length of stay in the WORK Program was estimated for each year, it was multiplied by the shadow price of the relevant service component to yield the cost of that component for that year. As mentioned in Chapter 6, all participation-related expenses were allocated to the average length of stay in the program during the first year after random assignment, while costs for "individual job search/other" and central administration were expected to accrue for three years after random assignment. However, because of the expected decline in service intensity during the second and third years, only 50 percent of the first-year shadow price was applied for the second year, and only 25 percent for the third year. (See Chapter 6, footnote 21.) The total per experimental cost of "individual job search/other" and central administration is simply the sum of the costs estimated for each of the three years.

Whatever uncertainties arise in predicting length of stay for the second and third years after random assignment, it is important to recall from Chapter 6 that the vast majority of program costs were incurred during the first year of operations, for which length-of-stay estimates were more reliable. Consequently, any error in the later length-of-stay estimates would not dramatically alter the overall cost estimates computed for this report.

FOOTNOTES

CHAPTER 1

1. Quint, 1984.
2. In reality, Pulaski South is a part of Pulaski County covered by one WORK Program office; the northern part of the county is served by a separate office. For the sake of simplicity, this report refers to Pulaski South as a county.
3. Several months after the end of the study period, the WORK Program was extended from the original eight to 20 counties. The eight original counties are Crawford, Crittenden, Jefferson, Mississippi, Ouachita, Pulaski (including the two program areas, Pulaski North and Pulaski South), Sebastian and Union.
4. See Arkansas Department of Human Services, Annual Report for fiscal years 1982-1983 and 1983-1984, and "Monthly WORK Program Case Status Reports," 1983-1984.
5. Of the eight counties originally in the WORK Program, only four, including Pulaski South and Jefferson, offered work experience.
6. See Quint, 1984, p.6.
7. In programs funded by welfare diversion, welfare recipients are employed in subsidized jobs partly supported by a wage pool made up of some of the welfare payments they normally would have received as transfer payments.
8. Arkansas Department of Human Services, Annual Report, for fiscal years 1981-1982, 1982-1983, and 1983-1984.
9. The figures on population and income cited in this section refer to the whole of Pulaski County, not just the part served by the Pulaski South office. See U.S. Census data, U.S. Department of Commerce, 1980 for figures on population size, median income, poverty, and racial/ethnic composition in the two counties and the state as a whole.
10. Arkansas Department of Human Services, Annual Report, for fiscal years 1982-1983 and 1983-1984.
11. Arkansas Department of Labor, Economic Security Division, "Revised Labor Force Estimates," 1981 and 1983.

CHAPTER 2

1. The efficiency of the estimates is a measure of the variance or statistical uncertainty surrounding them. The use of more efficient estimators makes it less likely that true program effects will go undetected and increases the precision of the point estimate of the impacts.
2. Two-tailed tests were used because there were no assumptions about the way in which experimentals might differ from controls.
3. Arkansas does not have an AFDC-Unemployed Parent program, in which most households are headed by men. The predominance of women in the research sample reflects the character of the AFDC adult caseload.
4. This category does not include having been on a parent's case. Note, too, that any member of the research sample could be an older child on a parent's case.
5. Some 34 individuals who were originally randomly assigned were missing these forms or had to be left out of the impact analysis for lack of data on applicant/recipient status. This loss amounted to 2.9 percent of the full automated data set of 1,153 enrollees.
6. Welfare payments records for the two years before the start of the research were tabulated for sample members who were receiving welfare at the time of random assignment and who reported having had their own AFDC case for more than two years. Over 97 percent of those individuals had a prior welfare payment recorded in the research data set. The remaining 3 percent may be taken as the upper bound for the extent of non-matching to AFDC payment data.
7. As a check on the case file records data, three-month participation rates for the June-December 1983 enrollees were compared to the rates for the corresponding group as reported in the interim report. Participation data in that report were obtained from the WORK Program tracking system which recorded assignment to, and participation in, program activities. Program staff were to submit an Assignment Form to the system recording the dates enrollees were assigned to or participated in each activity. The two data sources give similar rates for participation.

CHAPTER 3

1. The distribution of cases by age of youngest child was obtained from the Office of Family Assistance's unpublished

preliminary compilation of fiscal year 1983 national integrated quality control system. The percentages for Arkansas and the nation as a whole match closely.

2. See, for example, Goldman et al., 1985.
3. See Bane and Ellwood, 1983.

CHAPTER 4

1. Quint, 1984.
2. This figure is not strictly comparable to the 36 percent three-month participation rate presented in the first report, not only because different data sources were used but also because in the first report, working registrants were included in the count of those "ever active." Data on whether or not members of the sample had working registrant status were not collected for the analysis of participation in this report.
3. This 17 percent of applicant enrollees who neither participated nor were deregistered is higher than the 9 percent figure achieved for AFDC applicants who were studied in a San Diego program entailing a sequence of group job search followed by work experience. The San Diego program was considerably more resource-intensive than the WORK Program, however, and gave staff less discretion to defer participation. Moreover, its enrollees tended to be better educated and to have more recent work histories than was the case in Arkansas.
4. Originally, the state had applied for a federal waiver to increase the number of hours individuals could work in CWEP, but it was denied. See Quint, 1984, p. 8.

CHAPTER 5

1. See Footnote 5, Chapter 2.
2. See Chapter 2, p. 20.
3. See Footnote 6, Chapter 2.
4. To check for possible mismatching of sample members with UI records, a number of cases in the analysis data base were hand-checked by direct inquiry to the Arkansas UI system. Thirty-six cases with earnings were selected, and for them the match was found to be exact for all quarters. Another 20 cases without UI earnings were chosen from the list of persons randomly assigned. Of these, two cases were found to have had earnings not picked up by the research data base. Two others

may also have been discrepant, but this suspicion could not be definitely confirmed at the time the check was performed.

5. The normal skew in earnings also affects precision. The inclusion in one of the research groups of a few more full-time workers employed during every week in a quarter can carry undue weight in the earnings measure without greatly affecting the employment measure. In addition, enrollees who find jobs as a result of WORK Program exposure often begin work near the middle or end of a quarter, and their earnings for that quarter may be too small to carry much weight during that period.
6. This percent reduction in AFDC benefit expenditures should not be interpreted to cover all such expenditures for the case-load. The sample under study includes only applicants and recipients who have recently been determined WIN-mandatory.
7. The 6.9 percentage point drop in the rate of receipt for quarter three is 10.8 percent of the control group mean receipt rate of 63.8 percentage points. The 10.8 figure is about three-quarters of the total 14.9 percent fiscal savings for the quarter.
8. Earnings impacts are the least reliably estimated of the four impacts. See Section B.2 and Footnote 5.
9. Complete tables containing numbers used in the graphs in this chapter are contained in Appendix E.
10. The actual proportion of applicants who were employed when they applied for welfare cannot be observed in these data. Any earnings during the first quarter classified an individual as "employed," whether these occurred just before the date of the application or soon afterwards.
11. Welfare savings for approved applicants are not directly relevant to this experiment, since services were given to applicants who were denied or withdrew their applications. Nevertheless, 4.9 percent would still be the rate of expenditure reduction for applicants who would have been approved for welfare in the absence of the program. The per person dollar savings would be larger, but there would be fewer persons and a larger per person control group mean. Likewise, the total dollar expenditure reduction for the applicant population is the same for the full sample as for the portion that would have been approved.
12. Total savings for the sample are savings per experimental times the number of experimentals in the sample, with the results for applicants and recipients added together. Savings

for recipients were 80 percent of this total.

13. An indication that impacts on applicants may increase over longer periods is found by examining the extended follow-up available for the early June-September sample. Estimates through quarter five, broken down by applicant/recipient status, are shown in appendix tables to this chapter. Since the sample sizes that produced these estimates are only a fraction of the full sample, the proportions should be viewed as only suggestive of possible trends.

The figures do indicate that welfare impacts for applicants in this early group grew steadily and smoothly over time until, at the fifth quarter of follow-up, the savings of \$58 per applicant were almost the same as the savings of \$57 per recipient. Employment impacts for applicants were also largest in the fifth quarter, although the movement up to that point was too erratic to identify any underlying pattern with confidence. The estimates also show that the negative earnings impacts, noted earlier, were entirely concentrated in the early group of applicants.

14. A note for the technical reader. The hypothesis of interest here is a two-part one: (a) that lower employment rates will be observed for controls with certain characteristics and (b) that employment impacts for those subgroups will be larger than impacts for subgroups with the opposite characteristics. That is, the subgroups expected to have lower control group employment and greater employment impacts are named prior to measurement.

Failure to specify both halves of the hypothesis for each subgroup beforehand would lead to an error in interpretation. The hypothesis that subgroups with the lowest control group means will have the highest impacts, without designating ahead of time which subgroups those will be, would tend to be confirmed as a natural outcome of regression to the mean.

In this connection, expectations are strongest for prior employment, child age and diploma subgroups, along the lines described in the text. Moreover, the barriers to employment experienced on these subgroup dimensions are such as could, in fact, be addressed by an employability development program of the kind under study. Although not detailed in the text, it is expected that individuals with longer welfare history would tend to show lower control group employment, consistent with their observed greater attachment to welfare. Ever-married women would also be expected to work less than never-married women, given age, on the supposition that they are more likely to obtain paternal child support as a substitute for their own earnings (and for AFDC, as well). Finally, greater numbers of

children increase the marginal utility of income and would therefore tend to encourage work, although the additional child-care requirements make this expectation uncertain.

15. This difference stemmed from a dramatically higher rate of approvals for welfare among the Jefferson applicants who enrolled in the WORK Program. Though not shown in the table, the regression-adjusted approval rate for controls in Jefferson was 85.5 percent compared to a rate of 46.8 percent in Pulaski South. Among those approved, the natural rate of caseload turnover for controls was similar for the two areas. Why there were so many more approved applicants in Jefferson cannot be determined from these data, but labor market conditions probably do not alone account for the inter-county difference, since the third-quarter employment rate of control group applicants was so similar in both localities.
16. This apparent earnings loss in Jefferson will play a role in the benefit-cost analysis of Chapter 6.
17. For a recounting of the implementation problems in Jefferson County, see the interim report (Quint, 1984), especially pp. 53, 71, and 103.
18. The following third-quarter impacts were calculated separately for child-age subgroups but with no other control variables. They may be compared directly to the impacts in Table 5.6 and 5.7.

	Applicants		Recipients	
	Employment	Welfare	Employment	Welfare
<u>Child Less Than Six</u>				
No	-0.8	-19.92	+6.8	-76.93
Yes	+3.7	- 7.05	+4.5	-94.08

As in the text tables, impact differences across child-age categories were not statistically significant for any of the four comparisons.

CHAPTER 6

1. Readers who are interested in the more technical aspects of the analysis, as well as further details on data sources, should consult Appendix F and Long and Knox, 1985.
2. Effects on these variables were found to be less important in MDRC's evaluations of Supported Work (Kemper et al., 1981) and the San Diego job search and work experience demonstration (Goldman et al., 1985).
3. Recent research by Bane and Ellwood (1983) found that a

national sample of AFDC recipients remained continuously on welfare for an average of 4.7 years.

4. For example, suppose that welfare savings of \$500 were achieved in 1985. If inflation were 4 percent and real interest rates 5 percent, then those savings would have to be adjusted by 9 percent to determine their worth in 1984 dollars. This would yield a value of \$455.
5. See Kemper et al., 1981. Because the time horizon is only five years, the results of the analysis would not be substantially affected by choice of a higher or lower discount rate within this range.
6. Some experimentals are also taxpayers. As discussed later in this chapter, one effect of the WORK Program is to increase the amount of taxes they pay.
7. The true social value of that output is probably less than the value estimated through this approach. If the true value were higher than the estimated value, presumably employers would have already hired alternative workers to do that work. However, under some circumstances the true value of output may in fact be higher than the cost of alternative labor. If so, then the use of WORK Program enrollees instead of regular workers would mean that some displacement of other workers might have occurred. See Kemper and Long (1981) for a discussion of the technical aspects of estimating the value of in-program output.
8. See Chapters 2 and 5 and Appendix B. See also Long and Knox, 1985.
9. Because interviews were not administered to supervisors at the JTPA worksites, the relative productivity of participants in those jobs was assumed to be the same as for participants in work experience jobs. Given that the skill demands of the work experience and JTPA jobs seemed comparable, and that the relative capabilities of the individuals in those jobs were probably quite similar, this assumption seems reasonable.
10. Extrapolation of the value of work experience and JTPA output is unnecessary since most of this was produced during the observation period.
11. These earnings estimates, as well as the AFDC estimates discussed below, are based on the same data used in the impact analysis (Chapter 5), but include an extrapolation component. Moreover, for the benefit-cost analysis, these estimates are not regression-adjusted since it is not possible to adjust, in a similar manner, the corresponding cost estimates.

12. This is a standard economic assumption made in analyses of this kind. The assumption implies that employers will not pay compensation in excess of the dollar value of an employee's contribution to output. However, to the extent that experimentals and controls obtain jobs in noncompetitive labor markets, some amount of error in benefit estimates may result.
13. Using microsimulation techniques, Smeedling (1981) estimated the value of fringe benefits as 17.9 percent of wages and salaries for workers earning less than \$10,000 in 1979.
14. Wolfhagen, 1983.
15. Ketrion, Inc. 1980.
16. Estimates of the earnings benefits were also computed after adjusting the earnings of the top 1 percent of earners in the sample to equal the 1 percentile level of earnings. This adjustment was made to limit the potential effect that a small number of relatively high earners could have on the sample mean. (See Chapter 5 for a discussion of the distribution of earnings.) The adjustment changed the experimental-control difference in earnings, but not dramatically, and the overall pattern of results remained the same.
17. Tax liability was imputed on the basis of tax rates and regulations summarized in The U.S. Master Tax Guides, 1983, and The State Tax Guide, as well as on the basis of average consumption data for low-income households. See U.S. Bureau of Labor Statistics, 1970.
18. The estimate of federal income taxes paid is based on the "typical" AFDC family with an income over \$5,100 per year filing a head of household return with two dependent children. It should be noted that this approach underestimates the taxes paid by others. The discrepancy is largest for families with more dependents and those with less income, because exemptions and the Earned Income Tax Credit greatly reduce the taxes they pay compared to the typical family. Thus, the overall federal income tax estimate used for this analysis probably overstates the actual taxes paid to some extent.
19. According to staff interviews, research time included about 5 to 10 percent of the time of the central office managers and the Director of Economic Security. This was the amount of time they spent meeting with MDRC staff and collecting demonstration-related information. Because these activities do not encompass resources expended to serve enrollees, it is inappropriate to include them among the costs that are compared to the benefits of the program. Assessment of the

control group and random assignment are also research-related activities. The resources for these activities were eliminated from operating costs simply by deducting the average number of minutes spent in assessment for the controls from the average minutes spent for the experimentals. This difference was multiplied by the average cost of assessment per minute to arrive at the net cost of assessment per experimental.

20. Indeed, the full sequence of activities established by program regulations -- two weeks of job club, three months of individual job search and 12 weeks of work experience -- could be completed in about seven months, assuming no assignment delays.
21. It is impossible to know, of course, precisely how intensive future services will be for longer-term enrollees. Presumably, service intensity will decline over time. Even though individuals may remain formally enrolled for several years, only a portion of them are likely to receive substantial amounts of staff attention. On the basis of interviews with the office supervisors of the two counties concerning the treatment of longer-term enrollees, it is assumed that only about half of the enrollees still in the program are likely to receive significant services during the second year after enrollment, and only about a quarter of those enrolled for a third year are likely to be actively served during that time. The analysis assumes that negligible program resources will be devoted to persons still enrolled after three years. While these assumptions are admittedly rather crude, it is important to remember that most costs are incurred during the first year after random assignment, and fewer experimentals are still enrolled in the program with each passing year. Therefore, the accuracy of these assumptions has little effect on the overall cost estimates.

CHAPTER 7

1. Employment rate increases of 5 to 15 percentage points have been reported for three other experimental studies of job search for the welfare population. Goldman, 1982, found a 5.4 percentage point gain for each quarter of a five-quarter follow-up to structured individual job search for applicants and recipients in Louisville. In the third quarter of follow-up, Goldman et al., 1985, estimated a 7.6 percentage point employment impact for welfare applicants in group job search in San Diego. Another group job search program, this time in Louisville, registered a 15 percentage point employment gain for applicants and recipients over two quarters (Wolfhagen, 1983).

APPENDIX B

1. See, for example, Goldman et al., 1985; Ball, 1984; and Price, 1985.

APPENDIX F

1. See Kemper et al., 1981; Wolfhagen, 1983; and Ketrion Inc., 1980.
2. Ketrion Inc., 1980.
3. Ellwood and Rymer, 1977, p.43.

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