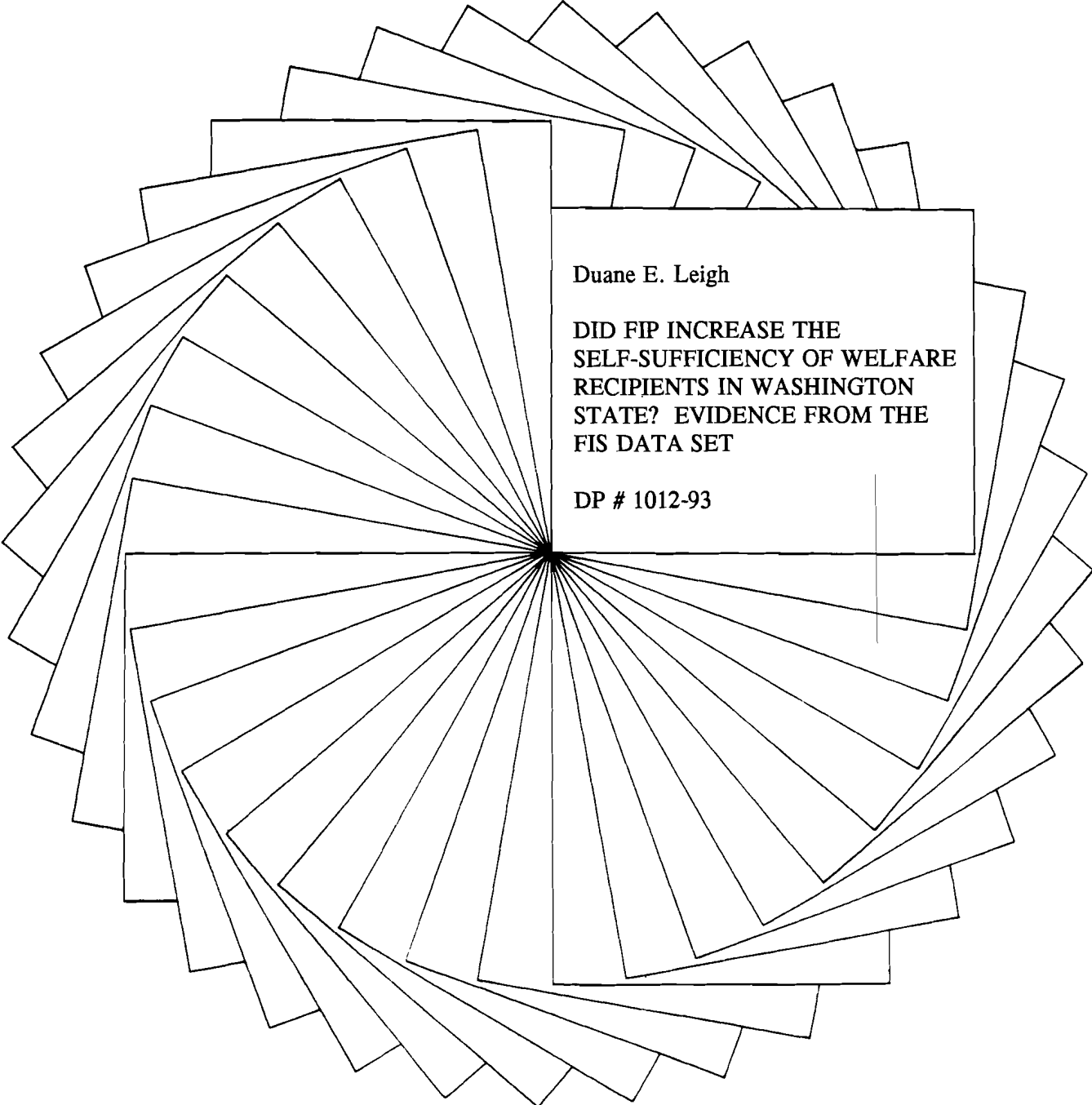

Institute for Research on Poverty

Discussion Papers



Duane E. Leigh

DID FIP INCREASE THE
SELF-SUFFICIENCY OF WELFARE
RECIPIENTS IN WASHINGTON
STATE? EVIDENCE FROM THE
FIS DATA SET

DP # 1012-93

**Did FIP Increase the Self-Sufficiency of Welfare Recipients
in Washington State? Evidence from the FIS Data Set**

Duane E. Leigh
Department of Economics
Washington State University

August 1993

Funding for this project was provided by the Institute for Research on Poverty Small Grants and Visitors Program. Rebecca Blank, Scott Cardell, Mark Gritz, Doug Wissoker, and an IRP affiliate provided helpful comments. The revised draft benefited from the discussion of Tom Corbett and Bill Prosser at the Small Grants Research Seminar held in Washington, D.C., on May 7, 1993.

Abstract

The author estimates the effect of the Family Independence Program (FIP) on the economic self-sufficiency of welfare recipients in Washington state. He finds that, as designed, enrollment in employment and training activities increased under FIP. FIP had no impact, however, on employment rates and earnings, and it actually led to increases in welfare participation and welfare benefits. According to the author, FIP introduced incentives to remain on welfare; this, along with its failure to encourage job placement and job development, is probably to blame for the program's effects on welfare dependency. Data are from the Family Income Study longitudinal survey.

Did FIP Increase the Self-Sufficiency of Welfare Recipients in Washington State? Evidence from the FIS Data Set

I. INTRODUCTION

In the spring of 1987 the Washington state legislature created the Family Independence Program (FIP), an innovative attempt at the state level to design an alternative to the national Aid to Families with Dependent Children (AFDC) program and to the Washington Employment Opportunity Program (WEOP), the state's Work Incentive (WIN) program. AFDC provides income-maintenance support to needy families headed by women while mandating that eligible welfare clients participate in WIN-approved employment and training (E&T) activities. State WIN programs of the 1980s typically offered short-term job search assistance and community work experience. In contrast, the objective of FIP was to increase economic self-sufficiency through a new program model designed to change the behavior of both public assistance clients and welfare agency staff. For welfare clients, FIP provided financial incentives and increased support services to encourage longer-term investments in education and training, with the ultimate objective of increasing employment opportunities at wages and hours sufficient to ensure self-sufficiency. For welfare staff, FIP's new approach to case management was designed to result in a more supportive, client-oriented environment. FIP was initially implemented in July 1988 as a five-year demonstration project. This report offers an evaluation of the extent to which the program increased the self-sufficiency of female welfare clients in Washington state.

To place FIP in the context of recent national policy change, the Family Support Act of 1988, and especially its centerpiece, the Job Opportunities and Basic Skills (JOBS) program, redefined federal policy on welfare employment programs and provided states with incentives to move their welfare systems in new directions. Like Washington state's FIP program, JOBS emphasizes longer-term investments in education and training intended to improve the capacity of AFDC mothers to find

jobs that lead to self-sufficiency. JOBS also offers funding for in-program child care and up to twelve months of transitional child care and Medicaid benefits for individuals leaving welfare for employment. The JOBS program was implemented nationally in October 1990.

Subject to mandated program participation rates and targeting requirements,¹ JOBS gives states new flexibility in how they will respond to federal incentives in designing new programs. Gueron and Pauly (1991: 59) remark that they anticipate great cross-state variation in such program features as the type, quality, and cost of services; the extent to which participation is mandatory or voluntary; the scale of the program; initiatives in E&T programs; and the form of assessment and case management. They also note (1991: 12, 24) that there is very limited evidence available on the effectiveness of key JOBS innovations, including the emphasis on investments in education and skills training.² With information on four years of the program's operation, the experience gained with FIP in Washington state represents an unusual opportunity to add to the knowledge available to state officials grappling with the problem of designing welfare employment programs that meet federal requirements and improve the employability of program participants.

One additional point that should be clarified at the outset is the relationship of this report to the "official" and much larger-scale evaluation of FIP by the Urban Institute. Urban's analysis is based on administrative data collected by state agencies on households registered at five matched pairs of local welfare offices. Used here, in contrast, is a unique state-funded longitudinal data base--the Family Income Study (FIS)--collected from personal interviews with a large sample of public assistance recipients. The present study complements Urban's evaluation in three respects. First, FIS data are available for welfare recipients in more sites (seven FIP sites and eleven non-FIP sites) than the ten matched sites studied by Urban. Second, FIS data include information on a broader range of personal characteristics--most notably education--than do the administrative data used by Urban.

Finally and most important, the present study measures program effects by comparing actual FIP participants with nonparticipants. As pointed out by Greenberg and Wiseman (1992: 45–46), most welfare employment program evaluations, including Urban’s evaluation, make treatment group–control group comparisons (where the treatment group includes program nonparticipants as well as participants) rather than participant-nonparticipant comparisons. The main reason for comparing treatment group members to a control group is the difficult statistical problems involved in measuring program effects where program participation is itself an outcome of the program.³ At the same time, Greenberg and Wiseman note that impact estimates obtained from a treatment group–control group design are a weighted average of program effects for persons who received the services incorporated in the treatment and for persons who did not. Program impact estimates are then partially driven by the magnitude of demonstration participation rates. Consequently, they argue that it is of interest to measure demonstration program impacts in terms of their effects on only those who were actually treated under the program, especially if participation rates can be manipulated by changes in policy.

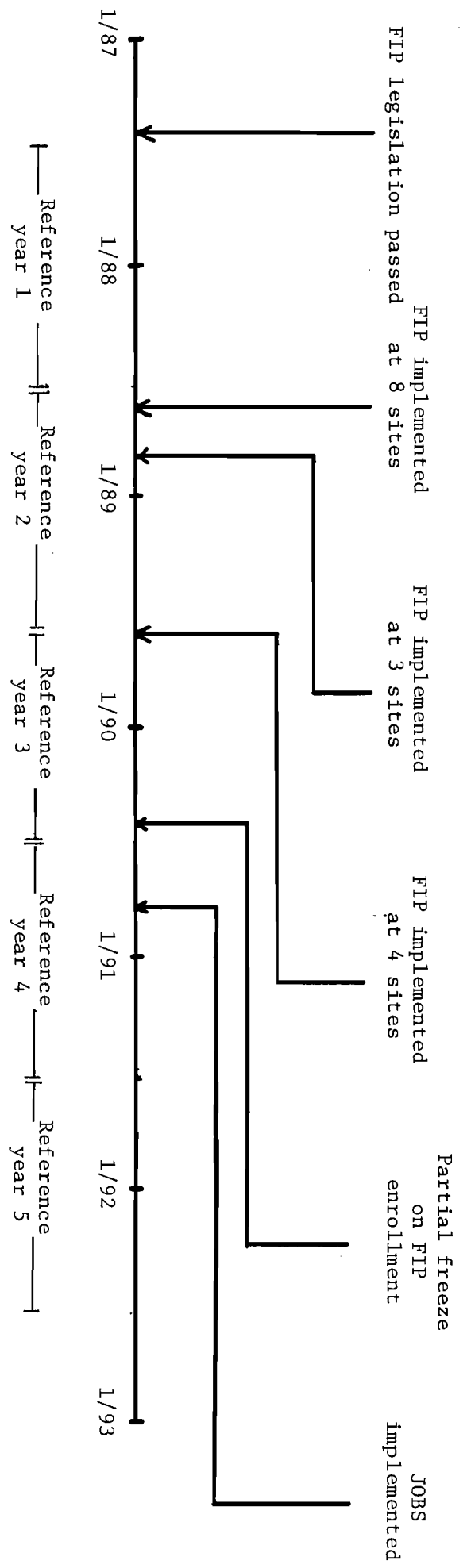
The report is organized as follows. Section II provides a brief overview of FIP. In Section III, the FIS data set is discussed and compared to the administrative data utilized by the Urban Institute. Section IV compares for female FIS respondents household characteristics and pre-FIP outcome variables stratified by enrollment in the FIP and AFDC/WEOP programs. Considered in this section is the choice of FIP program participation by ongoing AFDC/WEOP clients. Section V presents estimates of FIP’s impact on E&T enrollment, while in Section VI, estimates are reported of the program’s net impact on measures of economic self-sufficiency, including employment, earnings, welfare receipt, and welfare benefits. Section VII compares these FIP results to evaluation findings obtained for welfare-to-work programs in other states. Some conclusions are drawn in Section VIII.

To anticipate the main findings of the report, the evidence presented indicates that a voluntary program such as FIP can have a sizable, positive effect on the E&T enrollment of welfare recipients. Nevertheless, estimates of the program's effect in enhancing welfare recipients' chances of economic self-sufficiency are not encouraging. In particular, FIP is found to have little or no effect on measures of employment and earnings while actually increasing welfare dependency. A comparison with five other state welfare employment programs suggests that FIP's lack of emphasis on job placement and its attractive incentives to remain on welfare may be important elements in explaining the unanticipated effect on welfare receipt.

II. AN OVERVIEW OF FIP

As an experimental program, FIP was phased in in three stages. FIP was initially implemented at eight local welfare offices (called Community Service Offices or CSOs) in July 1988. Three more FIP sites were added in October 1988, followed by the final four sites in July 1989. (Refer to Figure 1 for help in keeping these and other key dates in mind.) At the fifteen CSOs allowed to offer FIP, new welfare applicants meeting AFDC eligibility requirements were automatically enrolled in FIP. Ongoing AFDC/WEOP participants who had registered at the same fifteen CSOs were given the opportunity to convert to FIP at their annual recertification interview. New applicants and ongoing AFDC/WEOP clients at the other twenty-seven CSOs in the state were excluded from FIP participation. The AFDC/WEOP participants described in this report thus include public assistance recipients who did not have a chance to enroll in FIP plus ongoing public assistance recipients who could have enrolled in FIP but chose not to.

FIGURE 1. Important Dates in Lifecycle of FIP



Client Flow Model

As described by Nightingale, Holcomb, and O'Brien (1990: 16–25), FIP made two major changes in the services available to public assistance clients. The first was a new client flow model. In non-FIP CSOs, applicants seeking public assistance were processed through a sequence of activities. Applicants were first given an application package that included about 20–25 pages of forms, instructions for completing the forms, and a list of documents required to complete the application. Within a few days, the client underwent an application interview with an intake worker to determine AFDC eligibility. After the application was approved, the client next met with a financial management worker who was responsible for periodically reviewing the case for eligibility. If the client satisfied WIN eligibility criteria or volunteered for WIN, a social worker conducted a WEOP social services assessment and referred the client to an Employment Service/WEOP staff member who conducted the WEOP orientation, completed an employability assessment, and made a referral to an appropriate employment and training program.

FIP introduced operational changes simplifying some of these activities and consolidating others. Three changes were most noteworthy. First, FIP simplified the paperwork involved in filing for AFDC by requiring applicants to complete only an abbreviated 2–3 page form. The full application package was completed by a "case coordinator" in consultation with the applicant at the application interview. Second, the case coordinator assigned each client was responsible for the case from intake forward, including application processing, determining continued eligibility, child care authorization, FIP orientation, and coordination with ES/FIP staff. Finally, clients were introduced to employment-related services sooner than was the case in non-FIP CSOs.

Cash Bonuses and Enhanced Support Services

The second major change was a very different menu of client services. FIP's main categories of program services may be summarized in the following table:

-
1. Food Stamp "cash-out"
 2. Financial incentives to encourage training and employment
 - 5% bonus for participation in an E&T program.
 - 5% bonus for teen parents if they stayed in school and participated in parenting education.
 - 15% bonus for half-time employment.
 - 35% bonus for full-time employment.
 3. Support services
 - Direct child care subsidies for enrollees working, looking for work, or engaged in E&T.
 - Transitional child care and medical benefits for up to twelve months for those who earned enough to leave the program.
 - Parenting education programs for teen parents.
-

Beginning with the first category, the intent of the Food Stamp cash-out was to simplify the administration of the program and to remove the stigma often associated with the use of Food Stamp coupons. Since participation in E&T activities was voluntary in FIP, the four financial incentives listed next were intended to encourage program enrollees to engage in E&T (or to find employment). The incentive payments were calculated as a percentage of the sum of the benefits a family would have received under AFDC and the cash value of its Food Stamp allotment. A "hold harmless" provision guaranteed that the total FIP payment, including incentive bonus payments, would equal or exceed the AFDC payment for a given level of earnings and no child care deductions under AFDC. It should be emphasized that the E&T services available to FIP participants were no different than those available under AFDC/WEOP. In neither program, in addition, were state funds typically supplied to cover the out-of-pocket costs clients incurred in enrolling in education or training programs. Financial assistance was available through federal Job Training Partnership Act (JTPA) and Pell grant programs.

Figure 2 illustrates the effect of the financial incentives on the choice between income and leisure. Using the numerical illustrations worked out by Long and Wissoker (1992: Appendix B), the

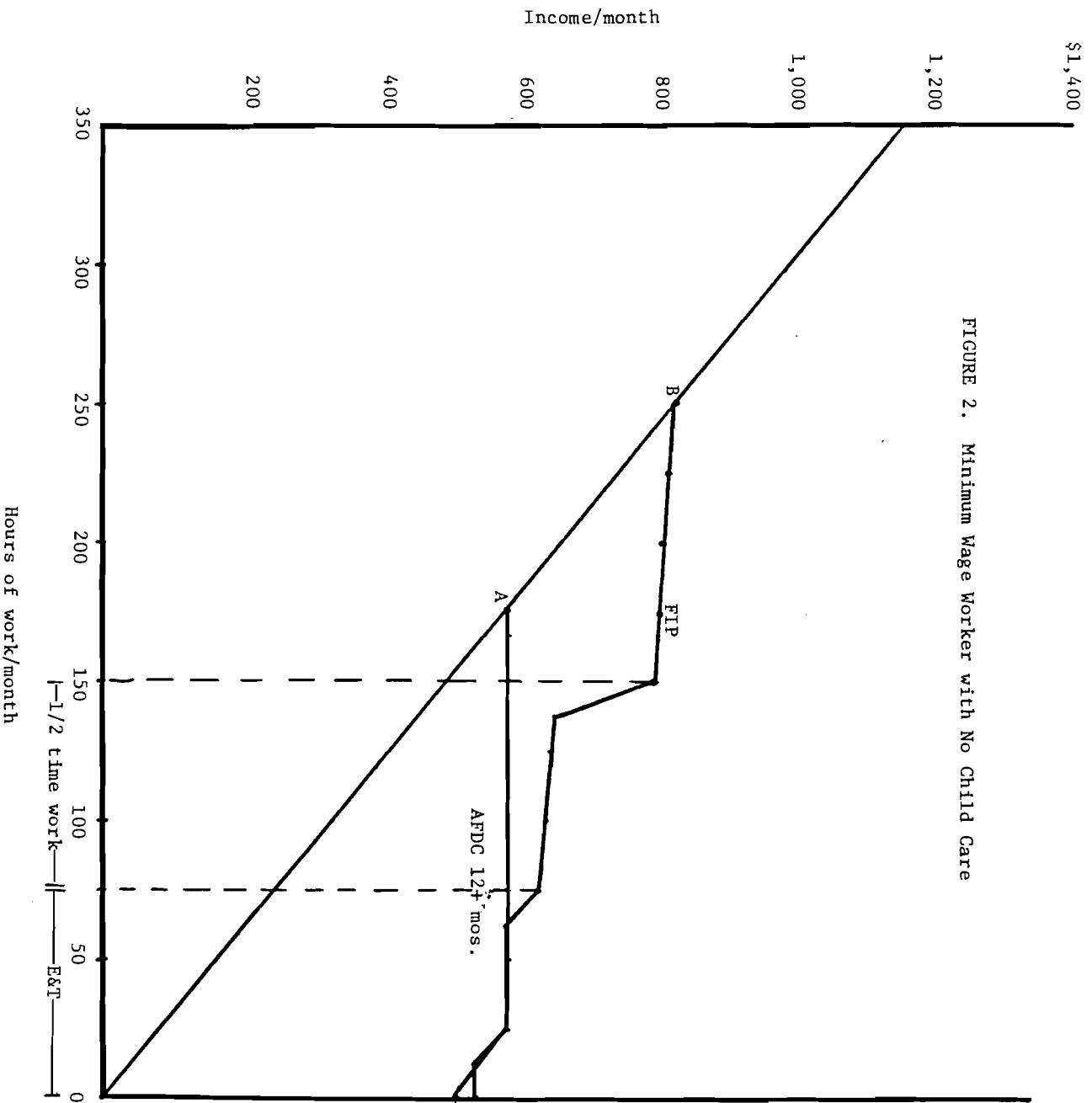


FIGURE 2. Minimum Wage Worker with No Child Care

individual represented in the figure is assumed to be a minimum wage worker earning \$3.35 per hour in 1990 with a family size of three but no child care expenses. The FIP budget constraint is drawn on the assumption that a FIP client receives the 5 percent incentive for enrolling in an approved E&T activity when working less than 75 hours per month, the 15 percent incentive for working half-time (between 75 and 149 hours per month), and the 35 percent incentive for working full-time at 150 or more hours per month. The AFDC budget constraint assumes welfare receipt for more than a year.⁴ Beyond 75 hours of work per month, the figure shows that the FIP financial incentives steepen the FIP budget constraint relative to the AFDC constraint. As a consequence, the break-even level of earned income occurs at about \$838 and 250 hours worked per month for FIP recipients (point B) as opposed to about \$586 and 175 hours worked per month for AFDC clients (point A). It should also be noted that Figure 2 does not include food assistance benefits. However, Long and Wissoker (1992: Appendix B) mention that food assistance benefits will be greater for FIP cases receiving the 15 and 35 percent incentives than for cases with the same level of earnings under AFDC, while FIP cases receiving the 5 percent incentive or no incentive will receive the same level of food assistance as would a similar AFDC case.

In the third category of services, FIP provided a mother with a direct child care subsidy if she was enrolled in E&T, working, or looking for work. The subsidy was 90 percent of the prevailing market rate in the area, with the care provider paid directly if the child was cared for outside the home in a licensed home or child care center. FIP paid the mother directly if the care occurred in a relative's home or in the child's own home. In contrast, AFDC allowed (and still allows) a child care deduction from earned income but did not provide a child care subsidy. Once a client earned enough to leave public assistance, moreover, FIP provided transitional child care and medical benefits for up to twelve months. A widely noted problem with AFDC is that a single mother may choose not to

work outside the home for fear of losing her Medicaid health insurance benefits (see, for example, Ellwood 1988: 176).

Figure 3 illustrates the effect of adding the FIP and AFDC/WEOP child care provisions. The child care deduction from earned income gives the AFDC budget constraint a positive slope up to 250 hours of work per month and sharply increases the break-even level of earned income. Nevertheless, FIP's child care subsidy steepens the FIP budget constraint even more, leading to a sizable gap (exceeding \$240 for hours worked between 150 and 300 per month) between the FIP and AFDC budget constraints for all possible hours worked.⁵

Voluntary Program Philosophy

In addition to these major changes in program services, Table 1 indicates that a third difference distinguishing FIP from WEOP was their participation requirements. FIP was clearly a voluntary program because its financial incentives and support services were designed to elicit changes in client behavior. The "mandatoriness" of WEOP is more complex and requires further discussion. WEOP is mandatory in that participation in E&T activities is required for nonexempt clients. At the same time, a court decision ruled that sanctions could not be imposed on clients failing to comply with this requirement (Nightingale et al. 1991: 2). So how mandatory can a program be that lacks sanctions?

Gueron and Pauly (1991: 12-13) note that the availability of sanctions is beside the point from an operational point of view when, as is typically the case, funding is inadequate to provide services to all eligible clients. Central to a meaningful voluntary/mandatory distinction is the nature of the interaction between clients and caseworkers in the provision of services. Bane (1989) describes the contemporary American welfare office as being essentially a paper-processing factory in which the caseworker/client relationship is best characterized as staff members attempting to make sure that clients are not cheating the system. As she notes, the danger of mandatory workfare programs, such

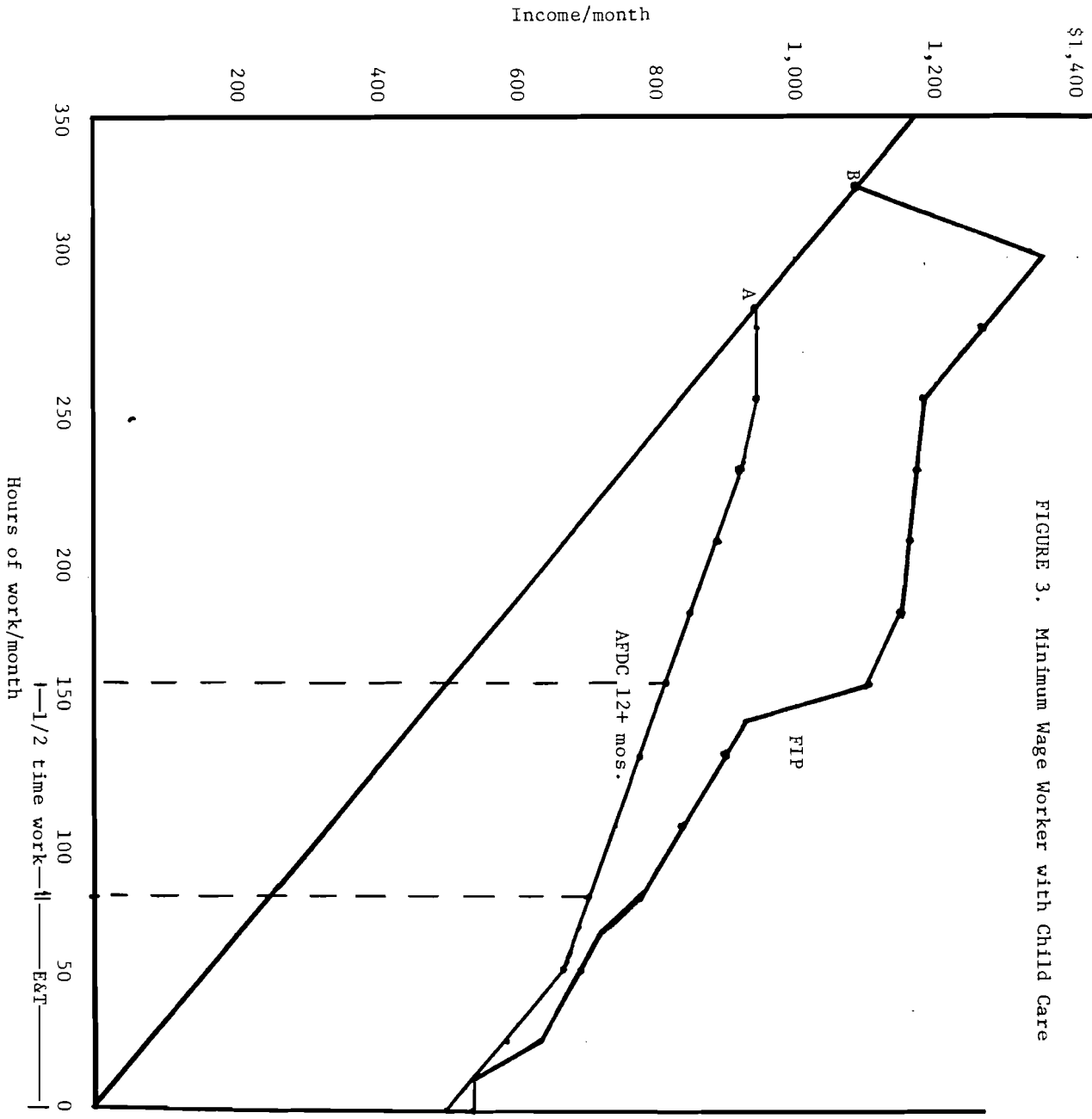


FIGURE 3. Minimum Wage Worker with Child Care

TABLE 1
Selected Features of the FIP, AFDC/WEOP, and AFDC/JOBS Programs
in Washington State

Program Feature	FIP	AFDC/WEOP	AFDC/JOBS
Targeted population	Entire public assistance caseload	AFDC recipients exempting those caring for a child under age 6 ^a	AFDC recipients exempting those caring for a child under age 3 ^a
Participation mandate	Voluntary	Mandatory	Voluntary
Employment and training activities	Wide variety of E&T activities, emphasis on education	Similar to FIP	Similar to FIP but targeted at special groups
Support services			
Child care	Direct child care subsidy	Earned income disregard for child care expenses	In-program child care assistance
Transitional child care	Assistance for up to 12 months	None	Same as FIP
Transitional Medicaid	Assistance for up to 12 months	Assistance for up to 4 months	Same as FIP
Financial incentives	Bonuses for participation in approved E&T programs or finding employment	None	None
Food assistance	Cash	Food stamps	Food stamps

Source: Nightingale et al. (1993: Table II.1).

^aOther exempt recipients include those who are ill or incapacitated, who care for an ill or incapacitated family member, who are employed at least 30 hours per week, who are full-time students, or who reside in an area where the program is not available.

as WEOP, comes from their tendency to slip into a pattern of nominal compliance, with the development of an adversarial relationship between caseworkers and clients.

Rather than relying on threats of sanctions to motivate clients, voluntary programs place more of the burden for program success on the ability of caseworkers to sell clients on the idea that jobs can be found by utilizing program services. Bane (1989: 287) argues that under good management a voluntary program can generate more enthusiasm and commitment on the part of both caseworkers and clients than a mandatory program. Establishing this kind of supportive interaction was clearly the goal of FIP program designers. In particular, their efforts to simplify the application procedure and consolidate case management activities were intended to reduce barriers to program participation and to establish a more personal relationship between clients and caseworkers. It is worth noting that the Urban Institute's second process analysis comments that, despite an increased workload, FIP staff workers exhibited a high level of enthusiasm and commitment to "making this a good program for clients" (Nightingale et al. 1991: 7, 9); and a survey administered as part of the third process analysis found that job satisfaction and morale were higher among staff workers in FIP than in non-FIP sites (Nightingale et al. 1993). Urban's survey of household heads who got jobs and left welfare also provides evidence that former FIP clients are more likely than former AFDC recipients to report positive feelings about their caseworkers (Loprest et al. 1992).

To summarize the discussion of FIP in this section, program designers expected FIP participants to choose to increase their job skills because of the child care subsidy, bonus payments, and more-encouraging caseworkers. The combination of enhanced job skills and fewer barriers to employment was anticipated to, in the long run, increase employment and earnings and decrease welfare dependency relative what would have occurred under AFDC/WEOP.

III. THE DATA

The FIS data set consists of two randomly selected samples of Washington state households: (1) a sample of households receiving public assistance in March 1988 and (2) a sample of households determined to be at risk of public assistance dependency. First-year (or Wave 1) interviews were completed during the summer of 1988 with approximately 1,300 and 800 households, respectively, in the public assistance and at-risk samples. Annual questionnaires allowed the collection of a wealth of longitudinal information on such topics as marital history, education, employment history, public assistance receipt, income and assets, personal health and health insurance, health of children, school and social activities of children, and child care. This study utilizes the public assistance FIS sample to track FIP and AFDC/WEOP clients over time.⁶

A two-stage stratified method was used to select a random sample of welfare recipients in the FIS public assistance sample.⁷ The first stage involved selecting eighteen of the forty-two CSOs serving public assistance recipients in the state. These eighteen sites were chosen to represent three domains of CSOs. To ensure comparability with Urban's evaluation design, representing the domain of CSOs scheduled to offer FIP during 1988 are the five offices selected by Urban as "treatment sites." Similarly, the five Urban Institute "comparison sites" were selected to represent a second domain of sites that were to maintain the regular AFDC/WEOP program for several years. The remaining eight CSOs represent the domain of CSOs that could have implemented FIP at any time. In fact, two of these CSOs did implement FIP in July 1989.

The second stage of the stratification methodology was a random drawing within each of the eighteen CSOs from the March 1988 list of public assistance recipients supplied by the Washington State Department of Social and Health Services (DSHS). Household interviews were allocated across the three CSO domains in such a way that somewhat more than four hundred completed interviews were obtained for each domain.

The overlap between the FIS sample design and the Urban Institute's selection of study sites suggests that attention also be given to Urban's FIP evaluation design and its use of administrative data. Because FIP was a saturation experiment with the objective of changing the welfare environment in a community, Urban took the position that it was not possible to use a true experimental design in which individuals are randomly assigned to treatment or control groups. Rather, a quasi-experimental design was chosen in which pairs of CSOs were first matched by location in rural or urban areas and by location in eastern or western Washington. Within each of these four substrata, CSOs were then matched by seven measures of welfare caseloads and the local labor market. Finally, one CSO in each of five matched pairs was randomly assigned to be a treatment site and the other assigned to be a comparison site.

Data on household characteristics available for the Urban Institute's analysis were drawn from client records in the management information systems of the FIP, AFDC, and Medicaid offices. These administrative data include clients' age, number and age of children, race, ethnicity, and number of adults in the household. Outcome variables examined in Urban's net impact analysis are earnings, employment, receipt of a welfare grant, and average size of the monthly welfare grant. Administrative data on these variables are available from records maintained by the Unemployment Insurance (UI) program and ES (Employment Service). In addition, data on E&T activities were obtained from administrative records supplied by ES, JTPA, the State Board for Community College Education, and the Higher Education Coordinating Board.

While the use of administrative data ensures large sample sizes, Urban points out in its baseline and net impact analyses that there are three important gaps in these data (see Long and Wissoker 1991, 1992; and Long, Wissoker, and Jeffries 1991). First, the educational attainment of welfare clients is not available in the records of welfare agencies. Second, UI employment and earnings data are not available for welfare clients engaged in "off-the-book" employment, jobs in

neighboring states, and occupations not included in the wage reporting system (such as certain agricultural jobs and domestic service jobs). Long and Wissoker (1992: 55) note that a comparison of earnings data from the UI system with earnings information reported in welfare records indicates that UI data do not contain earnings information for a "large share" of the households reporting earnings to FIP or AFDC. Finally, while community college enrollment is supplied by the State Board for Community College Education (except for enrollment in out-of-state community colleges), enrollment data are not available for other institutional providers of E&T services in Washington state. These other providers include proprietary vocational schools, state-funded vocational/technical institutes, and four-year colleges.

Since FIS data were collected from personal interviews with welfare clients, none of these information gaps is a problem for the present analysis. Of course, use of information obtained from personal interviews raises issues relating to the reliability of information respondents provide on such potentially sensitive variables as the dollar amount of earnings, assets, and public assistance benefits, as well as the timing of earlier spells of welfare and employment.

IV. HOUSEHOLD CHARACTERISTICS AND PRE-FIP OUTCOME MEASURES

Identification of the impact on a particular outcome variable (call it Y) of a program like FIP requires a measure of what participants' level of Y would have been if they had not gone through the program. Used here to measure what Y would have been for program participants in FIP's absence is the observed level of Y for participants in AFDC/WEOP. Hence, the net impact of FIP is estimated as the difference between the average level of Y for FIP and AFDC/WEOP participants. In contrast, Urban's net impact estimates are differences between the average outcomes for welfare clients in the treatment and comparison sites. Long and Wissoker (1992: 32) thus remark that Urban's results are diluted estimates of the effect of FIP for program participants.

Household Characteristics

Use of an evaluation methodology comparing program participants with nonparticipants immediately raises the question of how closely AFDC/WEOP respondents in the FIS data set resemble FIP respondents in terms of measurable personal characteristics including their need for child care. Such a comparison will prevent one from crediting FIP with favorable differences in outcome measures that are really attributable to preprogram differences between FIP and AFDC respondents in their personal characteristics and child care needs. Similarly, FIP and AFDC/WEOP respondents should be compared to identify observable differences in outcome variables that existed prior to FIP.

The personal and other characteristics of FIP and AFDC/WEOP respondents are expected to be similar because, as noted, an important objective in choosing the sample design for FIS was conformity with the Urban Institute's quasi-experimental design. Using the first wave of FIS data, where most Wave 1 interviews were conducted during the summer of 1988, Table 2 shows that female FIP and AFDC/WEOP respondents are indeed closely matched in terms of their personal characteristics. Individuals in both groups are likely to be white, non-Hispanic women in their late twenties or early thirties who are not married.⁸ Possibly the only differences worth mentioning are that FIP respondents are a little more than two years younger than AFDC/WEOP respondents, are less likely to be married (and more likely to be divorced), and are more likely to have graduated from high school. The statistically significant 7 percentage point difference in high school graduation rates may reflect a difference in motivation to get off welfare. Nevertheless, FIP and AFDC/WEOP respondents are clearly comparable in their low level of formal education. More than half of the members of both groups are high school dropouts (measured as either no degree earned or a GED certificate). At the other extreme, only 4 percent of FIP enrollees and 6 percent of AFDC clients possess a postsecondary academic degree.

TABLE 2
Personal Characteristics and Family Responsibility Variables
for Female FIP and AFDC/WEOP Respondents, Wave 1 Data

Variable	FIP (N=285)	AFDC/WEOP (N=631)	Difference
Mean age as of 6/87	28.9	31.2	-2.3**
Race			
White	81.8%	79.5%	2.3%
Black	5.2	5.4	-0.2
American Indian	4.9	5.4	-0.5
Asian/Pacific Islander	1.4	3.0	-1.6
Other	6.7	6.7	0.0
Hispanic	10.3%	7.0%	3.3%
Marital status			
Married	8.4%	17.0%	-8.6%**
Separated	15.1	15.7	-0.6
Divorced	42.5	35.0	7.5**
Widowed	0.0	2.3	-2.3**
Never married	34.0	30.0	4.0
Degree earned			
No degree	37.9%	40.0%	-2.1%
High school	40.3	33.3	7.0**
GED	15.0	17.6	-2.6
Postsecondary	3.9	5.9	-2.0
Other	2.9	3.2	-0.3
Mean no. of children in household	2.12	2.08	0.04
Youngest child < 6 years in household	66.7%	61.5%	5.2%*
Mean no. of adults in household	1.42	1.54	-0.12**

Note: FIP clients are respondents enrolled in FIP at least 1 month during July 1988 to May 1991. AFDC/WEOP clients are respondents enrolled in AFDC/WEOP at least 1 month during June 1987 to May 1991. Number of observations is slightly lower for particular variables than the N indicated because of missing data.

* and ** indicate statistical significance at the 10 percent and 5 percent levels, respectively.

Turning to the available measures of family responsibilities, large families are seen in Table 2 to be reasonably infrequent. The average number of children in the home is slightly over two for both FIP and AFDC/WEOP respondents. A majority of women in both groups have a child under age six in their households, although a higher percentage of FIP clients than AFDC/WEOP clients are responsible for raising a young child. Consistent with the evidence on marital status, FIP respondents are somewhat less likely than AFDC respondents to have another adult in the household who is potentially available to assist in child care and other household chores.

In addition to examining only females, two restrictions were imposed in selecting the FIP and AFDC/WEOP respondents described in Table 2 and in the following tables. First, FIP respondents are defined as women who report at least one month of FIP enrollment between July 1988 and the close of Reference Year 4 on May 31, 1991.⁹ AFDC/WEOP respondents, in turn, are women who report being on AFDC (but never on FIP) for at least one month during the entire June 1987–May 1991 period covered by Reference Years 1 through 4. Second, respondents must have answered the lead question in the sequence of questions about schooling and job training activities posed in the Wave 3 FIS questionnaire. The intent of this restriction is to limit the sample to respondents for whom both pre- and post-FIP information is available. Since most Wave 3 interviews were carried out in the summer of 1990 and FIP was fully implemented in July 1989, Wave 3 is the first available post-FIP (or, more accurately, post-FIP implementation) wave of FIS data.¹⁰ It is also worth noting that most Wave 3 interviews were completed prior to the implementation of JOBS in October 1990.

Pre-FIP Outcome Measures

Table 3 examines the extent to which FIP and AFDC/WEOP respondents engaged in E&T activities, relied on public assistance, and participated in the labor market during Reference Year 1, a twelve-month period just prior to the implementation of FIP in July 1988. Observed pre-FIP differences between the two groups are reasonably small. In particular, the table shows that there is

TABLE 3

**Pre-FIP Measures of E&T Enrollment, Welfare Dependence, and Labor Market Activity
for Female FIP and AFDC/WEOP Respondents, Reference Year 1**

Outcome Variable	FIP (N=285)	AFDC/WEOP (N=631)	Difference
Ever in E&T activity	31.2%	27.4%	3.8%
Welfare			
Ever on AFDC	100.0%	100.0%	0.0%
Continuously on AFDC	73.3%	66.2%	7.1%**
Annual AFDC benefit			
Mean	\$4,803	\$4,604	\$199
Median	4,764 [273]	4,764 [589]	0
Labor market			
Ever employed for pay	40.4%	37.7%	2.7%
Among those employed:			
Full-year employment	14.8% [115]	13.9% [238]	0.9%
Annual earnings			
Mean	\$2,619	\$3,417	\$-798**
Median	1,802 [108]	2,072 [227]	-270
Hourly wage			
Mean	\$4.45	\$4.80	\$-0.35*
Median	4.00 [110]	4.42 [227]	-0.42

Note: FIP and AFDC/WEOP respondents are defined in notes to Table 2. Reference Year 1 covers the June 1987 to May 1988 period. Number of observations that differ from those shown in column heads is indicated in brackets.

* and ** indicate that means are significantly different at the 10 percent and 5 percent levels, respectively. Significance tests are not shown for medians.

no significant difference in the percentage of FIP and AFDC/WEOP respondents who enrolled in E&T between June 1987 and May 1988. Recall that during this pre-FIP time period all welfare recipients with children older than age five were expected to participate in E&T activities approved by WEOP.

With respect to welfare dependency, all respondents should have been on AFDC during Reference Year 1, since the FIS public assistance sample is restricted to public assistance recipients in March 1988. Table 3 also provides evidence that women who subsequently opted to enroll in FIP were more likely to have continuously received AFDC benefits than AFDC/WEOP recipients. Annual AFDC benefits are found to be essentially the same for both groups.

Regarding labor market activity, Table 3 indicates that the proportions of FIP and AFDC/WEOP clients who were employed at all during the reference year are similar at about 40 percent. Among the employed, less than 15 percent of the members of both groups were engaged in full-year employment. The very modest annual earnings estimates shown for these respondents reflect the predominance of part-year work. There is also some evidence that both pre-FIP annual earnings and wages are somewhat lower for FIP than AFDC/WEOP respondents. The Urban Institute's baseline impact analysis shows that between treatment and comparison sites there is no significant difference in monthly earnings and size of monthly AFDC grants (see Long, Wissoker, and Jeffries 1991: 20).

Program Choice among Ongoing AFDC/WEOP Clients

Section II described that while new applicants at CSOs offering FIP were automatically enrolled in FIP, ongoing AFDC/WEOP clients registered at these CSOs had the option to convert to FIP at their annual recertification interviews. Since the FIS public assistance sample consists only of welfare recipients in March 1988, most FIP clients are likely to be converters to FIP. The AFDC/WEOP sample, however, includes public assistance recipients who did not have the option to

convert to FIP as well as recipients who could have converted but chose not to. What can be said about the fraction of the AFDC/WEOP sample that falls into the latter category?

Table 4 presents the numerical distribution of female FIP and AFDC/WEOP respondents broken down by residence in FIP and non-FIP CSOs and, for FIP CSOs, by FIP implementation date. The table indicates that 124 respondents or 19.7 percent of the AFDC/WEOP sample were registered at FIP CSOs and therefore had the choice to convert to FIP but decided not to. (Note that in this context the word "choice" is loosely defined to include the choice made by respondents located at FIP sites to leave welfare before they were actually eligible to convert to FIP.) Consequently, some 80 percent of AFDC/WEOP respondents did not have a choice between the two programs.

Table 5 compares average values of selected personal characteristics for FIP converters and the two groups of AFDC/WEOP respondents--FIP nonconverters and those not eligible for FIP. Between the two groups of AFDC/WEOP respondents, observed differences in personal characteristics are small for most variables, including age, race, ethnicity, number of children, youngest child under age six, and number of adults in the household. Intriguing differences of larger magnitude are observed, however, for marital status and possession of a high school diploma. Comparing FIP converters and nonconverters, even larger differences appear for the marital status and high school graduation variables. These substantial differences suggest that estimates of the net impact of FIP on outcome variables must take into account the possibility that observed variables influence selection into the program.

Returning to Table 4, three other observations should be made. First, given the overlap between the FIS sample design and the Urban Institute's selection of study sites, it is expected that a large fraction of FIP respondents in the FIS sample will be registered at Urban's five treatment sites. Indeed, the table shows that 215 individuals or about three-quarters of FIP respondents are located at the Urban Institute treatment sites (those implementing FIP in July and October 1988). Second, the

TABLE 4

**Distribution of Female FIP and AFDC/WEOP Respondents by Category
of CSO and FIP Implementation Date**

CSO Category and FIP Implementation Date	Number of Respondents		% FIP Enrollees
	FIP	AFDC/WEOP	
FIP CSOs:			
Implemented 7/88 (2 sites)	99	29	77.3
Implemented 10/88 (3 sites)	116	54	68.2
Implemented 7/89 (2 sites)	32	41	43.8
Non-FIP CSOs (11 sites)	38	507	7.0
Total	285	631	

Note: FIP and AFDC/WEOP respondents are defined in notes to Table 2.

TABLE 5

**Selected Household Characteristics for Female Public Assistance
Respondents, by FIP Conversion Status, Reference Year 1**

Variable	FIP Converters (N = 285)	AFDC/WEOP Respondents	
		FIP Nonconverters (N = 124)	Not Eligible for FIP (N = 507)
Mean age as of 6/87	28.9	30.9	31.3
Nonwhite	18.2%	21.0%	20.7%
Hispanic	10.3%	8.1%	6.7%
Married	8.4%	22.6%	15.6%
Degree earned			
No degree	37.9%	43.1%	39.3%
High school	40.3	24.4	35.5
GED	15.0	15.5	18.0
Postsecondary	3.9	8.1	5.4
Other	2.9	8.9	1.8
Mean number of children in household	2.12	1.97	2.11
Youngest child < 6 years in household	66.7%	63.4%	61.0%
Mean number of adults in household	1.42	1.55	1.54

Note: AFDC/WEOP respondents are defined in notes to Table 2. Reference Year 1 covers the June 1987 to May 1988 period.

rate at which program-eligible respondents chose to convert to FIP declined sharply from 68 percent to less than 50 percent between the October 1988 and July 1989 implementation dates. Nightingale et al. (1991: 9) suggest that by July 1989 it was becoming apparent that the JOBS program passed in 1988 would share a number of the programmatic features of FIP. Consequently, caseworkers might well have stopped working as hard to sell FIP to eligible clients by July 1989 than they did earlier when the program was unique.

Finally, Table 4 indicates that 38 respondents reported that they converted to FIP although they were not recorded as being registered at a FIP CSO. These individuals represent something of a puzzle since, in principle, they should not have been eligible for FIP. While the explanation may simply be coding error, Long and Wissoker (1992: 19) report the existence of a number of individuals located at comparison sites (13 percent of ongoing participants) who moved to treatment sites and received FIP benefits. The authors note that these "crossover" individuals have the effect of narrowing the difference in services between treatment and comparison sites and, consequently, of downwardly biasing reported net impact estimates. Known in the literature as "contamination bias," this problem is not an issue in the present study because respondents receiving FIP services are categorized as FIP clients.

V. POST-FIP ENROLLMENT IN E&T ACTIVITIES

Although FIP was designed to increase economic self-sufficiency by encouraging education and training, it is not clear that the services offered by the voluntary FIP program will necessarily stimulate E&T enrollment. For welfare recipients not initially employed, higher bonuses for part-time and especially full-time work may induce a shift toward employment at the expense of training. It is primarily for jobless individuals unable to find full-time employment without further training (presumably a large group) that FIP's financial bonuses and child care benefits should increase the

E&T rate. For welfare recipients already working, FIP is expected to enhance the relative attractiveness of employment. Only for persons working because they cannot afford to be enrolled in a training program might the FIP bonus and offer of child care generate a rise in E&T enrollment.

Differences in Means

To determine if FIP did in fact raise E&T enrollment, it is useful to begin by comparing mean E&T rates for FIP and AFDC/WEOP clients. The first row of Table 6 repeats from Table 3 mean E&T rates in the pre-FIP Reference Year 1. Rows 2 through 4 show post-FIP means for Reference Years 2, 3, and 4. During each post-FIP year, the enrollment rate for FIP respondents is calculated over respondents participating in FIP during that or an earlier year. Thus, the larger number of observations used in Row 3 than in Row 2 reflects the additional individuals located at sites implementing FIP in July and October 1988 who opted to convert during Reference Year 3 plus FIP participants located at sites that implemented FIP in July 1989.

In the AFDC/WEOP column, two E&T enrollment rates are shown for Reference Years 2–4. Rows labeled "a" display rates calculated over all respondents regardless of the year in which they participated in AFDC/WEOP. Rows labeled "b" more closely align AFDC/WEOP and FIP respondents by calculating enrollment rates only for AFDC/WEOP participants during that or an earlier year excluding the pre-FIP Reference Year 1. In Row 2a, for example, the 29.4 percent rate is calculated over all respondents in AFDC/WEOP in any year including Reference Year 1, while 30.2 percent in Row 2b is the E&T rate for respondents enrolled in AFDC/WEOP in Reference Year 2 only. Similarly, Row 3b compares FIP recipients in Reference Years 2 or 3 to AFDC/WEOP recipients in either of those two years only. Despite the sizable drop in number of observations moving from a to b for each reference year, there is little change in the calculated enrollment rate.

The E&T enrollment rate reported for FIP participants shows a substantial jump in Reference Year 2 from the baseline rate in Row 1, resulting in a difference in means in that reference year on

TABLE 6

**E&T Enrollment Rates for Female FIP and AFDC/WEOP
Respondents, Reference Years 1 through 4**

Reference Year	FIP ^a	AFDC/WEOP ^b	Difference
1. Reference Year 1 (6/87-5/88)	31.2% [285]	27.4% [631]	3.8%
2. Reference Year 2 (6/88-5/89)			
a. All AFDC/WEOP respondents	45.5 [156]	29.4 [623]	16.1**
b. AFDC/WEOP respondents on welfare rolls	45.5 [156]	30.2 [569]	15.3**
3. Reference Year 3 (6/89-5/90)			
a. All AFDC/WEOP respondents	39.4 [274]	26.3 [631]	13.1**
b. AFDC/WEOP respondents on welfare rolls	39.4 [274]	27.0 [585]	12.4**
4. Reference Year 4 (6/90-5/91)			
a. All AFDC/WEOP respondents	34.1 [270]	23.3 [593]	10.8**
b. AFDC/WEOP respondents on welfare rolls	34.1 [270]	23.4 [551]	10.7**

Note: FIP and AFDC/WEOP respondents are defined in notes to Table 2. Number of observations is indicated in brackets.

^aCalculated in Rows 2-4 over FIP respondents in that year or an earlier year for whom E&T information is available.

^bRows labeled "a" are calculated over all AFDC/WEOP respondents for whom E&T information is available. Rows labeled "b" are calculated only for AFDC/WEOP respondents in that or an earlier year excluding Reference Year 1.

** Indicates statistical significance at the 5 percent level.

the order of 15–16 percentage points. Post-FIP differences between FIP and AFDC/WEOP respondents then drop off somewhat to 12–13 percentage points in Reference Year 3 and 11 percentage points in Reference Year 4. All of the post-FIP differences are significantly different from zero. The downward trend in the size of the differences may reflect a wearing off of FIP's novelty over time. Or it may have to do with more-motivated respondents enrolling in E&T programs as soon as they are eligible to convert to FIP, leaving the enrollment rate in later years to reflect the decisions of less-motivated individuals. One might also have expected the difference in means to fall even more moving between Reference Years 3 and 4 because of the implementation of JOBS in October 1990.¹¹ The table indicates that the E&T rate fell rather than rose for AFDC/WEOP respondents.

In addition to increasing the E&T enrollment rate, FIP may also affect the choices of institutional training provider and training curriculum. Table 7 displays distributions by institutional provider and curriculum for FIP and AFDC/WEOP respondents engaged in an E&T activity in Reference Year 3. Reference Year 3 is selected for more detailed analysis since it begins near the date at which the final group of FIP sites implemented FIP (July 1989) and ends prior to the implementation of the federal JOBS program in October 1990.

Among major categories of training providers, enrollment in a community college is seen to be by far the most frequent choice of both FIP and AFDC/WEOP respondents. FIP respondents are about 7 percentage points more likely than AFDC/WEOP respondents to choose a community college program, although this difference is not significantly different from zero. Nevertheless, programs supplied by institutional providers other than the community college system are also selected reasonably frequently by both groups of respondents. In particular, nearly 17 percent of AFDC/WEOP respondents enrolled in a vocational/technical institute (VTI) program during Reference Year 3. Recall from Section III that an important gap in the administrative data used by the Urban

TABLE 7

**Institutional Training Provider, Training Curriculum, and Length of Training
for Female FIP and AFDC/WEOP Respondents Enrolled in an E&T Activity,
Reference Year 3**

E&T Variable	FIP	AFDC/WEOP	Difference
Institutional provider			
High school	3.7%	1.9%	1.8%
VTI	12.0	16.5	-4.5
Private vocational school	2.8	4.4	-1.6
Apprenticeship	0.0	2.5	-2.5**
Community college	54.6	48.1	6.5
Four-year college	6.5	8.2	-1.7
Other	20.4	18.4	2.0
	[108]	[158]	
Curriculum^a			
Vocational	42.9%	48.3%	-5.4%
Basic education	53.6	44.9	8.7
OJT	20.2	34.8	-14.6**
Job search assistance	28.6	30.5	-1.9
GED preparation	21.4	19.5	1.9
Academic degree	40.5	33.9	6.6
Other training program	4.8	7.6	-2.8
	[84]	[118]	
Mean hours per week	17.3	16.9	0.4
	[102]	[148]	
Mean annual hours	430	388	42
	[102]	[149]	

Note: Respondents must be enrolled in FIP or AFDC/WEOP in Reference Year 2 or Reference Year 3. Reference Year 3 covers the June 1989 to May 1990 period. Number of observations is shown in brackets.

^aMultiple responses mean that percentages do not sum to 100.

** Indicates statistical significance at the 5 percent level.

Institute is the absence of measures of enrollment in training institutions other than community colleges.

Breaking down E&T activities by curriculum, both FIP and AFDC/WEOP respondents show more interest in making longer-term investments in education and vocational training than in short-term job search assistance (JSA). Among education and training curriculums, FIP respondents place more emphasis on formal education (as reflected in the basic education and academic degree categories), while AFDC/WEOP respondents are more interested in upgrading job-specific skills through classroom vocational training and on-the-job training (OJT). Only in the case of OJT, however, is there a statistically significant difference. In the Urban Institute's second process analysis, Nightingale et al. (1991: Chap. IV) observe that JSA declined in importance in both treatment and comparison sites during the late 1980s, while institutional training became more prevalent. Consistent with the findings in Table 7, in addition, the authors report that FIP sites were more likely to experience an increase in enrollment in both remedial and postsecondary formal educational programs, while the rise in institutional training in non-FIP sites is attributable more to increased vocational training.

Correction for Self-Selection

The program choice given ongoing welfare recipients residing in FIP sites makes it unlikely that FIP and AFDC/WEOP respondents are randomly selected into the two programs. Indeed, the earlier discussion of Table 5 emphasized differences between FIP converters and eligible nonconverters in observed educational attainment and marital status. Unobservable variables are also likely to affect program selection. Differences in means cannot therefore be presumed to be unbiased estimates of FIP net impacts. The strategy followed here is to investigate the extent to which alternative econometric techniques intended to correct for selection bias yield program impact estimates that are substantially different from differences in means.

Heckman and Hotz (1989: 865) use the term "selection on observables" to capture selection bias due to the influence of observed variables on program selection. To produce consistent estimates of program impacts, they suggest as a natural starting point the use of "linear control function estimators" by which they mean the inclusion as ordinary least squares regressors of observed variables that influence program selection. Table 8 presents alternative estimates of FIP's net impact on E&T activities in Reference Year 3. Appearing in Row 1 as a baseline estimate is the difference in means transferred from Row 3b of Table 6. Rows 2-4 are linear control function estimates. Shown in each row are ordinary least squares (or linear probability model) and logistic function estimates calculated for all respondents who are FIP or AFDC/WEOP clients in either Reference Year 2 or Reference Year 3 and who report usable data for the degree earned, number of children, and number of adults variables. (These restrictions on the explanatory variables reduce the number of observations used to 843 rather than the total of 916 observations in Table 5.) The logistic estimates strongly support the OLS estimates, and the discussion focuses on the OLS estimates.

Beginning with Row 2, explanatory variables included in the regression are the personal characteristics and family responsibility measures displayed earlier in Table 2, including education and marital status. Control for these likely determinants of the FIP participation decision process reduces the estimated program net impact just marginally to 10.3 percent from the baseline estimate of 12.4 percent. Estimate 3 adds to these individual characteristics a vector of site-specific dummy variables measuring the eighteen CSOs represented in the FIS data set. CSOs are likely to differ in a number of respects, including access to providers of E&T programs, labor market conditions, and site-specific FIP and WEOP services.¹² The addition of these site-specific dummies raises the estimated net impact of FIP to equal the baseline estimate.

Row 4 substitutes three dummy variables measuring FIP implementation dates for the site-specific dummies in Row 3. As shown in Table 4, the FIP participation rate decreased over time,

TABLE 8

Estimates of Net Impact of FIP on E&T Enrollment, Reference Year 3

Estimation Approach	OLS	Logistic
1. Difference in means for participants		0.124**
2. Controlling for individual characteristics ^a	0.103** (3.01)	0.478** (2.92) [0.102]
3. Controlling for individual characteristics and site dummies ^b	0.124** (2.68)	0.613** (2.64) [0.131]
4. Controlling for individual characteristics and FIP implementation date dummies ^c	0.117** (2.55)	0.547** (2.44) [0.117]
5. Instrumental variables replacing FIP dummy variable by its predicted value ^d	0.094* (1.83)	0.427* (1.75) [0.091]
6. Controlling for self-selection in the FIP participation decision ^e	0.097** (2.20)	0.436** (2.04) [0.093]
7. Difference in means for FIP and non-FIP sites		0.056*

Note: Respondents must be enrolled in FIP or AFDC/WEOP in Reference Year 2 or Reference Year 3. Reference Year 3 covers June 1989 to May 1990. N = 843 for the estimates in Rows 2-6. Numbers in parentheses are t-statistics. Shown in brackets are partial derivatives of the probability of E&T enrollment with respect to the FIP dummy variable calculated as $b_{FIP} * P * (1-P)$, where b_{FIP} is the coefficient estimate on FIP and P is the probability of E&T enrollment approximated by the sample mean.

^aControl variables include age, race, ethnicity, marital status, degree earned, number of children, youngest child under age 6, and number of adults in household.

^bAdded to control variables listed in note a are 17 site-specific dummy variables.

^cAdded to control variables listed in note a are 3 dummy variables representing FIP implementation dates.

^dThe auxiliary logistic equation used to predict Prob(FIP) includes, in addition to three FIP implementation date dummies, the control variables listed in note a. Control variables in the E&T equation are those listed in note a.

^eEstimated with a two-step procedure. A logistic FIP participation function is first estimated using data only for FIP converters and nonconverters and including two FIP implementation date dummies in addition to the control variables listed in note a. Using these parameter estimates to construct a selectivity-correction variable, an E&T equation is then estimated controlling for the explanatory variables in note a and including on the right-hand side of the equation the selectivity-correction variable.

* and ** indicate statistical significance at the 10 percent and 5 percent levels, respectively.

particularly between the October 1988 and July 1989 implementation dates. The implementation date dummies should therefore represent important determinants of FIP participation. Nevertheless, the FIP net impact estimate shown in Row 4 is less than 1 percentage point lower than the baseline estimate. Overall, the three linear control function estimates fall in a narrow interval between 10 and 12 percent that includes the baseline estimate. All of the linear control function estimates are statistically significant.

Treating FIP participation as endogenously determined, the estimate in Row 5 uses an instrumental variables (IV) procedure to isolate the impact of FIP on E&T enrollment from its effect in attracting eligible members of the AFDC population especially interested in training. The first step in the procedure is to predict the probability of FIP participation [Prob(FIP)] for each respondent from a logistic equation with a FIP dummy dependent variable. Moffitt (1991: 296–97) suggests that identifying variables to be included in a FIP participation equation may be found in the natural experiment in which government officials decide to fund a program in one site but not in another for reasons unrelated to the outcome variable under consideration. Dummy variables representing the three groups of CSOs at which FIP was sequentially implemented satisfy the conditions for choosing identifying variables; that is, these variables should affect the probability of receiving treatment but have no direct relationship to E&T enrollment. Explanatory variables included in the first-step regression thus include the individual characteristics controlled for in Estimate 2 plus three dummy variables representing FIP implementation dates. As expected, the FIP implementation date variables are found to be important predictors of FIP participation, with implementation in July 1989 having a distinctly smaller estimated effect than the two earlier dates. Similarly, possession of a high school diploma sharply increases the likelihood of FIP participation, while being married reduces this probability.

The second step of the IV procedure substitutes $\text{Prob}(\text{FIP})$ for the dummy variable FIP in the E&T equation used to obtain Estimate 2. A comparison of Estimate 5 with Estimate 2 indicates that accounting for the possible joint determination of FIP participation and E&T enrollment has a fairly modest effect on FIP's estimated net impact. While its estimated t-statistic decreases due to an increase in its standard error, Estimate 5 is still sizable at over 9 percent and marginally statistically significant.

A final econometric approach proceeds on the assumption that unmeasured variables affect both FIP participation and E&T enrollment and attempts to model the program participation decision of welfare recipients who actually made this decision.¹³ The first step in the procedure that yields the estimates in Row 6 uses a logistic equation to obtain parameter estimates of a FIP decision function. Data used in estimating this equation are restricted to observations for respondents who had the option to select FIP, that is, FIP converters and nonconverters ($N=372$). Included on the right-hand side of the FIP decision equation (but excluded from the E&T enrollment equation) are two dummy variables measuring FIP implementation dates in July and October 1988. With these parameter estimates, a selectivity-correction variable (Heckman's lambda) is calculated for each observation used.

The second step of the procedure uses data for all three categories of respondents ($N=843$) to estimate an E&T equation corrected for selection bias. In this equation, the selectivity-correction variable takes the value zero for AFDC/WEOP respondents in non-FIP sites, since for them FIP was not an option. Estimated coefficients on the lambdas are not statistically significant, and Row 6 reports a selectivity-corrected net impact estimate of nearly 10 percent.¹⁴ Hence, Estimates 5 and 6 are both distinctly positive and only slightly smaller than the 10–12 percent range yielded by the linear control function estimates. Relative to the annual enrollment rate calculated for AFDC

participants in Reference Year 3 (27.0 percent), program net impact estimates in the 9 to 12 percent range represent a 33 to 44 percent increase in E&T enrollment.

Treatment Site-Comparison Site Differences

The final row of Table 8 uses FIS data to contrast differences in means obtained using the Urban Institute's approach comparing treatment and comparison sites to the approach used here comparing FIP and AFDC/WEOP participants. Taking Urban's approach, the mean E&T enrollment rate for FIP CSOs (34.1 percent) is calculated over both FIP converters and nonconverters. FIP estimates calculated across sites should be substantially lower than estimates calculated across participants due to (1) the diluting effect of including FIP nonconverters in the treatment sites and (2) contamination resulting from the presence of individuals in comparison sites who received FIP benefits. This expectation is clearly borne out in Row 7, where the difference in means calculated across sites is seen to be about one-half the size of FIP net impact estimates calculated across participants. However, dividing by the program take-up rate in FIP CSOs (about 67 percent) yields a net impact estimate of 8.4 percent, which is consistent with estimates at the lower end of the 9-12 percent range.

Turning to the Urban Institute's own E&T findings, Long and Wissoker (1992: Chap. IV) report FIP net impact estimates over eight follow-up quarters for the following E&T variables (1) job search assistance, (2) education or training, (3) education only (includes remedial and postsecondary education), and (4) training only (includes OJT, work experience, and institutional vocational training). Estimates reported for each quarter are differences-in-differences estimates calculated by taking the difference of estimated FIP effects obtained from pre- and post-FIP regression equations.

For both new entrants and ongoing participants, Urban's results fail to provide evidence that FIP has an effect on participation in JSA activities over the two-year period. It is also the case that while overall enrollment in education and training activities is not significantly affected, FIP does

appear to change the mix between education and training among E&T enrollees. Enrollment in education programs tends to increase under FIP, while enrollment in training activities declines by an approximately equal amount. The finding that FIP affects the mix of E&T activities is consistent with evidence presented in Table 7 suggesting that FIP clients have a greater propensity to pursue formal education, while AFDC/WEOP respondents are more interested in vocational training curriculums. However, the results in Table 8 suggest that Urban's findings are likely to understate the effect of FIP on overall E&T enrollment rates.

VI. POST-FIP LABOR MARKET AND WELFARE OUTCOMES

The next issue to be addressed is the extent to which the increased enrollment in E&T activities stimulated by FIP helps to achieve the program's ultimate goal of increasing economic self-sufficiency as measured by employment, earnings, welfare receipt, and size of welfare payments. Before getting into the empirical results, it is worth taking a moment to step back to consider the likely effect of FIP on these measures. For welfare recipients not initially working, FIP bonuses for part-time and especially full-time work might induce a shift toward employment. As drawn, however, both Figures 2 and 3 suggest that FIP is unlikely to have a dramatic impact on the employment rate unless FIP's positive impact on E&T should sharply increase available wage offers. Indeed, it would take a wage rate of \$5.59 (as opposed to the minimum wage of \$3.35 in 1990) to even make the break-even level of earnings of \$838 per month available to a FIP recipient working full-time at 150 hours per month.

Among welfare clients already working (except those working in excess of the break-even point of 175 hours per month), Figure 2 suggests that for a given wage rate FIP bonuses will enhance the relative attractiveness of employment, which could potentially lead to a positive impact of FIP on earnings. In Figure 3, nevertheless, the upward rotation of the budget constraint associated with

FIP's child care subsidy raises the possibility that a FIP-generated income effect could depress employment and earnings for a given wage. Employed individuals therefore appear to be just as likely to reduce hours of work (and thus earnings) under FIP as to increase hours, particularly if they are eligible for child care assistance.

The likely effect of FIP on the welfare measures is less ambiguous than is the case for the labor market outcome variables. Figure 2 makes it clear that the sharp increase in the break-even level of earnings under FIP increases the likelihood of welfare receipt, and, for working welfare recipients, the size of welfare payments.

Differences in Means

Table 9 displays for Reference Years 4 and 5 average values of the labor market and welfare outcome variables for FIP and AFDC/WEOP respondents. Reference Years 4 and 5 are twelve-month FIP follow-up periods beginning almost two years and three years, respectively, after FIP was initially implemented. Beginning with the labor market outcomes, employment rates for both groups rise from their Reference Year 1 levels reported in Table 3 (40.4 percent and 37.7 percent for FIP and AFDC/WEOP respondents, respectively). This increase is larger for AFDC/WEOP clients than for FIP recipients, resulting in the negative differential of 9.1 percentage points shown for Reference Year 4. Moving to Reference Year 5, however, a further rise in the employment rate of FIP respondents essentially eliminates the differential. Table 6 suggested that the greater E&T enrollment of FIP participants carried into Reference Year 4, depressing employment in that year but contributing to a higher employment rate in Reference Year 5.

Among those who are employed, FIP respondents lag behind AFDC recipients in share of full-year employment and in annual earnings in both Reference Years 4 and 5. The negative earnings differential is somewhat smaller, although still large and statistically significant, in the latter year. Differences in hourly wage rates are essentially zero in both years.

TABLE 9

Post-FIP Measures of Labor Market Activity and Welfare Dependence for Female FIP and AFDC/WEOP Respondents, Reference Years 4 and 5

Outcome Variable	Reference Year 4			Reference Year 5		
	FIP (N = 260)	AFDC/WEOP (N = 547)	Difference	FIP (N = 250)	AFDC/WEOP (N = 518)	Difference
Labor market						
Ever employed for pay	45.4%	54.5%	-9.1%**	50.4%	53.1%	-2.7%
Among those employed:						
Full-year employment	32.2% [118]	40.6% [298]	-8.4%	35.7% [126]	46.2% [275]	-10.5%**
Annual earnings						
Mean	\$6,580	\$8,735	-\$2,155**	\$8,301	\$9,931	-\$1,630*
Median	4,739 [117]	7,416 [290]	-2,677	6,014 [121]	8,459 [266]	-2,445
Hourly wage						
Mean	\$6.28	\$6.46	-\$0.18	\$7.10	\$6.99	\$0.11
Median	5.51 [117]	5.71 [295]	-0.20	6.00 [124]	6.00 [273]	0.00

(table continues)

TABLE 9, continued

Outcome Variable	Reference Year 4			Reference Year 5		
	FIP (N = 260)	AFDC/WEOP (N = 547)	Difference	FIP (N = 250)	AFDC/WEOP (N = 518)	Difference
Welfare dependency						
Ever on welfare ^a	89.2%	67.0%	22.2%**	81.2%	59.8%	21.4%**
Among those on welfare: ^b						
Continuously on welfare	73.3% [232]	67.8% [366]	5.5%	69.5% [203]	68.4% [310]	1.1%
Annual benefit						
Mean	\$6,507	\$4,735	\$1,772**	\$6,445	\$4,853	\$1,592**
Median	6,909 [230]	5,074 [364]	1,835	7,175 [179]	5,136 [307]	2,039

Note: Respondents must be enrolled in FIP or AFDC/WEOP in Reference Year 2 or 3. Reference Year 4 covers June 1990 to May 1991 and Reference Year 5 covers June 1991 to May 1992. Number of observations that differ from those shown in column heads is indicated in brackets.

^aIncludes receipt of AFDC benefits for FIP respondents.

^bMeasures are specific to the FIP program for FIP recipients.

* and ** indicate that means are significantly different at the 10 percent and 5 percent levels, respectively. Significance tests are not shown for medians.

Turning to the welfare outcomes, a complicating factor is that by Reference Year 4 or 5, FIP respondents could have opted out of FIP either entirely or for part of the year and reenrolled in AFDC. In Reference Year 4, seven respondents classified as FIP recipients (since they were enrolled in FIP in either Reference Year 2 or 3) reported receiving AFDC benefits but no FIP benefits, while another twenty-one FIP respondents received both FIP and AFDC benefits. During Reference Year 5, twenty-three FIP respondents received AFDC benefits only and another eleven received benefits from both programs. The ever-on-welfare means in Table 9 include both sources of welfare payments. For FIP participants, therefore, the welfare participation rate in Reference Year 4 (89.2 percent) exceeds the FIP-only participation rate of 86.5 percent. The same welfare rates for FIP respondents in Reference Year 5 are 81.2 percent for both programs and 72.0 percent for FIP only. Among respondents receiving welfare, the continuously on welfare and annual welfare benefit measures shown in the table are defined to be program specific. For example, the mean annual welfare benefit of \$6,507 calculated for FIP respondents in Reference Year 4 measures FIP benefits only.

Consistent with the expectation of stronger FIP effects on welfare outcomes than on labor market variables, FIP clients are found in Table 9 to be over 20 percentage points more likely than AFDC/WEOP recipients to have received welfare benefits in Reference Year 4 and again in Reference Year 5. For respondents who reported receiving welfare benefits, there is no statistically significant difference in the percentage continuously on welfare in either year. However, average annual welfare benefits are about \$1,800 higher under FIP in Reference Year 4 and about \$1,600 higher for FIP recipients in Reference Year 5.

Correction for Self-Selection

Since FIP and AFDC/WEOP respondents are not randomly selected, the differences in means presented in Table 9 are unlikely to be unbiased estimates of FIP's impact on labor market and

welfare outcomes. Table 10 reports estimates using selectivity-adjustment methodologies outlined in connection with the E&T results in Table 8. Shown for both sets of outcome variables are linear control function estimates and two-stage Heckman estimates. The Reference Year 4 estimates are calculated for all respondents available to be interviewed in Wave 4 who were FIP or AFDC/WEOP clients in either Reference Year 2 or 3 and who reported usable data for the degree earned, number of children, and number of adults variables. Reference Year 5 estimates added the restriction that respondents must have been available for the Wave 5 interview. To increase comparability with the Urban Institute's net impact findings, respondents who did not report annual earnings are included in the regressions, with earnings set equal to zero. Similarly, respondents who did not report annual welfare benefits are included in the regressions, with the welfare benefit variable set equal to zero.

Linear control function estimates shown in Table 10 are obtained from regressions including as explanatory variables the personal characteristics and family responsibility measures appearing in Table 2. In the employment equation, the OLS and logistic coefficient estimates for Reference Year 4 imply that FIP depresses the probability of being employed during the year by about 11 percentage points. Table 9 suggested that FIP's depressing effect on employment decreases considerably moving into Reference Year 5. Consistent with this finding, the linear control function estimates for Reference Year 5 fall to about -5 percentage points and are no longer statistically significant. The same pattern in the linear control function results appears for annual earnings. In particular, the estimated effect of FIP on annual earnings falls from about \$-1,800 in Reference Year 4 to about \$-1,200 in Reference Year 5.

Application of the Heckman lambda methodology to account for self-selection was found earlier in Table 8 to make little difference in the E&T results. That is, coefficients estimated for the calculated lambda variables were not significantly different from zero, and the coefficient estimates on the FIP dummy variable were essentially unchanged. In contrast, lambda coefficient estimates

TABLE 10

**Estimates of the Net Impact of FIP on Labor Market and Welfare Outcomes,
Reference Years 4 and 5**

Outcome and Estimation Approach	Reference Year 4 (N = 791)	Reference Year 5 (N = 753)
Ever employed		
OLS controlling for individual characteristics	-0.112** (-2.90)	-0.050 (-1.27)
OLS controlling for self-selection in the FIP participation decision	-0.069 (-1.40)	0.007 (0.13)
Logistic controlling for individual characteristics	-0.466** (-2.90) [-0.116]	-0.209 (-1.28) [-0.052]
Logistic controlling for self-selection in the FIP participation decision	-0.284 (-1.38) [-0.071]	0.033 (0.16) [0.008]
Annual earnings^a		
OLS controlling for individual characteristics	-1,772** (-3.60)	-1,182** (-1.97)
OLS controlling for self-selection in the FIP participation decision	68 (0.11)	293 (0.39)
Ever on welfare		
OLS controlling for individual characteristics	0.230** (6.96)	0.218** (5.97)
OLS controlling for self-selection in the FIP participation decision	0.042 (1.02)	0.065 (1.42)
Logistic controlling for individual characteristics	1.503** (6.46) [0.289]	1.127** (5.74) [0.250]
Logistic controlling for self-selection in the FIP participation decision	0.629** (2.29) [0.121]	0.462* (1.93) [0.103]

(table continues)

TABLE 10, continued

Outcome and Estimation Approach	Reference Year 4 (N = 791)	Reference Year 5 (N = 753)
Annual welfare benefits ^a		
OLS controlling for individual characteristics	2,419** (9.93)	1,651** (6.28)
OLS controlling for self-selection in the FIP participation decision	1,571** (5.07)	841** (2.53)

Notes: Respondents must be enrolled in FIP or AFDC/WEOP in Reference Year 2 or 3. Reference Year 4 covers June 1990 to May 1991 and Reference Year 5 covers June 1991 to May 1992. Numbers in parentheses are t-statistics. Shown in brackets are partial derivatives of the probability of the outcome variable with respect to the FIP dummy variable.

^aObservations not reporting earnings (in the annual earnings equation) or welfare benefits (in the annual welfare benefits equation) are set equal to zero and included in the regressions.

* and ** indicate statistical significance at the 10 percent and 5 percent levels, respectively.

obtained in the ever employed and annual earnings equations are typically significant, and Table 10 shows that the FIP coefficient estimates are substantially reduced in size when adjustment is made for self-selection. In fact, FIP fails to have a statistically significant effect on either employment or earnings in either year.

In contrast to the labor market results, both methodologies correcting for self-selection yield welfare outcome estimates that are uniformly positive and generally statistically significant across reference years. In particular, use of the Heckman lambda methodology suggests that annual welfare benefits increase under FIP by nearly \$1,600 in Reference Year 4 and by over \$800 in Reference Year 5. The Heckman lambda estimates in the ever-on-welfare equation are also positive, but only the logistic estimates are statistically significant. The logistic results suggest that welfare receipt under FIP increases by about 12 and 10 percentage points, respectively, in Reference Years 4 and 5. Estimated coefficients on the lambda variable are typically statistically significant in both equations in both years.

Treatment Site-Comparison Site Differences

As pointed out by LaLonde and Maynard (1987), among others, use of nonexperimental data to estimate the impact of a training program imposes on the analyst the burden of correctly specifying the trainee's decision to participate in the program. Not everyone is likely to be convinced that the specification used in connection with Table 10 is indeed correct. It is therefore useful to compare the results in Table 10 with estimates of FIP's labor market and welfare effects measured between FIP and non-FIP sites.¹⁵

For Reference Years 4 and 5, Table 11 presents differences in means for the outcome variables in Table 10 calculated for the seven FIP sites and eleven non-FIP sites available in FIS data. The samples of FIS respondents used are the same as in Table 10 except that the restrictions on useable degree earned, number of children, and number of adults variables are not imposed. The first

TABLE 11**Differences in Means between FIP and Non-FIP Sites, Labor Market and Welfare Outcome Variables, Reference Years 4 and 5**

Outcome Variable	Reference Year 4 (N = 806)	Reference Year 5 (N = 768)
Ever employed	-0.019	0.022
Annual earnings	\$342	\$386
Ever on welfare	-0.008	0.009
Annual welfare benefits	\$826**	\$648**

Note: Respondents must be enrolled in FIP or AFDC/WEOP in Reference Year 2 or 3. Reference Year 4 covers June 1990 to May 1991 and Reference Year 5 covers June 1991 to May 1992.

** Indicates statistical significance at the 5 percent level.

column of Table 11 shows that FIP/non-FIP site differences are not statistically significant for employment, earnings, and welfare receipt in Reference Year 4. Only for welfare benefits is there evidence of a statistically significant effect, with welfare benefits higher under FIP. Moving from Reference Year 4 to Reference Year 5, mean annual earnings grow substantially for respondents in both groups of sites, while welfare receipt and annual welfare benefits fall in Reference Year 5. With the exception of the drop in welfare benefits, these same patterns appear between years in the means calculated for FIP and AFDC/WEOP respondents in Table 9. Nevertheless, the FIP/non-FIP site differences for Reference Year 5 in the second column of Table 11 echo those for Reference Year 4. Overall, these results are quite comparable with those in Table 10.

In the Urban Institute's second net impact report, Long and Wissoker (1992: Chap. V) present FIP estimates for labor market and welfare outcomes over eight follow-up quarters for new entrants and ongoing welfare recipients. Estimates are obtained using a regression-adjusted differences-in-differences approach. (As noted, respondents not reporting earnings or welfare benefits in a quarter are assigned the value zero for the missing variable and included in the regressions.) Beginning with their labor market results, FIP is found to have negative but only occasionally statistically significant impacts on employment and earnings for both new entrants and ongoing recipients. These estimates tend to be larger for new entrants than for ongoing recipients, but even for new entrants the largest quarterly estimates are a 5 percentage point reduction in the percentage employed and a \$42 decrease in average monthly earnings (relative to comparison site means of about 38 percent and \$266, respectively). In discussing these results, the authors conclude that the FIP-generated reduction in employment cannot be completely explained by increased E&T activity in FIP sites (Long and Wissoker 1992: 91).

Consistent with the FIS results in Tables 9 through 11, Long and Wissoker find considerably larger and more statistically significant FIP impacts on the welfare measures than the labor market

outcomes. After the first follow-up quarter, welfare receipt for new entrants is between 6 and 12 percentage points higher under FIP, while the average monthly welfare grant increases by between \$36 and \$57. Average values of these variables for the new entrant comparison sites are approximately 51 percent and \$191 per month, respectively. Among ongoing welfare recipients, welfare receipt rises by between 2 and 5 percentage points after quarter 3, and the average monthly welfare grant increases by \$14 to \$28. Average values of the comparison site means for ongoing welfare recipients are about 70 percent and \$295, respectively, for welfare receipt and the monthly welfare grant.

VII. COMPARISON TO OTHER WELFARE EMPLOYMENT PROGRAMS

The results presented in Sections V and VI lead to the conclusion that although FIP did have the anticipated intermediate result of increasing E&T enrollment, it did not have the intended ultimate effect of enabling welfare recipients to achieve economic self-sufficiency. In fact, both FIS survey results and the Urban Institute's evidence suggest that FIP had little impact on employability and earnings potential while increasing welfare dependency. While these findings run counter to the announced self-sufficiency objective of FIP, they are not totally unexpected, given the financial incentives and support services built into the program. That is, program participants may well have responded rationally to changes in their budget constraints generated by FIP.

A useful approach to a fuller understanding of where FIP "went wrong" is to place the program in the context of other recently evaluated welfare employment programs that emphasized investment in education and training as a means of attaining self-sufficiency. Table 12 summarizes the major features of and net impact estimates for four local welfare employment programs and one statewide program for which six county programs were evaluated. The statewide program is California's Greater Avenues for Independence (GAIN) program, and the local community or county

TABLE 12

Characteristics of and Impact Estimates for Selected Welfare Employment Programs

Program	Program Activities	Coverage/ Mandatoriness	Program Impacts in Follow-up Periods		
			Outcome	Experimental- Control Difference	% Change over Control Group
Baltimore Options (Nov. 1982-Dec. 1984)	Participant choice of activities including JSA, work experience, basic education, and skills training	Limited to 1,000 mostly minority female AFDC participants per year. Mandatory but few sanctions for nonparticipation.	Earnings:		
			Year 1	\$140	10%
			Year 2	401**	17
			Year 3	511**	17
			Benefits:		
			Year 1	\$2	0%
Year 2	-34	-2			
Year 3	-31	-2			
San Diego SWIM (July 1985-Sept. 1987)	Fixed sequence of group job search, work experience, and education and job skills training. Heavy emphasis on participation in program activities.	AFDC participants with children 6+. Mandatory with rigorously enforced sanctions.	Earnings:		
			Year 1	\$352**	21%
			Year 2	658**	29
			Benefits:		
Year 1	-\$407**	-8%			
Year 2	-553**	-14			
California GAIN (Early 1988-mid- 1990) ^a	Participants sorted into two different sequences on the basis of their basic educational skills. Emphasis on basic education for those deemed deficient in basic skills.	AFDC participants in 6 California counties. Mandatory with use of financial sanctions varying by county.	Earnings:		
			Year 1	\$266**	16%
			Year 2	519**	24
			Benefits:		
Year 1	-\$283**	-5%			
Year 2	-347**	-7			

(table continues)

TABLE 12, continued

Program	Program Activities	Coverage/ Mandatoriness	Outcome	Program Impacts in Follow-up Periods	
				Experimental- Control Difference	% Change over Control Group
Riverside GAIN program ^a	Highly focused on job placement, even for participants in basic education classes. Prominent role given job development.	About half of participants are minorities, largely Hispanics. Greatest use of sanctions among the six counties, with comparatively low emphasis on personalized attention.	Earnings:		
			Year 1	\$920**	59%
			Year 2	1,179**	53
			Benefits:		
			Year 1	-\$695**	-12%
			Year 2	-701**	-17
San Jose CET (1982-1988)	Basic education integrated with job-specific skills training. Skills training provided in-house using instructors with industry experience. Job developers work with local employers to establish demand for trainees.	Targeted at low-income minority single mothers. Over two-thirds are welfare recipients. All participants placed into the job-specific skills training course of their choice. No use of sanctions.	Earnings:		
			Qtr. 4	\$133/mo.**	47%
			Qtrs. 7-10	101/mo.**	25
			Benefits:		
			Qtr. 4	-\$45/mo	-5%
			Qtrs. 7-10	Not statistically significant	

Sources: Baltimore Options and San Diego SWIM: Gueron and Pauly (1991: Table 1.1); California GAIN and Riverside GAIN program: Friedlander, Riccio, and Freedman (1993: Table 1); and San Jose CET: Burghardt and Gordon (1990: Appendix table 2) and Burghardt et al. (1992: Table IV.1).

^aEstimates reported are for single parents.

** Indicates statistical significance at the 5 percent level.

programs are the Baltimore Options program, the San Diego Saturation Work Initiative Model (SWIM), the Riverside county GAIN program, and the San Jose Center for Employment Training (CET) program. With the exception of the San Jose CET, all of the programs were a consequence of the authority given states to design their own welfare employment programs under the federal Omnibus Budget Reconciliation Act of 1981 (OBRA). These OBRA-related programs were evaluated by the Manpower Demonstration Research Corporation (MDRC). The CET in San Jose was one of four community-based organizations funded by the Rockefeller Foundation to operate comprehensive welfare employment programs for low-income minority single mothers. Rockefeller contracted with Mathematica Policy Research to evaluate the four Minority Female Single Parent (MFSP) demonstrations. Evaluations of all five programs were based on an experimental design in which welfare recipients were randomly assigned to treatment or control groups.

Table 12 makes it clear that the programs differed in at least two important respects. First, they differed in the kinds of services offered and their sequence. Second, although the OBRA-related programs were formally mandatory, they differed considerably in how rigorously sanctions for nonparticipation in program activities were enforced. Baltimore Options was the most flexible in allowing participants to choose among program activities. It was also the least rigorous in imposing sanctions. These features make Options the most comparable to the voluntary FIP program. Options differs from FIP, however, in that it intentionally limited annual enrollment in an effort to keep staff caseloads low and to make sure that all enrollees received program activities and support services (Friedlander 1987: 4). It also did not offer financial bonuses and enhanced support services.

Net impact estimates reported for Baltimore Options indicate that the program was successful in increasing annual earnings, particularly in the second and third years of the follow-up period. However, the program had little impact on welfare benefits. A comparison with the welfare benefit

estimates for the San Diego SWIM and Riverside GAIN programs suggests that more rigorous use of sanctions may be important in reducing welfare dependency.

In addition to its use of sanctions, the SWIM program differed from Baltimore Options in imposing on participants a fixed sequence of program activities (see Hamilton and Friedlander 1989). The sequence began with a two-week job search workshop followed, for those who had not found jobs, by three months of unpaid work experience. Those still unemployed after completing their work experience assignment were assessed and referred to education and training programs available within the community. Like Washington state, San Diego offers a broad network of education and training facilities, including an extensive community college system. Since SWIM was a saturation demonstration project, an explicit objective of the program was to maximize the proportion of the WIN-mandatory caseload that received program services for the duration of their stay on welfare. As mentioned in Section I, the magnitude of impact estimates for training programs will be partially driven by program participation rates. The substantial earnings impacts shown in Table 12 for SWIM are therefore likely to be due to some combination of (1) the quality and sequencing of program activities and (2) the high rate of participation in these activities enforced by rigorous application of mandatory participation requirements.

California's GAIN program is distinguished from other welfare employment programs by its emphasis on upfront basic education. Welfare recipients who did not possess a high school diploma (or its equivalent), who did poorly on a math and literacy test, or who were not proficient in English were deemed by GAIN to be "in need of basic education." These individuals could have chosen either a basic education class or a job search activity, but if they chose JSA and failed to obtain employment, they must have entered basic education. Recipients judged not in need of basic education began by participating in job search. Participants in either of these sequences who failed to obtain employment after completing their initial activities moved on, after undergoing an

employability assessment, to a next level of activities including skills training, vocationally oriented postsecondary education, OJT, and unpaid work experience.

Focusing on single-parent welfare clients,¹⁶ the GAIN net impact estimates shown in Table 12 are unweighted averages of estimates obtained for all six county programs. In Year 1, these impact estimates varied substantially across counties, ranging from -8 percent to 59 percent for earnings and from 2 percent to -12 percent for AFDC payments. Large variation in estimated impacts was also found in Year 2. For both years, the largest positive estimates for earnings and the largest negative estimates for welfare payments were found for the Riverside county program. Basically two factors distinguished Riverside from the other five GAIN programs evaluated (see Riccio and Friedlander 1992: 157). The first was the emphasis of Riverside's staff on the goal of quick employment (aided by the county's efforts at direct job development).¹⁷ This emphasis was created, in part, by assigning case managers job placement performance standards. Second, Riverside ranked first among the six GAIN programs in its use of financial sanctions, where the sanctioning rate can be thought of as a proxy for a county's emphasis on formal enforcement. At the same time, it is interesting to note that Riverside did not have a particularly high rate of participation in GAIN activities. Unlike FIP, in addition, it put relatively little emphasis on personalized attention to client needs.

While it emphasized investment in education and training, the San Jose CET demonstration differed from the OBRA-based programs in three important respects. First, low-income single mothers entering the program did not receive assessment and referral services but were instead placed immediately in a self-paced job training curriculum, regardless of their formal educational deficiencies. Second, remedial education was integrated with skills training for a specific occupation, rather than provided prior to job training or concurrently in a separate class. This approach allowed

participants to acquire essential basic skills while progressing toward their ultimate goal of a job. Finally, training was provided in-house using experienced instructors drawn from local industries.

The other three MFSP demonstrations followed either of two more traditional approaches. Programs in Atlanta and Providence used a sequential approach in which women with poor basic skills were enrolled initially in remedial courses and only later placed in job skills training classes. The Washington, D.C. demonstration emphasized a "general employability" model that included instruction on motivation, basic reading and math, and job search skills. A course for better-prepared trainees augmented these general classes with instruction in the basic concepts of electricity, mechanics, and tools as preparation for training or employment in nontraditional jobs. The large effects of CET on earnings shown in Table 12 coupled with the generally insignificant results obtained for the other three MFSP demonstrations indicate that the sequential GAIN model of completing basic education courses before moving clients on to job skills training may not be a practical route to employment for many welfare participants. At the same time, the very positive results obtained for both the Riverside GAIN and San Jose CET programs emphasize the importance of focusing on job-specific skills and providing active assistance in helping trainees find jobs.

Two final points should be mentioned concerning the San Jose CET program. First, while growth in the employment rate for the control group during the follow-up period narrowed the treatment-control differential, the impact of the CET project on earnings remained large in quarters 7–10 because of its positive impact on hourly wages. Second, cost per treatment group member in CET was about \$3,600 per year, which was in the middle of the range for MFSP demonstrations of between \$2,700 and \$4,800.

VIII. CONCLUSION

Implemented in July 1988 as a five-year demonstration project, Washington's Family Independence Program (FIP) was an innovative attempt to design a new public assistance model with the ultimate objective of achieving economic self-sufficiency for welfare recipients. To achieve self-sufficiency, FIP provided recipients with financial incentives and enhanced support services to encourage longer-term investment in employment and training (E&T) activities. An integral part of FIP was its approach to case management designed to promote a more supportive environment for clients than is usually found in mandatory workfare programs. This report evaluated the extent to which the voluntary FIP program initially increased E&T enrollment and subsequently contributed to the self-sufficiency of female welfare clients. It is important to emphasize that the alternative to FIP was a WIN-approved mandatory workfare program rather than no program at all.

A unique longitudinal data set collected for welfare recipients--the Family Income Study (FIS)--was used to compare E&T enrollment and labor market and welfare outcomes for a sample of FIP participants and a comparison group of nonparticipants receiving traditional AFDC benefits and subject to state workfare requirements. Program nonparticipants included both ongoing welfare recipients registered at FIP sites who could have chosen FIP but decided not to and recipients registered at non-FIP sites who did not have a choice between programs. Participants and nonparticipants were predominantly white, non-Hispanic females in their late twenties or early thirties who were not married but who were responsible, on average, for raising two children. Respondents in both groups also exhibited a high degree of welfare dependency, a lack of formal education, and a low level of labor market activity, where these variables were measured prior to the initial implementation of FIP. The pre-FIP difference in E&T enrollment was essentially zero.

Although FIP was intended to stimulate E&T activity, the higher bonus payments for part- and full-time employment might have increased employment at the expense of training, raising the

possibility that FIP would have had little impact on E&T enrollment. Differences in mean E&T rates measured over twelve-month periods ending roughly one year, two years, and three years after FIP was initially implemented indicate that enrollment in training activities increased by between 11 and 16 percentage points under FIP. (These twelve-month periods are referred to as Reference Years 2, 3, and 4). Focusing on the June 1989 to May 1990 period (a twelve-month period that is post-FIP and pre-JOBS), several econometric approaches were used to control for the selection bias likely to be present because ongoing welfare recipients registered at FIP sites had the choice of converting to FIP. These techniques yielded FIP net impact estimates falling between 9 and 12 percentage points, a range that was only somewhat below the baseline difference-in-means estimate of 12.4 percentage points. Relative to the enrollment rate calculated for AFDC participants in Reference Year 3, estimates in this range represent a 33 to 44 percent increase in E&T activity. These estimates suggest that a voluntary program with features like those of FIP can have a sizable effect on E&T enrollment.

The next step was to consider whether this increase in E&T activity under FIP paid off in gains in economic self-sufficiency, where self-sufficiency was assumed to be reflected in labor market and welfare outcome variables measured over twelve-month periods ending roughly three years and four years after the initial implementation of FIP (that is, Reference Years 4 and 5). Given the incentives and support services built into the program, however, it was not clear that FIP's actual effect would have been that anticipated by program designers. The sharp increase in the break-even level of earnings under FIP was especially likely to have increased the rate of welfare receipt and, for working welfare recipients, the size of welfare payments.

Differences in means calculated for both Reference Years 4 and 5 indicate, in fact, that employment rates and annual earnings were lower and welfare rates and annual benefits higher under FIP. Correction for self-selection modified but did not reverse these findings. In particular, the net impact of FIP on employment and earnings was estimated to be essentially zero once correction had

been made for self-selection. For the welfare measures, selectivity-corrected estimates remained positive and statistically significant, especially for annual welfare benefits. These findings comparing actual program participants with nonparticipants were buttressed by a comparison of treatment sites with comparison sites using FIS data.

It is important to emphasize that the FIS-based results support Urban Institute estimates calculated using administrative data for five matched pairs of welfare offices. Specifically, Urban reports FIP net impact estimates that are negative but only occasionally significant for employment and earnings and positive and more consistently significant for welfare receipt and welfare benefits. Moffitt (1992: 43) suggests that the long-run effect of training programs on welfare caseloads is ambiguous a priori. His argument is that while any program that increases wage rates or earnings of participants will reduce welfare rolls in the future, the program is likely to make welfare more attractive and hence draw some women onto the rolls or make them less likely to leave the rolls. Both the results presented here and the Urban Institute's findings offer little support for the expectation that the caseload-reducing effect of FIP would dominate in the long run.

One way of gaining some perspective on these rather discouraging results is to place FIP in the context of several other recently evaluated welfare employment programs emphasizing E&T investment as a means of attaining self-sufficiency. There are important differences between these programs in kinds and sequence of services and the degree to which requirements for participation in program activities were enforced. Nevertheless, the programs examined were all successful in increasing the postprogram earnings of participants and, to a lesser degree, in decreasing welfare benefits. This review of alternative program models suggested that in addition to FIP's attractive incentives to remain on welfare, its lack of emphasis on job placement and job development may have been important factors in accounting for its unanticipated effects on welfare dependency.

Notes

¹To avoid a reduction in federal matching rates, states must have at least 20 percent of the mandatory caseload participating in program activities (excluding employment) in each month by 1995. In addition, states must spend at least 55 percent of JOBS funds on families in the following circumstances (1) the custodial parent is under age twenty-four and possesses neither a high school diploma (or equivalent) nor recent work experience, (2) the youngest child is within two years of ineligibility for AFDC benefits because of age, or (3) AFDC benefits were received in at least thirty-six of the previous sixty months.

²In their survey of state welfare reform programs initiated under the federal Omnibus Budget Reconciliation Act of 1981, Greenberg and Wiseman (1992: 60–61) also conclude that state programs shed little light on the potential impact of JOBS, since they tend to be limited to short-term job search and work experience services.

³While acknowledging that their treatment site–comparison site design yields diluted estimates of FIP's impact on participants, Long and Wissoker (1992: 31–32) argue that attempting to control for selection bias in making a participant–nonparticipant comparison is not feasible because of the limited demographic and socioeconomic information in data drawn from administrative records.

⁴The diagram is essentially unchanged for individuals receiving welfare benefits for 1–4 months or 4–12 months who are eligible, respectively, for the "30 and one-third" and "30" deductions.

⁵The sharp drop in the FIP budget constraint at 300 hours of work per month occurs because the FIP client is no longer eligible for Medicaid assistance.

⁶It should be noted that the evaluation design approved by the U.S. Department of Health and Human Services for the "official" FIP evaluation requires assessing FIP's impact on both existing welfare clients and new entrants. (New entrants are defined as those not on AFDC rolls when FIP was implemented.) The Urban Institute's impact analysis reports thus distinguish between program

effects for new entrants and ongoing participants. Since all FIS public assistance respondents were on welfare in March 1988, it is reasonable to assume that most FIS public assistance respondents are ongoing participants. Results reported here are therefore more directly comparable to Urban's findings for ongoing participants, the category of recipients that makes up the majority of the caseload.

⁷Heeringa (1988) provides a technical description of the FIS sample design.

⁸Tarnai (1990) reports that there are no substantial differences between respondents in the FIS public assistance sample and the total population of public assistance cases in the state with respect to gender, race, and number of persons in the household. The largest difference he observes is that about 9 percent of state public assistance recipients are black as opposed to only 6 percent of FIS respondents.

⁹The naming system for variables generated for successive years of FIS data identifies variables by wave or reference year. Wave refers to information gathered in a particular interview that covers the time period since the last interview (which may be more than or less than twelve months). As shown in Figure 1, a reference year is a twelve-month period beginning on June 1 of the previous calendar year and extending to May 31 of the current year.

¹⁰Long and Wissoker (1992: 46-47) point out that it is difficult to define "postprogram" for FIP because FIP includes the Food Stamp cash-out, financial incentives for E&T participation and employment, child care subsidies, and transitional child care and medical assistance.

¹¹As noted earlier in the text, JOBS places more emphasis on education and training and requires that states guarantee child care assistance and provide transitional child care and Medicaid coverage. The distinctive features of FIP that remain are its Food Stamp cash-out, financial bonuses, and greater resources for child care assistance. The blurring over time of the services available to FIP and WEOP/JOBS participants clearly makes the evaluation of FIP more difficult.

¹²In regard to access to E&T programs, Nightingale et al. (1991: 24–38) conclude that there are no noticeable differences between FIP and non-FIP sites in the availability of community college programs and JTPA services.

¹³Scott Cardell of Washington State University suggested this modification of the standard Heckman two-step procedure for correcting for selection bias.

¹⁴Replacing an explanatory variable with its predicted value as in Estimates 5 and 6 yields a composite error term that is heteroskedastic. This causes net impact estimates that are inconsistent in the logistic case but not in the OLS case. While the logistic estimates may undercorrect or overcorrect for selection bias, it can be concluded that moving from a significant coefficient estimate on the FIP variable to an insignificant estimate means that the possibility cannot be rejected that the significant result is due to selection bias. It should also be noted that the OLS estimates are subject to the well-known problem that predicted probabilities may not fall in the unit interval.

¹⁵Since FIP may be viewed as a saturation experiment, it could also be argued that it makes sense to evaluate FIP using a treatment site–comparison site strategy.

¹⁶The MDRC reports also present net impact estimates for heads of two-parent households.

¹⁷The emphasis on job development in the Riverside GAIN program is clearly brought out in the following description of the program (Rich 1993):

The Riverside result is so far out of line with results achieved elsewhere that MDRC cannot fully explain it, and it is possible that the result could not be duplicated. The director of the program, at a seminar at the American Enterprise Institute, may have inadvertently offered the best explanation. The first thing he did each year, he declared, was to go to potential employers and lock up all the available job slots for his "graduates." What this suggested to some listeners was that much of the director's startling success came from simply grabbing the jobs first—leaving others who might have gotten them unemployed.

Perhaps in reaction to this description, Friedlander, Riccio, and Freedman (1993: 2) argue forcefully that what distinguished Riverside from the other counties was its particular combination of practices and conditions. In addition to job development, Riverside's practices included its "message" that

employment is central for all registrants and its heavy reliance on GAIN's formal enforcement mechanisms to ensure the program participation of all mandatory registrants. Favorable conditions included a local economy that grew at a faster rate than that of any other county.

References

- Bane, Mary Jo. 1989. "Welfare Reform and Mandatory versus Voluntary Work: Policy Issue or Management Problem?" Journal of Policy Analysis and Management 8 (Spring), pp. 285-89.
- Burghardt, John, and Anne Gordon. 1990. "More Jobs and Higher Pay: How an Integrated Program Compares with Traditional Programs." The Rockefeller Foundation, New York.
- Burghardt, John, Anu Rangarajan, Anne Gordon, and Ellen Kisker. 1992. "Evaluation of the Minority Female Single Parent Demonstration: Summary Report." Vol. I. The Rockefeller Foundation, New York.
- Ellwood, David T. 1988. Poor Support: Poverty in the American Family. New York: Basic Books.
- Friedlander, Daniel. 1987. "Supplemental Report on the Baltimore Options Program." Manpower Demonstration Research Corporation (October), New York.
- Friedlander, Daniel, James Riccio, and Stephen Freedman. 1993. "GAIN: Two-Year Impacts In Six Counties." Manpower Demonstration Research Corporation (April), New York.
- Greenberg, David, and Michael Wiseman. 1992. "What Did the OBRA Demonstrations Do?" In Charles F. Manski and Irwin Garfinkel, eds., Evaluating Welfare and Training Programs. Cambridge, Mass.: Harvard University Press. Pp. 25-75.
- Gueron, Judith M., and Edward Pauly. 1991. From Welfare to Work. New York: Russell Sage Foundation.
- Hamilton, Gayle, and Daniel Friedlander. 1989. "Final Report on the Saturation Work Initiative Model in San Diego." Manpower Demonstration Research Corporation (November), New York.

- Heckman, James J., and V. Joseph Hotz. 1989. "Choosing among Alternative Nonexperimental Methods for Estimating the Impact of Social Programs: The Case of Manpower Training." Journal of the American Statistical Association 84 (December), pp. 862-74.
- Heeringa, Steven G. 1988. "The Washington State Family Independence Study (FIS) Sample Design Description." Institute for Social Research, University of Michigan (June).
- LaLonde, Robert, and Rebecca Maynard. 1987. "How Precise Are Evaluations of Employment and Training Programs? Evidence from a Field Experiment." Evaluation Review 11 (August), pp. 428-51.
- Long, Sharon K., and Douglas A. Wissoker. 1991. "Short-Run Net Impacts of the Washington State Family Independence Program (FIP). First Interim Impact Analysis Report from the Evaluation of the Family Independence Program." The Urban Institute (June), Washington, D.C.
- _____. 1992. "Net Impacts of the Washington State Family Independence Program (FIP) The First Two Years. Second Interim Impact Analysis Report from the Evaluation of the Family Independence Program." The Urban Institute (June), Washington, D.C.
- Long, Sharon K., Douglas A. Wissoker, and Neal O. Jeffries. 1991. "Treatment and Comparison Site Differences in the Washington State Family Independence Program (FIP). Baseline Impact Analysis Report from the Evaluation of the Family Independence Program." The Urban Institute (March), Washington, D.C.
- Loprest, Pamela, Pamela A. Holcomb, Demetra S. Nightingale, Carolyn T. O'Brien, and Lee Bawden. 1992. "Those Who Found Jobs and Left Welfare: Findings from the Social Services Client Interview Survey." The Urban Institute (September), Washington, D.C.
- Moffitt, Robert. 1991. "Program Evaluation with Nonexperimental Data." Evaluation Review 15 (June), pp. 291-314.

- _____. 1992. "Incentive Effects of the U.S. Welfare System: A Review." Journal of Economic Literature 30 (March), pp. 1-61.
- Nightingale, Demetra S., Pamela A. Holcomb, and Carolyn T. O'Brien. 1990. "The General Structure and Operation of the Washington State Family Independence Program (FIP). First Process Analysis Report from the Evaluation of the Family Independence Program." The Urban Institute (April), Washington, D.C.
- Nightingale, Demetra S., Anne M. Cammisa, Barbara Cohen, Pamela A. Holcomb, Carolyn T. O'Brien, Kristin Seefeldt, and Regina Yudd. 1991. "Services to Clients in the Washington State Family Independence Program (FIP). Second Process Analysis Report from the Evaluation of the Family Independence Program." The Urban Institute (July), Washington, D.C.
- Nightingale, Demetra S., Carolyn T. O'Brien, Pamela A. Holcomb, and Kristin Seefeldt. 1993. "FIP at Steady State. The Third Process Analysis Report from the Evaluation of the Family Independence Program." The Urban Institute (February), Washington, D.C.
- Riccio, James, and Daniel Friedlander. 1992. "GAIN Program Strategies, Participation Patterns, and First-Year Impacts in Six Counties." Manpower Demonstration Research Corporation (May), New York.
- Rich, Spencer. 1993. "Runaway Training . . . Why Educating Poor, Unskilled Workers Won't Land Them Jobs." The Washington Post, February 7, p. C3.
- Tarnai, John. 1990. "Survey Methods--Overview." Chapter 8 in Washington State's Family Income Study: Results from the First Year. Washington State Institute for Public Policy (January), Olympia, Wash.