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The Evaluation of Welfare Reform in Iowa

Final Impact Report

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EXECUTIVE SUMMARY

THE EVALUATION OF WELFARE REFORM IN IOWA: *FINAL IMPACT REPORT*

In advance of implementing new welfare policies, Iowa changed the name of the program that provides cash assistance to low-income families with dependent children from "Aid to Families with Dependent Children" (AFDC) to the "Family Investment Program" (FIP) on July 1, 1993. Three months later, on October 1, 1993, acting under waivers of certain federal regulations, Iowa replaced the policies that had formerly governed the provision of assistance to low-income families with a set of welfare reform policies. Relative to AFDC policies, Iowa's welfare reform policies place less emphasis on maintaining the incomes of client families and more emphasis on increasing their participation in employment or in employment-oriented training activities. To reinforce these incentives, Iowa implemented complementary reforms to the Food Stamp Program. Iowa's reforms anticipated the fundamental shift in federal welfare policy away from long-term income maintenance and toward temporary assistance mandated by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

THE GOALS AND PROVISIONS OF IOWA'S WELFARE REFORM

Iowa's welfare reform provides a comprehensive package of incentives and services to encourage clients to adopt behaviors that will facilitate their achievement of self-sufficiency. It also imposes strong consequences on those who fail to adopt those behaviors. While self-sufficiency is the ultimate goal of welfare reform, state policy makers established three more immediate goals:

1. ***Making Work Pay.*** The former AFDC program imposed a high "tax" on earnings, thereby discouraging welfare recipients from working. FIP provides several earnings disregards that jointly imply a 40 percent tax on earnings, in contrast to a tax of between 67 percent and 100 percent under AFDC. The lower tax on earnings under FIP allows a family to achieve a higher level of income at a given level of earnings than would have been possible under pre-reform regulations.
2. ***Responsibility with Consequences.*** FIP was designed to shift responsibility for the well-being of low-income families with dependent children from the state to the parents in those families. To ensure that parents accept this responsibility, each able-bodied adult FIP recipient is required to participate in PROMISE JOBS, a program that provides employment and training opportunities for welfare recipients in Iowa. Exemptions from this requirement are sharply limited under FIP relative to AFDC. A critical PROMISE JOBS activity is the development and signing of a Family Investment Agreement (FIA). The FIA specifies the steps that a FIP participant will take to achieve self-sufficiency and the services that the state will provide to facilitate that process. Failure to develop and sign an FIA, or abandonment of a signed FIA, results in the individual being assigned to the Limited Benefit Plan, under which his or her family's cash grant is temporarily reduced and/or eliminated.

3. ***Family Stability.*** The designers of FIP regarded stable two-parent families as a key to achieving family self-sufficiency and building strong communities. They also believed that many AFDC policies undermined the formation and maintenance of two-parent families by restricting the access of these families to public assistance. FIP does not include several AFDC requirements that restricted eligibility for two-parent families, including the "100-hour rule," which stipulated that families in which the parent who was the principal earner worked more than 100 hours per month were ineligible for cash assistance even if the earnings from that employment were low.

RESEARCH METHODS

The evaluation of welfare reform in Iowa was based on an experimental design, under which families were randomly assigned to a treatment group that was subject to the new welfare reform policies or to a control group that was subject to the policies of the former AFDC program. Random assignment ensured that families in the treatment and control groups were, on average, alike in their characteristics at the time of random assignment and were equally subject to the influence of external factors, such as changes in Iowa's economy.

We estimated the impacts of welfare reform by comparing the average outcomes of treatment cases with the average outcomes of control cases in the years following random assignment. We made those comparisons separately for families that were ongoing participants in FIP when welfare reform was implemented on October 1, 1993 (referred to as "ongoing FIP cases") and for families that applied to FIP after that date (referred to as "applicant FIP cases").[1] To improve the precision of our estimates, we used multivariate regression to adjust for differences in socioeconomic characteristics across cases.

During the evaluation, Iowa changed its welfare policies governing control cases in a manner that may have affected some of the impact estimates presented in this report. In response to federal welfare reform, Iowa began to apply reform policies to control cases in April 1997. The effect that this policy shift had on control cases is unclear; it may have been small because many control cases had already left FIP by that time. However, because control cases were subject to reform policies beginning in April 1997, the evaluation's findings pertaining to the period beginning April 1997 probably understate the true long-run impacts of welfare reform in Iowa.[2]

The outcome measures for the evaluation were obtained from three sources:

1. ***State Administrative Files.*** State administrative files provided up to five years of data on employment, FIP participation, and child welfare services for 7,418 ongoing FIP cases and 9,927 applicant FIP cases.

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[1]Treatment and control groups were formed separately for ongoing FIP cases and applicant FIP cases. For each case assigned to a control group, two cases were assigned to a treatment group.

[2]The early termination of control policies is one of a number of potentially limiting features of this evaluation. Chapter II, Section E, of the report provides a full discussion of these features, which are often present in random assignment evaluations of social welfare programs.

2. ***Core Survey.*** A "core survey" of 1,413 of the ongoing cases and 1,538 of the applicant cases provided data on education and training, job characteristics, participation in government programs, and aspects of family well-being.
3. ***Child Impact Survey.*** A "child impact survey" was conducted with 813 of the ongoing cases and 662 of the applicant cases that previously had participated in the core survey and had reported the presence of a child between five and twelve years of age. The child impact survey provided data on family functioning and well-being, parenting behavior, use of child care, and the well-being of children.

Both the core survey and the child impact survey were conducted in 1998-99, which was five or six years after the ongoing cases went through random assignment and two and a half to six years after the applicant cases went through random assignment.

PRINCIPAL FINDINGS

Using the administrative and survey data, we estimated the impacts of Iowa's welfare reform on ongoing and applicant FIP cases. Many of the impacts that we found can be characterized as "favorable" or "unfavorable" based on the goals of Iowa's welfare reform. Some of the impacts apply to both ongoing and applicant cases; others apply only to ongoing cases or only to applicant cases.

Impacts Common to Both Ongoing and Applicant FIP Cases

For six sets of outcomes, welfare reform had qualitatively similar impacts on ongoing and applicant FIP cases. These impacts are displayed in a summary format in Exhibit ES.1. Most, but not all, of them can be regarded as favorable results of welfare reform.

1. ***Welfare reform raised participation in the PROMISE JOBS program, which provides employment-related services to FIP participants.*** This impact was probably due to a tightening of the requirement to participate in PROMISE JOBS under welfare reform and to more severe penalties for failure to participate.
2. ***Welfare reform increased the employment and earnings of ongoing cases and early applicants[3], at least in the short run.*** These impacts were probably due to the reform provisions that strengthened the financial work incentives and work requirements of FIP.
3. ***Welfare reform raised FIP participation in the short run.*** The enhanced earned-income disregards under welfare reform, which made it more difficult for a case to "earn its way off of welfare," are likely to have contributed to this impact. The impact on FIP participation was larger for applicants than for ongoing cases. Findings from the evaluation indicate that liberalized eligibility criteria under welfare reform contributed to the positive impact on FIP participation for applicant cases.

[3]Among the applicant cases, 4,526 went through random assignment during the first year of welfare reform. We have designated these cases as "early applicants" or "cohort 1 applicants."

EXHIBIT ES.1

THE EVALUATION OF WELFARE REFORM IN IOWA:
IMPACTS COMMON TO ONGOING AND APPLICANT FIP CASES

	Impact		
	Ongoing Cases	Applicant Cases	Report Exhibit
Participation in PROMISE JOBS			
Case head participated in any PROMISE JOBS activity	+	+	IV.2
Employment of Case Members			
Year 1	0	+	III.2
Year 2	+	+	III.2
Year 3	+	0	III.2
Year 4	+	0	III.2
Year 5	0	NA	III.2
Earnings of Case Members			
Year 1	+	+	III.3
Year 2	+	0	III.3
Year 3	0	0	III.3
Year 4	0	0	III.3
Year 5	0	NA	III.3
FIP Participation			
Year 1	+	+	III.7
Year 2	0	0	III.7
Year 3	0	0	III.7
Year 4	0	0	III.7
Year 5	0	NA	III.7
Combining Employment and FIP Participation			
Year 1	+	+	III.13
Year 2	+	+	III.13
Year 3	+	0	III.13
Year 4	+	0	III.13
Year 5	0	NA	III.13
Information About Post-FIP Medicaid			
DHS worker provided information on post-FIP Medicaid eligibility	+	+	IV.5
Domestic Abuse			
Verbal abuse by an intimate partner or ex-partner in past year	+	+	V.9
Physical abuse by anyone in the past year	+	+	V.9

SAMPLES: Ongoing FIP cases were active in FIP on 9/17/93 and were randomly assigned to treatment or control status at that time. Applicant FIP cases submitted their applications and went through random assignment between 10/1/93 and 3/31/96. Multi-year results for applicants are for those who applied before 10/1/94. Other results for applicants are for all applicants.

DATA: Multi-year results are based on data from Iowa administrative files for FIP, Food Stamps, and unemployment insurance. Other results are based on data from two MPR surveys that were conducted in 1998-99, five to six years after random assignment for ongoing cases and two and a half to six years after random assignment for applicant cases.

NOTE: Impact estimates indicated by a "+" or "-" are statistically significant at the .10 level or less, using a two-tailed t-test. Impact estimates indicated by a "0" are not significantly different from zero.

4. ***Welfare reform increased the rate of combining work and welfare.*** For both ongoing and applicant cases, this impact can probably be attributed to two features of Iowa's welfare reform. First, work requirements were applied more strictly and to a broader population under reform policies than under pre-reform policies. Second, financial incentives to work that were built into the FIP benefit formula were stronger under reform policies than under pre-reform policies.
5. ***Welfare reform raised the proportion of both ongoing and applicant cases that were informed by a DHS staff member of their potential eligibility for post-FIP Medicaid.*** The design for welfare reform in Iowa did not address the provision of information on post-FIP eligibility for Medicaid, but this finding indicates that DHS staff did more consistently provide such information under welfare reform.
6. ***The incidence of domestic abuse increased under welfare reform.*** Stiffened requirements to work under welfare reform may have resulted in more stress within families and higher rates of employment may have caused the heads of FIP cases to alter their roles within their families and their relationships with friends. In addition, applicant cases experienced a reduction in household income and greater financial strain under welfare reform (Exhibit ES.3). These impacts of the reforms may have led to the increase in domestic abuse.

Impacts Specific to Ongoing FIP Cases

Welfare reform had impacts specific to ongoing cases on two related sets of economic outcomes and on a third set of noneconomic outcomes. The economic impacts can be regarded as favorable results of welfare reform, but there is some evidence that they were accompanied by greater family stress. These impacts are summarized in Exhibit ES.2.

1. ***Welfare reform improved long-run labor earnings and benefits for the heads of ongoing cases.*** Welfare reform raised the monthly earnings of these individuals by 10 percent. For these individuals, it also had positive impacts on the availability of paid leave for vacation and illness. These findings pertain to the primary current job five to six years after random assignment, thus indicating that welfare reform had positive long-run impacts on labor compensation for the heads of ongoing cases.
2. ***Welfare reform reduced Food Stamp participation and benefits and FIP benefits for ongoing cases.*** The cumulative reductions in benefits over the evaluation's full follow-up period were 4 percent for FIP and 7 percent for Food Stamps. We attribute these reductions to the positive impacts of welfare reform on earnings. The absence of a negative impact on FIP participation is probably due to the greater FIP earned-income disregards under welfare reform.
3. ***Welfare reform reduced the likelihood that a child would leave the home to live elsewhere.*** This finding is indicative of greater family stability under welfare reform. But, when combined with the previously noted finding of more domestic abuse (Exhibit ES.1), it suggests that welfare reform had mixed impacts on family stability among ongoing FIP cases.

EXHIBIT ES.2

THE EVALUATION OF WELFARE REFORM IN IOWA:
IMPACTS SPECIFIC TO ONGOING FIP CASES

	Impact for Ongoing Cases	Report Exhibit
Earnings of Case Head		
Earnings on primary job last month	+	IV.8
FIP Benefit Amount		
Year 1	0	III.11
Year 2	-	III.11
Year 3	-	III.11
Year 4	-	III.11
Year 5	-	III.11
Food Stamp Participation		
Year 1	-	III.10
Year 2	-	III.10
Year 3	-	III.10
Year 4	-	III.10
Year 5	0	III.10
Food Stamp Benefit Amount		
Year 1	-	III.12
Year 2	-	III.12
Year 3	-	III.12
Year 4	-	III.12
Year 5	-	III.12
Family Stability		
Child went to live elsewhere, past two years	-	V.6

SAMPLES: Ongoing FIP cases were active in FIP on 9/17/93 and were randomly assigned to treatment or control status at that time. Applicant FIP cases were excluded from this table because the impacts on the measures shown were statistically insignificant for those cases.

DATA: Multi-year results are based on data from Iowa administrative files for FIP and Food Stamps. Other results are based on data from two MPR surveys that were conducted in 1998-99, five to six years after random assignment for ongoing cases.

NOTE: Impact estimates indicated by a "+" or "-" are statistically significant at the .10 level or less, using a two-tailed t-test. Impact estimates indicated by a "0" are not significantly different from zero.

Impacts Specific to Applicant FIP Cases

Welfare reform had impacts specific to applicant cases on six sets of outcomes. These are summarized in Exhibit ES.3. Most can be regarded as unfavorable results of welfare reform.

1. ***Welfare reform raised participation by applicant cases in FIP, Medicaid, and public/subsidized housing in the long run.*** The evaluation found statistically significant survey-based evidence of these impacts two and a half to six years after random assignment. This is consistent with, and extends, the previously noted finding, based on administrative data, that welfare reform raised FIP participation in the short run (Exhibit ES.1). Perhaps related to the finding regarding public/subsidized housing, the heads of FIP cases that were subject to reform policies were more likely to have concerns about the characteristics of their neighborhoods.
2. ***Welfare reform increased by 6.5 percentage points the proportion of FIP case heads who had never been married as of two and a half to six years after random assignment.*** Furthermore, among case heads who were single women at random assignment, the proportion married two and a half to six years later was 8.4 percentage points lower for treatment cases (24.2 percent) than for control cases (32.6 percent). Apparently, some provisions of the reforms discouraged marriage among FIP case heads.
3. ***Welfare reform reduced the household earnings and income of applicant cases by about $200 per month two and a half to six years after random assignment.*** This occurred despite the absence of a negative impact on the earnings of the case head, indicating that financial contributions by other household members were smaller under welfare reform. The lower marriage rate probably contributed to this, as it meant that there were fewer spouses in the households of applicant cases to contribute financially. The reduction in household income placed greater financial strain on applicant cases, despite the fact that it did not translate into an increased incidence of poverty.
4. ***Welfare reform had unfavorable impacts on family stability for applicant cases.*** These include "doubling up" with other households, turnover among partners of the FIP case heads, and placement of children in foster care. In addition, Exhibit ES.1 reported more domestic abuse of applicant case heads under welfare reform. These impacts may reflect stresses associated with work requirements, less household income, and the decline in marriage among applicant cases under welfare reform.
5. ***Welfare reform altered care arrangements for children ages 5-12.*** Welfare reform resulted in greater use of formal child care by applicant FIP cases and less use of informal care by relatives. The extended child care subsidies that are available under welfare reform are likely to have contributed to this shift. At the same time, children ages 5-12 in applicant cases were more likely to have cared for themselves on a regular basis under welfare reform.

EXHIBIT ES.3

THE EVALUATION OF WELFARE REFORM IN IOWA:
IMPACTS SPECIFIC TO APPLICANT FIP CASES

	Impact for Applicant Cases	Report Exhibit
Participation in Government Assistance Programs		
Family Investment Program (FIP)	+	IV.7
Medicaid	+	IV.5
Public/subsidized housing	+	IV.4
Neighborhood Characteristics		
Neighborhood quality	-	IV.4
Neighborhood deteriorated over past year	+	IV.4
Marriage		
Case head has never been married	+	IV.3
Household Earnings and Income		
Household earnings last month	-	IV.8
Household income (incl. Food Stamps) last month	-	IV.9
Household income (incl. Food Stamps) last month is below poverty	0	IV.9
Financial strain	+	V.4
Family Stability		
Family moved in with another household, past two years	+	V.6
Case head started or stopped living with a partner, past two years	+	V.6
Child is in foster care	+	IV.3, V.13
Care Arrangements for Children Ages 5-12 Years		
Primary arrangement is center, school-based care, or summer camp	+	V.14
Primary arrangement is care by relatives	-	V.14
Child regularly cared for self sometime during past two years	+	V.14
Well-Being of Children Ages 5-12 Years		
School engagement	-	V.16
Late for school three or more days in past month	+	V.16

SAMPLES: Applicant FIP cases submitted their applications and went through random assignment between 10/1/93 and 3/31/96. Ongoing FIP cases were excluded from this table because the impacts on the measures shown were statistically insignificant for those cases.

DATA: Results presented in this exhibit are based on state administrative data on child welfare services and on data from two MPR surveys that were conducted in 1998-99, two and a half to six years after random assignment for applicant cases.

NOTE: Impact estimates indicated by a "+" or "-" are statistically significant at the .10 level or less, using a two-tailed t-test. Impact estimates indicated by a "0" are not significantly different from zero.

6. ***Welfare reform led to a decline in school engagement and an increase in tardiness among children age 5 to 12 in applicant cases.*** These impacts may be related to the unfavorable impacts of welfare reform on economic well-being and family stability noted above. We detected no other impacts on educational, behavioral, and health outcomes of children in applicant FIP cases.

FINDINGS REGARDING SPECIFIC PROVISIONS OF WELFARE REFORM

The random assignment scheme underlying this evaluation was designed to support estimation of the impacts of Iowa's full welfare reform package, as opposed to the impacts of specific provisions of that package. However, it is possible to investigate the impacts of specific provisions by using the less rigorous methodology of subgroup analysis. This methodology exploits the fact that one subgroup of research cases may have been more likely to be exposed to a specific reform provision than another subgroup. Differences in impact estimates between the two subgroups may therefore reflect the influence of that provision. However, they may also reflect differences between the subgroups in the characteristics of their members, or even other reform provisions that differentially affected the two subgroups. Therefore, the findings from a subgroup analyses are typically less definitive and more subject to misinterpretation than those based directly on a random assignment scheme.

Unfortunately, our analyses of three pairs of subgroups that were differentially exposed to three specific provisions of Iowa's welfare reform package failed to yield results that lend insight into the overall findings from this evaluation. Therefore, we have chosen not to summarize the results from the subgroup analysis here. However, because the results are of some utility in that they provide information on the impacts of welfare reform on the specific subgroups considered, they are presented in Appendix I of this report.

SUMMARY OF FINDINGS

Welfare reform in Iowa achieved important goals with respect to making work pay and instilling in FIP participants greater responsibility for the well-being of themselves and their families. Some of the strongest and most consistent findings of this evaluation are that the reforms resulted in higher rates of participation in the PROMISE JOBS employment and training program and higher rates of combining employment with the receipt of cash assistance. For ongoing FIP cases only, there is evidence that welfare reform increased the earnings of the case heads in the long run (five or six years after random assignment), which was accompanied by reductions in FIP and Food Stamp benefits, indicating greater levels of self-sufficiency, but there are mixed results regarding the impact of welfare reform on the family stability of ongoing cases.

A number of the evaluation's findings indicate that welfare reform had unfavorable impacts on applicant cases in the long run. Two surveys conducted by MPR two and a half to six years after random assignment provide evidence that welfare reform raised rates of participation in FIP, Medicaid, and public/subsidized housing in the long run, while it reduced household earnings and total income by about $200 per month. A negative impact on marriage may have been one of the paths by which the reforms reduced household income. Consistent with the impacts on household earnings and income are findings of unfavorable impacts on a number of measures of family and child well-being, such as financial strain, doubling up of households, domestic abuse, and the school engagement of children.

FINAL OBSERVATIONS

On the surface, it appears to be difficult to reconcile this evaluation's finding of no impact or even a positive impact of welfare reform on FIP participation in the two and a half to six years following random assignment with the 39 percent decline in Iowa's welfare caseload that occurred over the same time period, roughly 1993 through 1998. However, it is important to recognize that Iowa's expanding economy during that period accounted for some of the caseload decline. In addition, the evaluation's design was such that the evaluation could only measure the impacts on cases that had some formal involvement with Iowa's welfare system. That involvement was either the receipt of cash assistance or the submission of an application for assistance. Thus, this evaluation generated findings only for families that were "inside" the welfare system.

It is possible and even likely that Iowa's welfare reform had its biggest impact on the FIP caseload size not by altering the behavior of families inside the welfare system but rather by altering the behavior of families outside the system. Certain aspects of the reforms, such as stronger work requirements and the possibility of being assigned to the Limited Benefit Plan if those requirements are not satisfied, may have dissuaded families from applying for assistance and encouraged them to instead seek employment or other sources of nongovernmental support. Major shifts in the public's thinking about cash assistance that are believed to have accompanied the introduction of welfare reform in Iowa may have had similar effects. If welfare reform did affect families outside the welfare system in these ways, then that, along with the influence of an expanding economy, might reconcile the finding from this evaluation of zero or positive impacts on FIP participation with the large reduction in the FIP caseload that occurred during the period covered by the evaluation.

CHAPTER I

INTRODUCTION

On October 1, 1993, under waivers from the federal government, Iowa replaced the cash assistance program for low-income families, Aid to Families with Dependent Children (AFDC), with the Family Investment Program (FIP). Relative to AFDC policies, FIP policies place less emphasis on maintaining the income of client families and more emphasis on increasing their participation in employment and employment-related training activities. To reinforce this emphasis on work, Iowa implemented complementary reforms to the Food Stamp Program.[1] FIP and the reformed Food Stamp Program anticipated the fundamental shift in welfare policy nationwide that came about with the passage of the federal Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA). That legislation changed welfare from a system of long-term income maintenance to a system of temporary assistance and incentives designed to move recipients into jobs. PRWORA also mandated that, with federally funded block grants, states replace AFDC with the Temporary Assistance for Needy Families (TANF) program. With relatively few modifications, FIP became Iowa's TANF program in 1997.

To assess the effectiveness of its reform policies, the Iowa Department of Human Services (DHS) contracted with Mathematica Policy Research (MPR), Inc., and the Institute for Social and Economic Development (ISED) to evaluate FIP. The evidence from this evaluation indicates that welfare reform in Iowa was modestly successful in raising rates of participation in employment-related activities, and in increasing employment and earnings, at least in the short-run, for two groups of welfare cases: those that were receiving cash assistance when FIP policies were implemented (ongoing cases) and those that applied for assistance in the year after FIP policies were implemented (early applicant cases). However, especially for applicant cases, these gains were accompanied by deterioration in the well-being of families and children along several dimensions.

This report provides estimates of the impacts of welfare reform in Iowa on a wide range of outcomes that extend well beyond the economic outcomes just noted. These estimates are based on data from three sources: state administrative files that provided up to five years of information on 17,345 ongoing and applicant cases that participated in the evaluation (Chapter III), a 1998-99 survey of a random sample of 2,951 of the evaluation cases (Chapter IV), and a survey of 1,475 cases that participated in the first survey and reported a child between the ages of 5 and 12 (Chapter V).

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[1]In August 1993, acting under Section 1115 of the Social Security Act, the U.S. Department of Health and Human Services granted Iowa waivers from certain regulations governing the AFDC program. Concurrently, acting under Section 17(b) of the Food Stamp Act, the U.S. Department of Agriculture granted the state waivers from certain regulations governing the Food Stamp Program. These waivers gave Iowa the authority to implement FIP and its welfare reform Food Stamp Program, and to operate those programs for five years.

A. GOALS AND PROVISIONS OF IOWA=S WELFARE REFORM

While self-sufficiency is the program=s long-run goal, state welfare policymakers established the following three, more immediate goals for FIP:

1. ***Making Work Pay.*** The FIP rules governing eligibility and benefits should permit welfare recipients to experience significant financial benefits from employment.
2. ***Responsibility with Consequences.*** FIP policies should give low-income families responsibility for moving toward self-sufficiency, with consequences for failing to take that responsibility seriously.
3. ***Family Stability.*** The FIP rules governing eligibility and benefits should foster the formation and maintenance of two-parent families.

Exhibit I.1 provides a partial list of FIP provisions that were intended by Iowa policymakers to achieve these three intermediate goals.[2] This section reviews selected provisions in the context of these goals.

1. Making Work Pay

The AFDC program discouraged recipients from working by imposing a high "tax" on earnings. That is, additional earnings led to large reductions in the AFDC benefit amount, thereby dissuading welfare recipients from working. During the first four months of employment, the AFDC benefit was reduced by 67 cents for every dollar earned in excess of $120 per month (a tax rate of 67 percent). During months 5 through 12 of employment, the AFDC benefit was reduced by one dollar for every dollar earned in excess of $120 (a tax rate of 100 percent), meaning that additional earnings had no effect on income. After the 12th month of employment, the 100 percent tax rate was applied to every dollar earned in excess of $90.

In most circumstances, a family can achieve a higher level of income at a given level of earnings under FIP than under AFDC. The "guarantee"—the amount of cash assistance received by a family with zero earnings—is the same for both AFDC and FIP: $426 for a family of three, and $495 for a family of four. However, unlike AFDC, FIP provides earned-income disregards that result in a tax rate on earnings of only 40 percent: for every dollar a FIP family earns, its FIP benefit amount is reduced by 40 cents, so its total income increases by 60 cents. Therefore, FIP families benefit substantially more from employment and earnings than did AFDC families.[3]

The relationship between earnings and income under FIP and AFDC is illustrated in Exhibit I.2 for a hypothetical family of three (a mother and two children) that is not receiving child

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[2]Prindle et al. (1999) provide a comprehensive list and discussion of the provisions of FIP.

[3]The contrast between FIP and AFDC was even greater before 1997. Before 1997, the work transition period (WTP) was available to FIP cases without significant earnings in the previous year. The WTP provided a four-month window during which the FIP cash benefit was not reduced if the case increased its earnings. This provision of welfare reform was eliminated in 1997.

support payments and has received earned income for at least 4 months but for no more than 12 months.[4] At all but the lowest levels of earnings, the family's income is higher under FIP than it would have been under AFDC, demonstrating that FIP provides a greater financial incentive to work than did AFDC. Paradoxically, the expanded earned-income disregards in FIP make it more difficult for a family to work its way off of welfare. Exhibit I.2 shows that, for this hypothetical family, the "break-even" level of earnings—the level at which the family can no longer receive cash assistance—is $1,065 per month under FIP (point A), compared with $546 under AFDC (point B). Therefore, a family can earn nearly twice as much under FIP compared with AFDC and still qualify for cash assistance. Suppose that the mother in our hypothetical family earns $7.15 per hour. Under AFDC, her family would be ineligible for cash assistance if she worked more than 18 hours per week, but under FIP, she could work as many as 34 hours per week, and her family would still qualify for assistance.

2. Responsibility with Consequences

FIP was designed to shift much of the responsibility for the long-run economic well-being of low-income families from the state to the parents in those families. To ensure that parents understand this responsibility, FIP requires them to develop and sign a Family Investment Agreement (FIA). The FIA is a contract specifying the steps that the parents will take to achieve economic self-sufficiency, and the financial assistance and services that the state will provide to facilitate that process. If a client parent(s) fails to develop and sign an FIA, or abandons an existing FIA, the client family is assigned to the Limited Benefit Plan (LBP). At the outset of welfare reform, in October 1993, the LBP provided three months of full FIP cash benefits, three months of reduced benefits, and then six months of no benefits for the entire family. Revisions to the LBP in 1996 and 1999 reduced the lag between entry into the plan and the full cessation of benefits.[5]

The FIA is developed during the up-front assessment activities that occur in the PROMISE JOBS program, which provides training, job placement assistance, and other employment-related services to FIP participants.[6] Exemptions from the requirement to participate in PROMISE JOBS are significantly restricted under FIP relative to AFDC. For example, the principal

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[4]The AFDC benefit formula described in Exhibit I.2 was used to determine benefit amounts for all cash assistance cases prior to the implementation of welfare reform in October 1993; the FIP benefit formula described in Exhibit I.2 has been used to determine benefit amounts for all cash assistance cases governed by reform policies between October 1993 and the present.

[5]The LBP was revised in 1996 to cover a nine-month period for an initial assignment, with three months of reduced benefits followed by six months of no benefits. If a client entered the LBP a subsequent time, benefits were terminated fully and immediately for six months. The current provisions of the LBP reflect revisions that were implemented in 1999. Under those provisions, cash benefits are terminated fully and immediately upon assignment to the LBP. Benefits are restored as soon as a client on an initial LBP assignment complies with the FIA process. If a client is on a second or subsequent assignment, then benefits cannot be restored until six months have passed, and then only if the client complies with the FIA requirements and also completes 20 hours of employment or approved employment-related activities.

[6]PROMISE JOBS implemented the Job Opportunities and Basic Skills Program in Iowa, as mandated by the federal Family Support Act of 1988. It has been retained in the PRWORA era as a complement to FIP.

caretaker of a child under the age of three years was exempt from the requirement to participate in PROMISE JOBS under AFDC, but that exemption was first restricted and then eliminated under welfare reform.[7] In addition, personal and family circumstances that resulted in exemptions from PROMISE JOBS under AFDC, such as a recipient's health problem or the disability of another family member, must be addressed within PROMISE JOBS and reflected in the FIA under FIP.

PROMISE JOBS offers a menu of services, including the following:

X Orientation and assessment (during which the FIA is developed and signed)

X Group and individual job search assistance

X Education and training programs

X Unpaid work experience and community service

X Monitored employment

Each client's FIA identifies certain activities—such as obtaining a GED certificate or seeking a job with certain characteristics—in which the client will participate at a specified level. A client who does not participate in these activities or who does not participate at the specified level is considered to have abandoned the FIA and is subject to assignment to the LBP.

3. Family Stability

The designers of FIP viewed two-parent families as more likely to be stable and economically self-sufficient than one-parent families. They were concerned that some AFDC policies may have undermined the formation and maintenance of two-parent families by restricting their access to public assistance. Motivated by these concerns, they designed FIP to promote and support family stability by making it easier for two-parent families to qualify for cash assistance. For example, unlike AFDC, FIP does not require one parent in a two-parent family to be identified as the Aqualifying parent≅ or that a history of significant recent attachment to the labor force be documented for that parent. Neither does FIP include the AFDC A100-hour rule,≅ which stipulated that families in which the qualifying parent worked more than 100 hours per month were ineligible for cash assistance. In addition, FIP extends to step-parent families the same deductions from earned income that are available to natural parents; because of these deductions, step-parent families are more likely to qualify for assistance under FIP than they were under AFDC.

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[7]Under AFDC rules, the primary caretaker of a child under the age of three years was exempt from PROMISE JOBS participation requirements. Effective January 1, 1994, welfare reform restricted this exemption to the primary caretaker of a child under the age of six months. In 1996, the exemption was lowered to three months, and it was eliminated entirely in 1997. However, under the 1997 policy, participation in PROMISE JOBS may be waived for 12 weeks in accordance with the Family and Medical Leave Act.

The designers of FIP also recognized that assets provide families with economic stability during periods of fluctuation in income or expenses. They believed that economic stability provides a foundation for family stability. To encourage the accumulation of assets, FIP raises asset limits and authorizes the establishment of individual development accounts for savings targeted to approved uses, such as educational expenses and the costs of starting a business.

4. Indirect Effects of the Reform Provisions

Each specific provision of Iowa's welfare reform was designed to facilitate progress toward one or more of the goals discussed above. However, some of the provisions may have indirectly influenced the achievement of goals other than those they were designed to address. For example, provisions that were designed to encourage case heads to take responsibility for moving their families toward self-sufficiency could possibly have affected intra-family relationships and thereby indirectly affected family stability. Indirect effects such as these may have facilitated or impeded progress toward the affected goals. The estimates of the impacts of welfare reform that are presented in this report reflect both the direct and indirect effects of all of the provisions of Iowa's welfare reform. If a particular impact estimate appears to be inconsistent with a goal of welfare reform and the provisions that were implemented to address that goal, it is possible that the impact also reflects the indirect effects of other provisions.

B. CASELOAD TRENDS AND ECONOMIC CONDITIONS IN IOWA

In September 1993, the month immediately before welfare reform was implemented in Iowa, 36,404 families with dependent children were receiving cash assistance, as shown in Exhibit I.3. The welfare caseload grew by about 4,000 cases over the next seven months, peaking at 40,659 families in April 1994. Following that peak, the monthly caseload declined steadily. By September 1998, the 60th month under welfare reform, the caseload stood at 23,139 families—36 percent fewer than in September 1993. The caseload continued to decline through November 2000. We have highlighted the decline through September 1998 because the findings from this evaluation that are based on data from state administrative files pertain to the period October 1993 through September 1998.

Much of the upswing in the welfare caseload in the months immediately following the implementation of welfare reform can be attributed to the expansions in eligibility for assistance that were included in the reforms. The larger earned-income disregards under FIP compared with AFDC meant that some working families that would have been ineligible for AFDC benefits were eligible for FIP benefits. Among families with earnings, this allowed some ongoing cases to continue receiving assistance and some applicant cases to qualify for assistance.

The contribution of welfare reform in the decline in Iowa's welfare caseload following its April 1994 peak is less clear. Iowa's robustly expanding economy is likely to have been an important factor underlying that decline. From the middle to the late-1990s, Iowa enjoyed a declining unemployment rate that was well below the national average. In 1993, the year in

which welfare reform was implemented, Iowa's unemployment rate stood at 4.0 percent (Exhibit I.4). From that point forward, it gradually declined, reaching a low of 2.5 percent in 1999.[8]

Given the competing explanations—welfare reform or expanding economy—for the reduction in the welfare caseload in Iowa after April 1994, this evaluation is valuable because it provides estimates of the impacts of welfare reform that are not confounded by the improvement in the economy. The evaluation is based on an experimental design in which families in the control group were subject to AFDC policies while families in the treatment group were subject to FIP policies. Because the members of both groups were equally exposed to Iowa's expanding economy and to other trends in the social, political, and demographic environment, the differences in outcomes between the treatment and control groups provide estimates of the impacts of welfare reform that are not distorted by those trends.

C. AN EXPERIMENTAL DESIGN FOR THE WELFARE REFORM EVALUATION

The terms and conditions under which the U.S. Department of Health and Human Services and the U.S. Department of Agriculture approved the waivers authorizing Iowa to implement its welfare reform program required the state to evaluate the reforms. They specified that the evaluation have an experimental design to measure the impacts of welfare reform on current participants ("ongoing FIP cases") and on families that apply for assistance ("applicant FIP cases").

DHS selected 9 of Iowa=s 99 counties to participate in the experiment, designating them as "research counties."[9] These counties were purposefully selected on the basis of the ability of the local DHS and PROMISE JOBS offices to administer the reform and pre-reform programs concurrently, and the desirability of having a geographically dispersed mix of urban and rural counties in the evaluation. The research counties are identified on the map in Exhibit I.5. There were five urban research counties (Black Hawk, Linn, Polk, Pottawattamie, and Woodbury) from across the state, and four rural counties (Clinton, Des Moines, Jackson, and Jones) from the southeastern region of the state.

In the nine research counties, ongoing FIP cases were identified as those that were active FIP cases in September 1993, while applicant FIP cases were identified as those that applied for FIP between October 1993 and March 1996. Ongoing FIP cases and applicant FIP cases were randomly assigned to treatment, control, or nonresearch status.[10] The research counties concurrently administered what amounted to two different welfare systems—a pre-reform system (operating under the rules of the former AFDC program) for control cases and a reform system (operating under the new FIP rules) for treatment and nonresearch cases.

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[8]The national unemployment rate was 6.9 percent in 1993 and 4.2 percent in 1999.

[9]In the 90 nonresearch counties, Iowa implemented welfare reform policies for all ongoing and applicant FIP cases on October 1, 1993.

[10]Cases that received or applied for Food Stamps but not FIP were also randomly assigned to treatment, control, or nonresearch status. Fraker et al. (1998) used data for these "Food-Stamp-only" cases to estimate the impacts of the welfare reform Food Stamp Program. We did not use data for these cases to generate the estimates presented in this report.

The nonrandom process used to select the nine research counties implies that the findings from this evaluation cannot be generalized to the entire state of Iowa.[11] However, the random process used to assign research cases to treatment and control status ensures that findings from this evaluation can be generalized to all ongoing and applicant FIP cases living in the nine research counties during the evaluation period.

D. COMPONENTS OF THE WELFARE REFORM EVALUATION

The original plan for the evaluation of Iowa=s welfare reform program included the following six major research components (MPR and ISED 1994a):

1. ***Monitor Random Assignment.*** MPR and ISED (1994b) used administrative data to statistically compare the treatment and control cases in the evaluation and to compare these cases with the statewide welfare caseload. In addition, the evaluators monitored the random assignment of applicant cases through visits to the local DHS offices and through reviews of the sampling logs used by those offices.
2. ***Process Study.*** ISED used data gathered through a review of DHS documents, site visits to DHS and PROMISE JOBS offices in the nine research counties, and structured discussions with administrators and staff in the DHS central state office to describe the design, implementation, and operation of FIP (Prindle et al. 1999).
3. ***Calculation of Federal Cost Neutrality.*** MPR used a federally specified methodology to calculate the costs to the federal government of cash assistance, Food Stamps, Medicaid, job training, and child care for treatment and control cases in Iowa. Treatment-control differences in total costs were computed and extrapolated to the state level using a federal formula. These calculations were conducted and reported quarterly during the first four years of welfare reform and in a final report (Gordon 1999).
4. ***Monitor Client Perceptions and Experiences under Welfare Reform.*** During the first five years of welfare reform, ISED used quarterly mail surveys and focus group discussions with current and former FIP clients to gather information on their perceptions of and experiences under welfare reform. Findings were reported quarterly and in occasional summary reports (Hein et al. 2000).
5. ***Core Impact Study.*** MPR used the evaluation=s experimental design to isolate the effects of welfare reform from the effects of other factors, such as the economy. Findings from MPR's analysis of up to 3-1/2 years of administrative data were presented in two interim reports (Fraker et al. 1998 and 2000). Findings from our analysis of up to 5 years of administrative data and from a survey of treatment and control cases are presented in Chapters III and IV of this report.

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[11]The inability to generalize the findings to the state level is a common feature of welfare reform waiver evaluations conducted during the 1990s.

6. ***Cost-Benefit Analysis.*** Using program cost data for FIP and PROMISE JOBS, along with findings from the core impact study, MPR and ISED calculated the costs and benefits of welfare reform in Iowa during its first two years. These calculations were performed from the perspective of various stakeholders in the reforms, including welfare clients, the state and the federal government, and society as a whole (Gordon and Martin 1999).

In 1997, DHHS gave grants to five states that were conducting random-assignment evaluations of welfare reform waiver programs so that they could expand the evaluations to include a special component focused on children. This became the seventh component of Iowa's evaluation:

7. ***Child Impact Study.*** Building on the evaluation's experimental design and using data from a survey of treatment and control cases with children of elementary school age, MPR estimated the impacts of welfare reform on the well-being of children. The findings from this analysis are presented in Chapter V of this report.

E. OBJECTIVES OF THIS REPORT

This final report on the impact study (encompassing components 5 and 7, above) moves beyond the two interim reports (Fraker et al. 1998 and 2000), to include both a longer follow-up period and a broader range of outcome measures. The interim reports presented estimates of impacts on only outcomes that could be measured through state administrative data systems during the first 3-1/2 years of welfare reform. These outcomes included TANF and Food Stamp benefit amounts and earnings on jobs covered by unemployment insurance. This report presents impact estimates based on administrative data through the full five years following random assignment for ongoing cases, and up to between two and four years for applicant cases. It also includes outcomes measured through two 1998-99 surveys of research cases, one focused on case heads and their families and the other focused on children ages 5-12 in those families.

The experimental design underlying the impact study ensures that its estimates are of the *net* impacts of welfare reform—that is, differences in outcomes that can be attributed only to the reforms and not to changes in other conditions that may have coincided with the introduction of the reforms. The robust expansion of Iowa=s economy following the implementation of welfare reform underscores the need for estimates that isolate the contributions of the reforms.

Despite some important limitations of the evaluation, discussed in Section E of the next chapter, this report provides a valuable picture of the effects of welfare reform in Iowa. Separately for ongoing and applicant FIP cases, it presents estimates of welfare reform's impacts on employment, earnings, program participation, and benefit amounts (Chapter III); on wage rates, hours of work, fringe benefits, family income, poverty status, and other measures of family well-being (Chapter IV); and on children's school performance, smoking and alcohol use, involvement in the formal child welfare system, and other measures of child well-being (Chapter V).

EXHIBIT I.1

PROVISIONS OF IOWA'S FAMILY INVESTMENT PROGRAM

Making Work Pay

- Under the Work Transition Period, all earnings of new workers (defined as workers who earned less than $1,200 in the past year) were disregarded in the initial four months of employment. (This provision was eliminated in 1997.)

- Earned-income disregards were expanded.

- Transitional Child Care was extended from 12 to 24 months for FIP cases that lost their eligibility for cash assistance due to earnings. TCC was also provided to FIP cases with earnings that either left FIP voluntarily or were terminated due to child support income. (This provision was eliminated in 1999, but the benefit was continued for ongoing recipients of TCC through July 2001.)

Responsibility with Consequences

- Able-bodied FIP recipients were required to participate in employment and training activities and to sign a Family Investment Agreement. The FIA is a contract specifying the work activities in which the recipient will participate, the support services that the state will provide, and the intended date of exit from FIP.

- Several exemptions from the employment and training requirement were eliminated, including the exemption for the principal caretaker of a child under the age of three years, and the exemption for one parent in a two-parent family.

- Many personal and family circumstances that previously qualified a recipient for an exemption from the requirement to participate in employment and training activities were treated as barriers to be resolved rather than as cause for an exemption.

- The Limited Benefit Plan was established for clients who fail to sign and carry out an FIA. At the outset of welfare reform, the LBP provided a full benefit for three months, followed by a reduced benefit for three months, and no benefit for six months. Currently, the LBP provides for the immediate cessation of all cash assistance. Assistance may resume as soon as a client on an initial LBP assignment complies with the FIA process. But for a client on a subsequent assignment, assistance may resume only after 6 months and then only if the client complies with the FIA process and also completes 20 hours of work or work-related activities.

Family Stability

- The designation of a principal wage earner (qualifying parent) was eliminated, as was the requirement that the qualifying parent work fewer than 100 hours per month.

- An unemployed parent was not required to have a recent work history in order to qualify for FIP.

- Step-parents qualified for the same work expense deductions and earned-income disregards as parents.

- The resource limit was increased to $2,000 for applicants and $5,000 for recipients. Also, the vehicle asset limit was increased to $3,000 for both applicants and recipients, with subsequent annual adjustments to offset inflation as measured by the consumer price index.

- The balance in an Individual Development Account (IDA) was disregarded in calculating a family's resources. Income deposited in an IDA is disregarded in calculating eligibility and benefits.

EXHIBIT I.2

MONTHLY INCOME UNDER AFDC AND FIP IN IOWA,
IN MONTHS FIVE THROUGH TWELVE OF EMPLOYMENT
(Family of Three without Child Support)

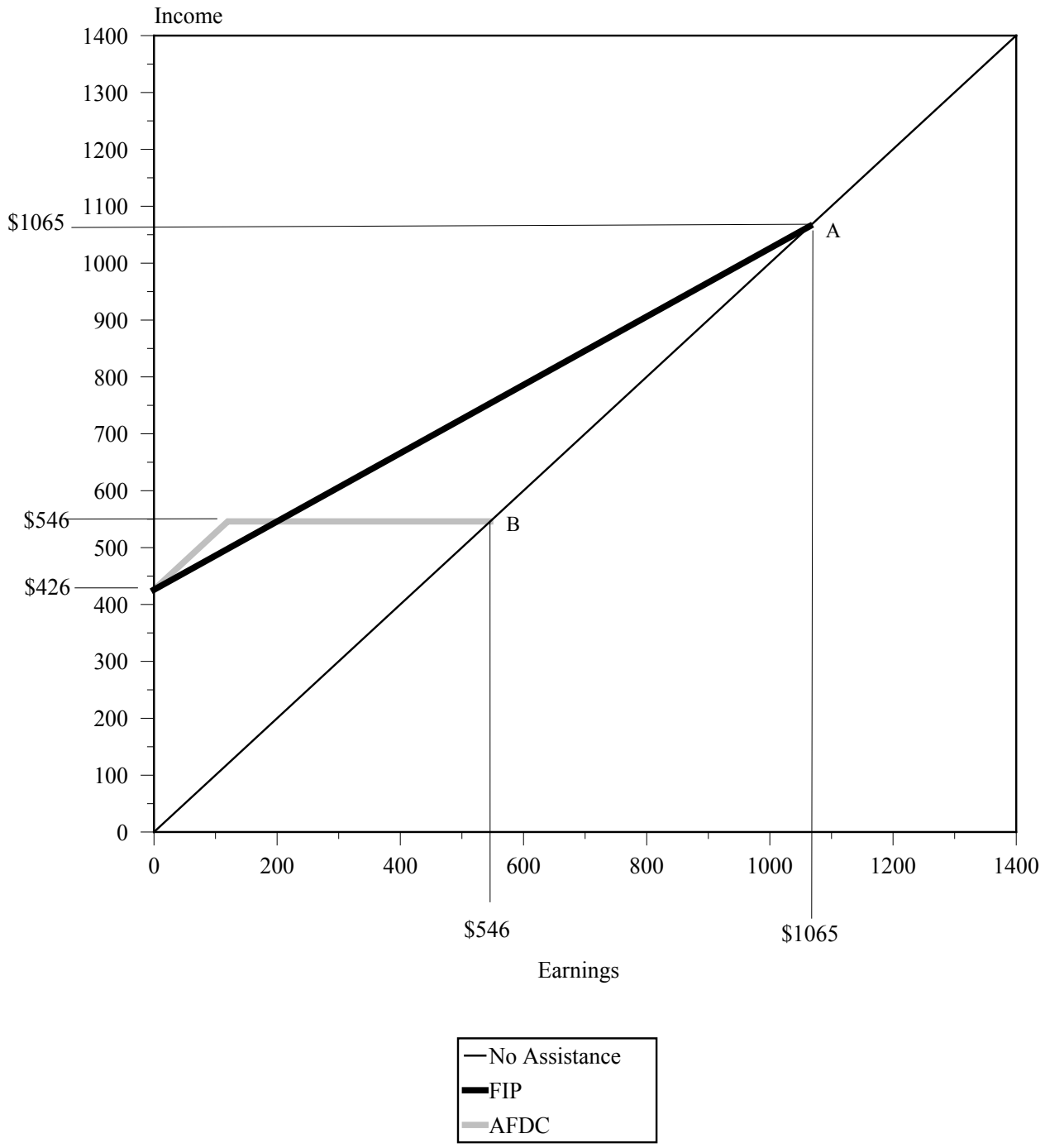


EXHIBIT I.3

FIP CASELOAD: SEPTEMBER 1993 - APRIL 2001

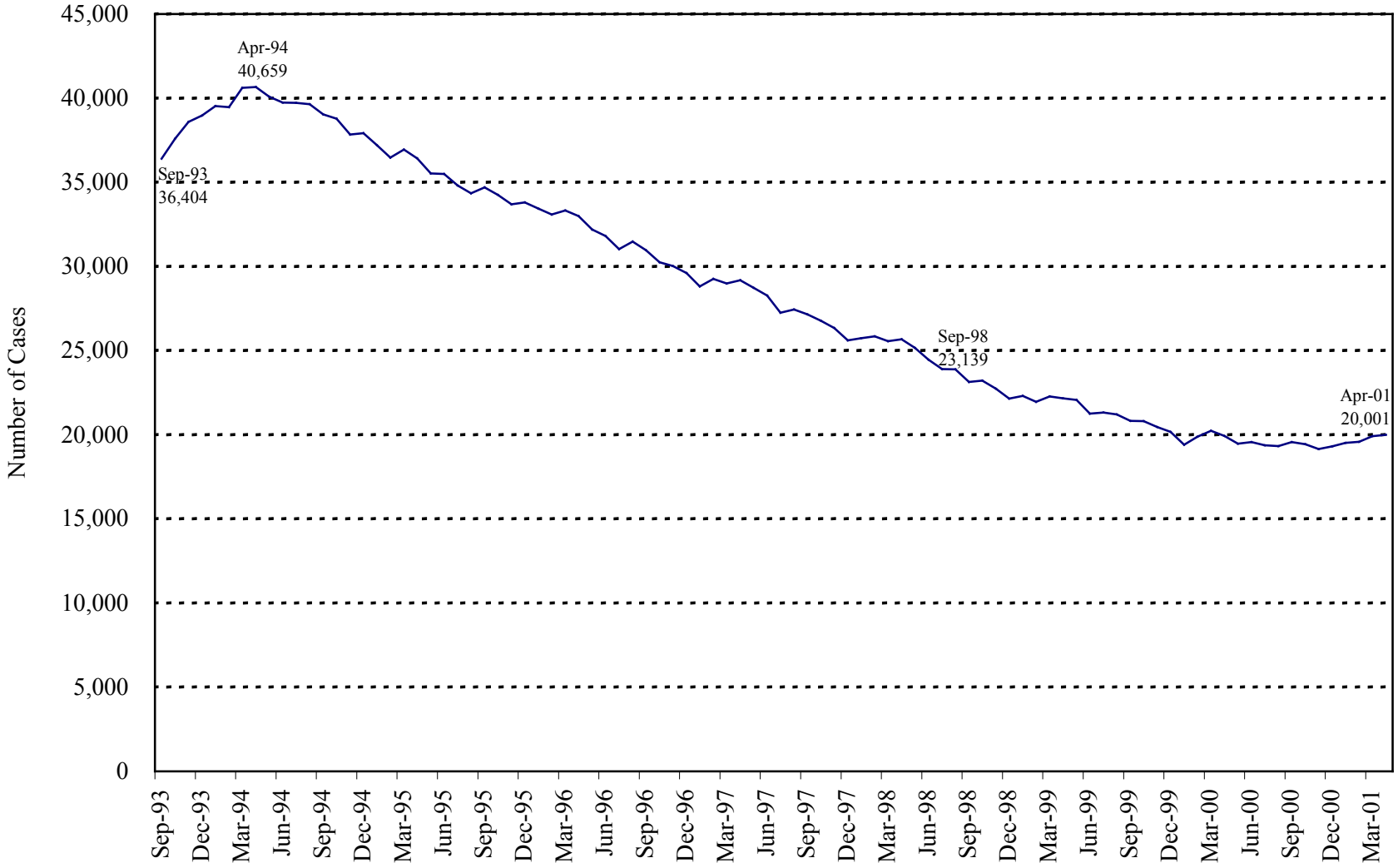


EXHIBIT I.4

IOWA UNEMPLOYMENT RATE: 1993 - 2000

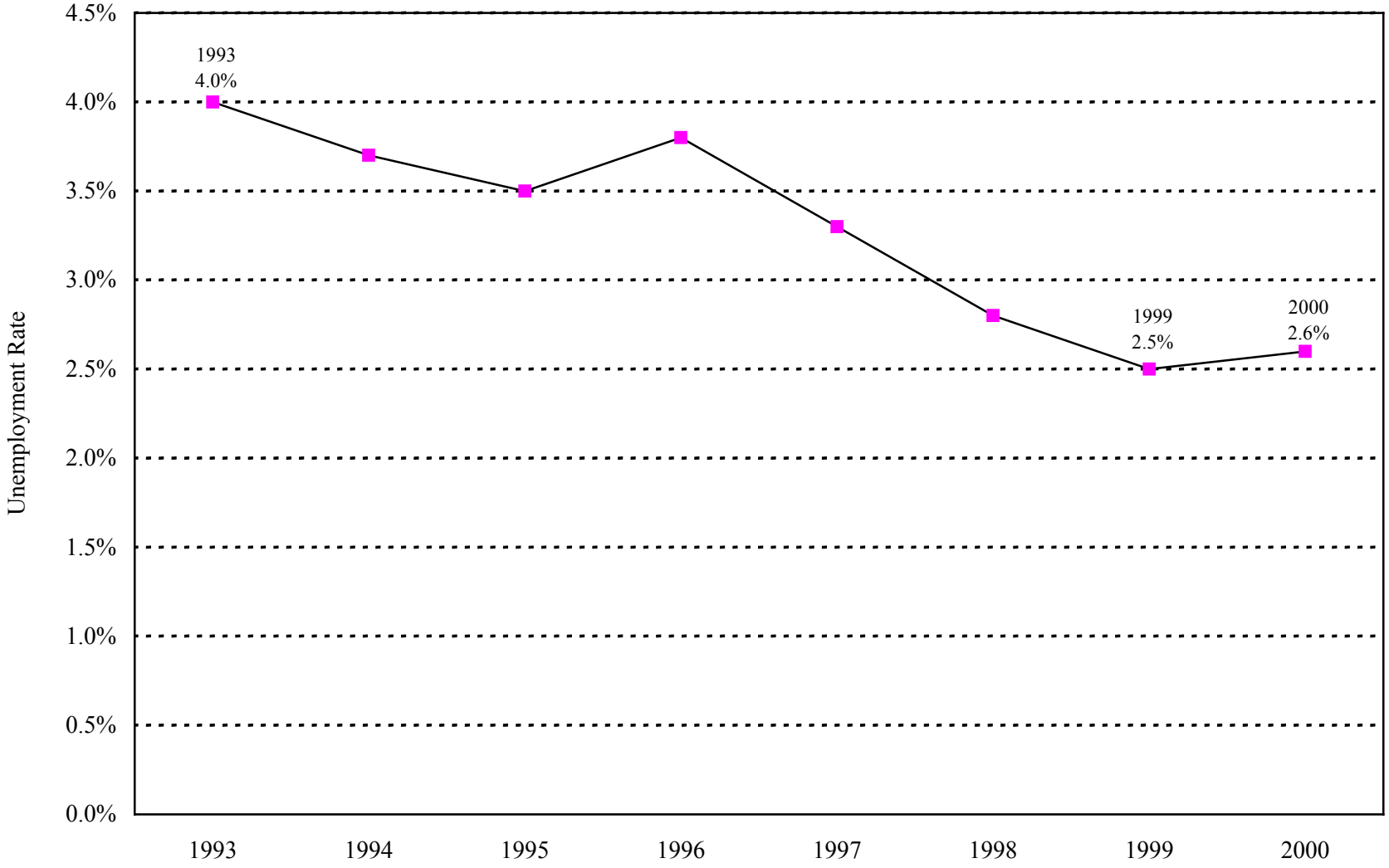
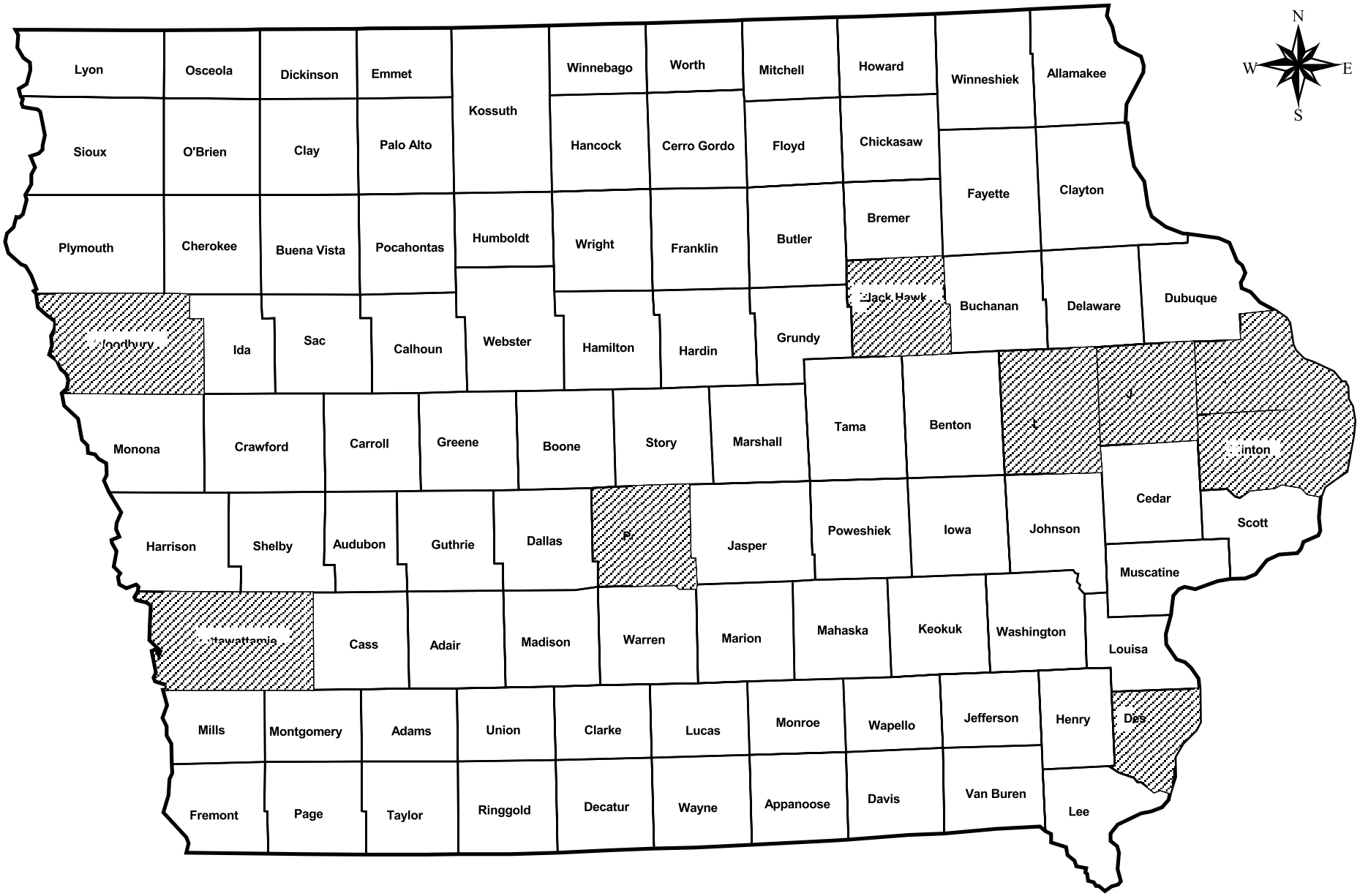


EXHIBIT I.5

IOWA RESEARCH COUNTIES



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CHAPTER II

DESIGN OF THE EVALUATION

This chapter presents the design for the evaluation of welfare reform in Iowa. It outlines the random assignment process that was used to select the research samples and provides statistical descriptions of those samples and the populations that they represent. The statistical methods used to estimate the impacts of welfare reform are described. The chapter concludes with a detailed discussion of the limitations of the evaluation design and their implications for the interpretation and use of the impact estimates.

The most important feature of the design of this evaluation is the random assignment of cases to reform (treatment) and pre-reform (control) policies. Because of random assignment, the differences in average outcomes between the treatment and control samples cannot be attributed to a lack of comparability between the two samples. Therefore, we are confident in attributing these differences to Iowa's welfare reform policies and in using them as estimates of the impacts of those policies.

A. DESIGN OF THE RESEARCH SAMPLES

Nine counties in Iowa were selected for the evaluation of welfare reform and designated as "research" counties: Black Hawk, Clinton, Des Moines, Jackson, Jones, Linn, Polk, Pottawattamie, and Woodbury. These counties are geographically dispersed across the state and include both urban and rural areas. The evaluation was designed to provide estimates of the impacts of welfare reform in the research counties. Because these counties were not selected randomly, we cannot generalize the findings in this evaluation to the entire state of Iowa.

The evaluation measured the impacts of welfare reform on two populations of FIP cases:

1. ***Ongoing FIP Cases.*** These are the 16,308 cases that received FIP benefits in the nine research counties in September 1993.
2. ***Applicant FIP Cases.*** These are the 20,819 cases that applied for FIP in the nine research counties from October 1993 through March 1996.

Members of both populations were randomly assigned to one of three samples: a treatment sample, which was subject to Iowa's welfare reform policies; a control sample, which was subject to pre-reform AFDC policies; and a nonresearch sample, which was subject to reform polices but was not tracked by the evaluation.[1] The probability of being assigned to any one of the three samples varied across counties and over time. In each research county, two cases were assigned to the treatment sample for each case assigned to the control sample. However, the

[1]Eligibility for assistance and the level of benefits were determined according to welfare reform policies for the treatment and nonresearch samples, and according to pre-reform policies for the control sample.

percentage of cases assigned to the nonresearch sample varied from county to county to ensure that the relative frequency distribution of treatment cases across regions of the state matched that of all FIP cases.

The random assignment process produced four research samples of FIP cases that were analyzed in the evaluation:[2]

1. ***Ongoing Treatment Sample.*** These are the 4,952 ongoing FIP cases that were randomly assigned to treatment status.
2. ***Ongoing Control Sample.*** These are the 2,466 ongoing FIP cases that were randomly assigned to control status.
3. ***Applicant Treatment Sample.*** These are the 6,615 applicant FIP cases that were randomly assigned to treatment status.
4. ***Applicant Control Sample.*** These are the 3,312 applicant FIP cases that were randomly assigned to control status.

To ensure that findings based on these four samples could be generalized to the population of ongoing FIP cases and the population of applicant FIP cases in the nine research counties, we computed an "evaluation weight" for each sample member that reflects the assignment probability. For example, the evaluation weight for each case in the ongoing treatment sample is equal to the inverse of the probability that the case would be randomly assigned to the ongoing treatment sample, as opposed to the ongoing control or nonresearch samples.

B. DESCRIPTION OF ONGOING AND APPLICANT FIP CASES

The populations of ongoing and applicant FIP cases can be described by using administrative data that were collected for all sample members. These data come from two sources maintained by state agencies:

1. ***The Iowa Automated Benefit Calculation (IABC) System.*** Maintained by Iowa DHS, the IABC system contains information on the FIP and Food Stamp benefits received by each case. It also contains basic demographic information on each member of each case.
2. ***The Unemployment Insurance (UI) Wage Reporting System.*** Maintained by Iowa Workforce Development, the UI wage reporting system contains employer-reported information on the earnings of employees during each calendar quarter.

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[2]The random assignment process actually produced *eight* research samples: four FIP samples and four Food Stamp-only (FSO) samples. An earlier analysis of the FSO samples provided estimates of the impacts of welfare reform on FSO cases. The analysis, reported in the evaluation's first interim report (Fraker et al., 1998, Appendix B), indicated that these impacts were small.

Ongoing FIP cases and applicant FIP cases were analyzed separately throughout the evaluation, reflecting the expectation that the two populations would contain different types of families, and that the impacts of welfare reform on each sample would be different. Ongoing cases received cash assistance in the month prior to random assignment; applicant cases did not. Therefore, long-term recipients are more likely to be found among ongoing cases than among applicant cases. Since long-term recipients tend to have less recent work experience than short-term recipients, we expected ongoing cases to have less labor force attachment on average than applicant cases.

To describe the characteristics of all ongoing FIP cases and applicant FIP cases in the nine research counties, we used data from the IABC and the UI wage reporting system to create baseline variables measured at or prior to random assignment for the 7,418 cases in the two ongoing samples and the 9,927 cases in the two applicant samples.[3] The characteristics are shown in Exhibit II.1. Ongoing and applicant cases differ primarily in terms of their earnings histories. In the year prior to random assignment, ongoing FIP cases earned an average of $1,744, while applicant FIP cases earned an average of $6,185. The two types of cases differ in other ways as well: compared with the heads of applicant FIP cases, the heads of ongoing FIP cases are more likely to be female and black, and less likely to be married. However, ongoing and applicant cases are also similar in certain ways. The proportion of case heads who are white is similar, as is the average age of the case head.

C. COMPARISON OF TREATMENT AND CONTROL SAMPLES

The key benefit of random assignment is that the treatment-control differences in outcomes will not be biased by systematic differences between the two groups at the time of random assignment (i.e., "at baseline"). Therefore, it would be desirable to "prove" that the assignment process was truly random. While we cannot use administrative data on the two samples to provide such proof, we use the data to provide an assessment of whether the two samples are as similar as we would typically expect under random assignment. For this analysis, we compared the treatment and control samples using the same baseline variables that we used to describe ongoing and applicant cases in Exhibit II.1.

Our analysis suggests that for ongoing FIP cases, the treatment and control samples were very similar to each other at baseline—as similar as we would expect under random assignment. The differences between the two samples are small and statistically insignificant for all baseline variables, as shown in Exhibit II.2. For example, the average age of the youngest person in the case was 5.0 years for the treatment sample and 5.2 years for the control sample. For applicant FIP cases, our analysis suggests that the treatment and control samples were similar to each other at baseline, but perhaps not quite as similar as we would expect under random assignment. The differences between the two applicant samples are small and statistically insignificant for most baseline variables, as shown in Exhibit II.3. On the other hand, these two samples are

[3]The 7,418 ongoing treatment and control cases were weighted to represent all 16,308 ongoing FIP cases (treatment, control, and nonresearch) in the nine research counties; the 9,927 applicant treatment and control cases were weighted to represent all 20,819 applicant FIP cases in the nine research counties.

significantly different from each other in the average age of the case head (27.3 years for the treatment sample and 27.9 years for the control sample) and in the age of the youngest person in the case (4.1 years for the treatment sample and 4.3 years for the control sample). However, neither of these differences would be considered large. Furthermore, as described in the following section, we control for differences in baseline variables in the method used to estimate the impacts of welfare reform.

D. ESTIMATION OF WELFARE REFORM'S IMPACTS

The small treatment-control differences in baseline characteristics suggest that treatment-control differences in average outcomes, such as earnings, provide reliable estimates of the impacts of welfare reform. However, to obtain more precise impact estimates, we used multivariate regression models to adjust the treatment-control differences in average outcomes. The regression adjustments were based on control variables that account for the baseline characteristics of the case head (such as age, sex, race and ethnicity, education, marital status, and number of dependents) and for the baseline characteristics of the case itself (such as county of residence, number of case members, and earnings in the year prior to the quarter of random assignment) that existed prior to random assignment. For all of these control variables (except the education of the case head, which was missing for almost half of all cases), the sample averages and proportions are displayed separately for treatment cases and control cases in Exhibits II.2 and II.3 for ongoing FIP cases and applicant FIP cases, respectively.

In addition to estimates of the impacts of welfare reform on all ongoing and all applicant FIP cases, this report provides estimates of the impacts on selected subgroups of ongoing and applicant cases. These subgroups were typically defined using the baseline variables shown in Exhibits II.1 through II.3. The benefits of random assignment extend to the subgroup analysis. Therefore, the subgroup impacts were estimated in much the same manner as the overall impacts. Details on the procedures that were used to estimate both overall impacts and subgroup impacts from administrative data and survey data are provided in sections on research methodology in Chapters III through V and in the appendices associated with those chapters.

As discussed in Section A, all impact estimates provided in this report are based on data that have been weighted to ensure that the estimates of overall and subgroup impacts are representative of the nine research counties. The weights account for variation across counties in the probability of being assigned to different samples. For the impact estimates that are based on the evaluation's two surveys, the weights also account for nonresponse to the surveys. The statistical significance of the impact estimates is assessed based on "robust" standard errors that account for variation in the sampling probabilities and sampling weights across the research counties.[4]

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[4]Because we applied sampling weights to our treatment and control samples to account for variation in sampling rates across counties, the weighted samples almost surely exhibit heteroskedasticity. Robust standard errors (otherwise known as "Huber-White" standard errors) account for heteroskedasticity.

E. LIMITATIONS OF THE EVALUATION DESIGN

The design for the evaluation of welfare reform in Iowa is fundamentally strong in that it entails the random assignment of research cases to treatment or control status. Random assignment is the "gold standard" design for evaluations of social welfare programs, yielding estimates of program impacts that are not influenced by factors external to the program reforms being studied. However, certain features of the design for the Iowa evaluation and its implementation can be viewed as limitations. The impact estimates presented in this report should be interpreted and used in light of these limitations. Most of the limitations are ones that would tend to result in estimates that understate the true impacts of welfare reform. These limitations are not unique to this evaluation; rather, they are present in most random assignment evaluations of social welfare programs.

This section discusses four limitations of this evaluation's design and assesses their implications for the interpretation and use of the impact estimates presented in this report.

1. Contamination of Control Cases

In a random assignment evaluation, cases in the control group are "contaminated" if they were exposed to treatment policies prior to the measurement of outcomes. Some degree of control group contamination is present in most evaluations of social welfare programs, especially evaluations of large-scale permanent programs, such as FIP, as opposed to smaller-scale demonstration programs. When control cases are exposed to treatment policies or influenced by the reform environment associated with the treatment, they may behave differently than they would have behaved under pre-reform policies in a pre-reform environment, i.e. the control cases may behave more like treatment cases. Thus, in the presence of contamination, impact estimates may understate the true impacts of a reform program.[5]

Contamination of control cases in the evaluation of welfare reform in Iowa may have arisen from four sources:

- ***A Paradigm Shift in Welfare Policy.*** Welfare reform was implemented statewide in Iowa in 1993. In 90 nonresearch counties, the reform policies were applied to all cases. Even in the 9 research counties, most cases were subject to the reform policies. To the extent that the reforms changed the attitudes of Iowans toward public assistance, the outcomes for both treatment cases and control cases in the evaluation would have been influenced. For example, welfare reform may have inculcated in the general public the philosophy that the heads of families on assistance should contribute to their own support by working. If so, even control cases may have worked more despite the fact that the AFDC benefit formula

[5]In statistical terms, contamination of control may cause an impact estimate to be "biased toward zero," but it does not cause the *sign* of the estimate to be biased. So, for example, if the true impact of a program on some outcome were large and negative, we would expect the contaminated impact estimate to be smaller in magnitude than the true impact but have the same negative sign.

provided them with little, if any, financial incentive to do so. Such reform-induced changes in behavior by control cases could not be captured in the impact estimates in this evaluation.

- ***Termination of Control Policies.*** By the end of March 1997, all control cases were subject to policies that differed from the policies that prevailed prior to Iowa's welfare reform. More specifically, in response to federal welfare reform, Iowa "lifted" control policies and applied reform policies to all research cases—both treatment and control. The extent to which this policy shift affected control cases is unclear. By early 1997, over half of ongoing and applicant cases were no longer participating in FIP and were therefore partially shielded from changes in FIP policies. However, because control policies were lifted during the evaluation, the evaluation's findings probably understate the true impacts of welfare reform on outcomes measured after March 1997.[6]

- ***Crossover.*** In the parlance of random assignment evaluations, "crossover" refers to a formal change in the treatment/control status of a research case. Such a change can result in a case being exposed to both treatment and control policies, albeit at different points in time. In the Iowa evaluation, crossover could in principle have occurred through any of several mechanisms, but the most likely mechanism was the movement of an active control case out of one of the nine research counties and into one of the ninety nonresearch counties. Since FIP was being administered in the nonresearch counties according to reform policies only, such a case would have automatically become subject to those policies. We studied crossover during the first two years of welfare reform and found its incidence to be small. Ongoing control cases were subject to treatment polices during 2.3 percent of the case-quarters following random assignment (Fraker et al. 1998).

- ***Irregularities in Office Procedures.*** Through announced and unannounced site visits, review of random assignment logs, and other means, the Institute for Social and Economic Development monitored the random assignment of applicant cases in DHS offices and the delivery of benefits and services in both DHS and PROMISE JOBS offices. It found a high degree of conformance of these processes to the specifications in the evaluation design. However, anecdotal evidence suggested that some deviations from the specifications occurred. A generic example would be a FIP or PROMISE JOBS orientation session conducted jointly (as opposed to separately) for treatment and control cases during which reform requirements were described but control cases were told that those requirements did not apply to them. Such exposure to treatment policies could have caused confusion among control cases regarding the applicable requirements and, hence, would be a form of contamination.

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[6]We attempted to measure the degree of the bias introduced by the termination of control policies and to adjust for it in our impact estimates. Using administrative data, we measured the extent to which the average outcomes of control cases after 1997:Q1 differed from the outcomes that would have been predicted based on the average outcomes of control cases from 1997:Q1 and before. However, we were unable to measure the difference with enough precision to adjust our impact estimates.

2. Limited Exposure of Some Research Cases to the Welfare System

If some research cases had only limited exposure to Iowa's welfare system, then estimates of the impacts of welfare reform would tend to be smaller than if these cases had more extensive exposure to the system. Limited exposure may have occurred for two reasons:

- ***Denial of FIP Applications.*** Approximately 40 to 50 percent of applicant FIP research cases did not participate in FIP in the quarter of application and random assignment. We infer that their applications were denied. Because these denied applicants had only minimal exposure to Iowa's welfare system, we would not expect their subsequent behavior to have been much influenced by whether they were subject to reform policies or pre-reform policies. The technical requirements of the random assignment design for the evaluation necessitated that all applicant cases be retained in the impact analysis. The presence of these cases in the analysis caused estimates of most impacts of the reforms on FIP applicants to be smaller than would have been obtained if all applications had been accepted.
- ***Absence of Recent Exposure to the Welfare System.*** Many of the outcomes analyzed in this evaluation were measured several years after random assignment. This is especially true of outcomes measured by the evaluation's two surveys, which were conducted three to six years after random assignment. Even some of the outcomes obtained from state administrative files were measured as many as five years after random assignment. The rate of exit from welfare was sufficiently high that many research cases were not participating in FIP at the time many outcomes were measured. For such outcomes, it is best to regard our research findings as providing information on the long-run impacts of welfare reform—the impacts well after exposure to the welfare system has ceased. We might expect those impacts to be smaller than shorter-run impacts, and the findings reported in Chapter III based on five years of administrative data are consistent with this expectation.

3. Weak Basis for Estimating Impacts of Specific Components of Welfare Reform

The simple random assignment plan underlying the evaluation design was capable of supporting estimation of the *overall* impacts of welfare reform separately for ongoing and applicant cases. However, it was not designed to support estimation of the impacts of specific components of the package of reforms. This created the possibility or even the likelihood that, while the evaluation would yield useful information on whether the reforms achieved certain broad objectives, it would yield little information on why that happened, e.g., information on which components of the reform package were primarily responsible for the overall impacts. For reasons discussed in Appendix I, DHS selected the simple random assignment plan over more complex plans that would have supported estimation of the impacts of specific reform components. Appendix I also reports on our efforts to investigate the impacts of several reform components despite the limitations of the evaluation design for that purpose.

4. Limited Scope of the Evaluation

Participation in the evaluation was limited to families that had some formal involvement in Iowa's welfare system. The families in the evaluation's four research samples were either receiving cash assistance immediately prior to the implementation of welfare reform on

October 1, 1993, or applied for assistance during the ensuing 2-1/2 years. Consequently, the estimates based on those samples do not reflect any impacts that welfare reform may have had on families that were not involved in FIP during that period. For example, a family that might have applied for and received assistance under the former AFDC program may have opted not to apply for assistance under the reform provisions of FIP. Instead, members of this family may have chosen to seek employment instead of FIP benefits. Welfare reform could be said to have reduced this family's welfare participation and benefits and increased its employment and earnings. These impacts may have been substantial in the aggregate. For example, the reforms may have contributed to the large reduction in the welfare caseload that began early in 1994 (documented in Exhibit I.3) by reducing the number of families that applied for assistance. But such impacts could not be captured by this evaluation and are not reflected in the estimates presented in this report.

5. Assessment of the Limitations of the Evaluation Design

We caution the reader to interpret the estimates of the impacts of welfare reform in Iowa that are presented in this report in light of the above limitations of the evaluation design. Our assessment of the implications of these limitations is as follows:

- ***The impact estimates pertain to families inside the welfare system.*** Any impacts of the reforms on families outside the welfare system, such as potential applicants, are not reflected in the estimates presented in this report.
- ***The impact estimates may understate the true impacts of welfare reform on families inside the welfare system.*** This potential bias is due to the limited exposure of some research cases to that system and to the contamination of some control cases through their exposure to reform policies.
- ***The evaluation design provides a weak basis for estimating the impacts of specific components of Iowa's welfare reform.*** Assignment to the entire reform package was random in the nine research counties. This evaluation design was conducive to estimating the impacts of the full reform package but not the impacts of its component parts.

To summarize, the limitations of this evaluation restrict its scope to the impacts of the full reform package on families inside the welfare system. The impact estimates presented in this report correctly capture the direction of those impacts but tend to understate their magnitude.

EXHIBIT II.1

DESCRIPTION OF ONGOING FIP CASES AND APPLICANT FIP CASES
(Weighted Frequencies and Means for Treatment and Control Samples Combined)

	Ongoing FIP Cases	Applicant FIP Cases
Characteristics of the Case Head		
Gender (%)		
Female	91.1	83.6
Male	8.9	16.4
Race/ethnicity (%)		
White	78.0	80.0
Black	18.3	12.2
Hispanic or other	3.8	7.8
Marital status (%)		
Never married	58.0	54.8
Divorced, separated, or widowed	23.9	17.5
Married	18.2	27.7
Age		
Less than 18 years (%)	7.3	11.8
Average age (years)	28.7	27.4
Characteristics of the Case		
County at random assignment (%)		
Urban	86.5	86.4
Rural	13.5	13.6
Demographic composition		
Number of persons	3.7	3.1
Age of youngest person (years)	5.1	4.3
Earnings in the year prior to quarter of random assignment ($)	$1,744	$6,185
Sample Size	7,418	9,927

NOTES: Due to missing data, the effective sample sizes for certain variables are reduced for ongoing FIP cases and applicant FIP cases. Effective sample sizes for ongoing FIP cases are as follows: gender, age, age of youngest child 7,367; race/ethnicity 7,321; marital status 7,337; number of persons 7,418; earnings 7,104. Effective sample sizes for applicant FIP cases are as follows: gender, age, age of youngest child 9,515; race/ethnicity 8,961; marital status 9,045; number of persons 9,919; earnings 8,879.

Weights equal the inverse of the probability of being assigned to either treatment or control status.

Percentages may not sum to 100 due to rounding.

EXHIBIT II.2

COMPARISON OF TREATMENT AND CONTROL SAMPLES: ONGOING FIP CASES
(Unweighted Frequencies and Means)

	Treatment Sample	Control Sample	Significant Difference?[1]
Characteristics of the Case Head			
Gender (%)			
Female	91.1	90.2	no
Male	8.9	9.8	no
Race/ethnicity (%)			
White	79.9	79.1	no
Black	16.6	17.1	no
Hispanic or other	3.5	3.8	no
Marital status (%)			
Never married	57.2	57.1	no
Divorced, separated, or widowed	24.0	22.9	no
Married	18.8	20.0	no
Age			
Less than 18 years (%)	7.0	8.0	no
Average age (years)	28.7	28.6	no
Characteristics of the Case			
County at random assignment (%)			
Urban	81.5	81.4	no
Rural	18.5	18.6	no
Demographic composition			
Number of persons	3.8	3.7	no
Age of youngest person (years)	5.0	5.2	no
Earnings in the year prior to quarter of random assignment ($)	$1,775	$1,639	no
Sample Size	4,952	2,466	

NOTES: Due to missing data, the effective sample sizes for certain variables are reduced for ongoing FIP cases and applicant FIP cases. Effective sample sizes for treatment cases are as follows: gender, age, age of youngest child 4,919; race/ethnicity 4,891; marital status 4,901; number of persons 4,952; earnings 4,761. Effective sample sizes for control cases are as follows: gender, age, age of youngest child 2,448; race/ethnicity 2,430; marital status 2,436; number of persons 2,466; earnings 2,343.

[1]Difference between the treatment and control samples is statistically significant at the .05 level.

Percentages may not sum to 100 due to rounding.

EXHIBIT II.3

COMPARISON OF TREATMENT AND CONTROL SAMPLES: APPLICANT FIP CASES
(Unweighted Frequencies and Means)

	Treatment Sample	Control Sample	Significant Difference?[1]
Characteristics of the Case Head			
Gender (%)			
Female	83.3	83.7	no
Male	16.7	16.3	no
Race/ethnicity (%)			
White	80.1	80.5	no
Black	11.6	11.2	no
Hispanic or other	8.3	8.3	no
Marital status (%)			
Never married	54.4	54.9	no
Divorced, separated, or widowed	17.2	16.9	no
Married	28.5	28.2	no
Age			
Less than 18 years (%)	11.8	10.5	no
Average age (years)	27.3	27.9	**yes**
Characteristics of the Case			
County at random assignment (%)			
Urban	84.3	83.3	no
Rural	15.7	16.7	no
Demographic composition			
Number of persons	3.1	3.0	no
Age of youngest person (years)	4.1	4.3	**yes**
Earnings in the year prior to quarter of random assignment ($)	$6,120	$6,208	no
Sample Size	6,615	3,312	

NOTES: Due to missing data, the effective sample sizes for certain variables are reduced for ongoing FIP cases and applicant FIP cases. Effective sample sizes for treatment cases are as follows: gender, age, age of youngest child 6,320; race/ethnicity 5,968; marital status 6,039; number of persons 6,607; earnings 5,851. Effective sample sizes for control cases are as follows: gender, age, age of youngest child 3,195; race/ethnicity 2,993; marital status 3,006; number of persons 3,312; earnings 3,028.

[1]Difference between the treatment and control samples is statistically significant at the .05 level.

Percentages may not sum to 100 due to rounding.

CHAPTER III

IMPACTS ON WELFARE CASES: FINDINGS BASED ON ADMINISTRATIVE DATA

This chapter is the first of three chapters describing the impacts of the full package of welfare reform in Iowa. It provides estimates of the extent to which that package reduced welfare dependence and increased self-sufficiency. The results presented here are based on our analysis of state administrative data on employment and earnings, and on welfare participation and benefits for all 17,345 treatment and control cases in the evaluation. Following are the five most important findings:

1. ***Welfare reform raised the employment and earnings of ongoing cases and "early" applicants—cases that applied for FIP benefits from October 1993 through September 1994—in the short run.*** These impacts are probably due to the reform provisions that strengthened the financial work incentives and work requirements of FIP.
2. ***Welfare reform raised FIP participation rates in the short run, especially for applicant cases.*** This impact can probably be attributed to more generous earned-income disregards.
3. ***Welfare reform reduced the Food Stamp participation rates of ongoing cases.*** This impact can probably be attributed to the positive impact of welfare reform on the earnings of these cases.
4. ***Welfare reform reduced FIP and Food Stamp benefits for ongoing cases.*** Like the impact on Food Stamp participation rates, this impact is probably due to the reform's positive impact on the earnings of these cases.
5. ***Welfare reform raised the rate of combining work and welfare.*** This impact is strong in the initial years following random assignment, but dissipates in the long run. It reinforces the conclusion we reach from considering findings 1 and 2 together: the reform's work incentives and requirements raised employment and earnings in the short run but did not cause cases to leave FIP.

In general, our estimates indicate that the impacts of Iowa's welfare reform on employment and welfare outcomes were modest in size. For example, the impacts on quarterly employment rates for ongoing cases and early applicant cases typically ranged from 1 to 4 percentage points. The most promising finding is the positive impact on the rate of combining work and welfare. These impacts typically ranged from 4 to 5 percentage points in the first year after random assignment,[1] but were progressively smaller in subsequent years. This finding indicates that welfare reform in Iowa was successful at encouraging employment among welfare recipients.

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[1]For ongoing cases, we examine the second year after random assignment instead because the process of implementing reform policies for ongoing, treatment cases took one year.

Our estimates based on administrative data suggest that many of the impacts of welfare reform did not persist in the long run for ongoing or applicant cases. This may be because as cases leave FIP, they are no longer subject to FIP's work incentives and requirements. As a result, the actual impacts of welfare reform on employment and earnings may diminish over time. However, the implementation of federal welfare reform led Iowa to apply reform policies to the control group in April 1997. If the actual impacts remained constant over time, we would expect the estimated impacts based on treatment-control differences to decline after reform policies were applied to the control group. Therefore, it is possible that the actual impacts persisted over time, but that Iowa's application of reform policies to the control group made it appear as if the impacts diminished. See Chapter II, Section D, for a more complete discussion of the application of reform policies to the control group.

In this chapter, we address whether the observed "short-run" impacts—impacts in the first two years after random assignment—persisted or diminished over time. We conclude that they persisted if the "long-run" impacts—impacts more than two years after random assignment—were comparable to the short-run impacts, and conclude that they diminished if the long-run impacts were close to zero. It is worth noting that even if the short-run impacts *on particular cases* diminish over time, the reforms could still have long-run impacts *on the caseload*. Suppose that the reforms have positive, short-run impacts on the employment rates of applicant cases, as the findings in this chapter suggest (at least for early applicants). Furthermore, suppose that the long-run impacts for applicant cases are zero. As applicant cases gradually leave FIP, they are replaced by applicant cases for which we can expect positive short-run impacts on employment rates. Therefore, short-run impacts on applicant *cases* can produce long-run impacts on the FIP *caseload*.

A. DATA AND METHODS

For the administrative data analysis presented in this chapter, we analyze three types of outcomes:

1. ***Employment and Earnings.*** Employment and earnings variables were created from quarterly earnings data obtained from the unemployment insurance (UI) wage reporting system of the Iowa Workforce Development (IWD). In each quarter, we added together the earnings of all case members age 14 or older to create quarterly measures of case-level earnings. These measures were converted to annual measures *at a quarterly rate*. For example, the earnings measure for year 1—the first year after the quarter in which the case was randomly assigned—equals the average quarterly earnings in the four quarters of that year. Cases with positive earnings were classified as employed.
2. ***Welfare Participation and Benefits (FIP and Food Stamps).*** Participation and benefit variables were created from data obtained from the Iowa Automated Benefit Calculation (IABC) system of the Iowa Department of Human Services. We combined monthly IABC data to create quarterly FIP and Food Stamp benefit amounts for each case, and we converted quarterly measures to annual measures at a quarterly rate for consistency with the employment-related outcomes. Cases with positive benefits were classified as program participants.

3. ***Income Sources and Levels.*** Income variables were created by combining earnings data from IWD with benefit data from IABC. We created annual measures of cash income for each year by adding together the total amount of earnings and the total amount of FIP benefits received by case members. We also created more complete measures of annual income by adding cash income to the value of all Food Stamp benefits received by case members.

The methods we use to estimate the impacts of welfare reform in Iowa are described in detail in Chapter II. The impact estimates presented here are regression-adjusted differences in mean outcomes between the treatment and control groups. The regression adjustments are based on a linear model with control variables to account for differences in characteristics of the case head—such as age, sex, race and ethnicity, education, and marital status—and differences in the characteristics of the case itself—such as county of residence and earnings of all case members in the year prior to the quarter of random assignment—that existed prior to random assignment.

The impact estimates presented in this chapter are based on treatment and control samples that were randomly selected from two populations:

1. ***Ongoing FIP Cases.*** Cases active in FIP in September 1993.[2]
2. ***Applicant FIP Cases.*** Cases that applied for FIP benefits from October 1993 through March 1996. For the purpose of analyzing administrative data, we divided this population into three cohorts:
   - ***Cohort 1 Applicant Cases.*** Cases that applied for FIP benefits from October 1993 through September 1994.
   - ***Cohort 2 Applicant Cases.*** Cases that applied for FIP benefits from October 1994 through September 1995.
   - ***Cohort 3 Applicant Cases.*** Cases that applied for FIP benefits from October 1995 through March 1996.

In this chapter, we provide separate impact estimates for ongoing FIP cases and for each of the three cohorts of applicant FIP cases. The impacts of welfare reform may differ between ongoing and applicant cases because the impacts may differ between short-term and long-term welfare participants: ongoing cases are more likely to be long-term recipients, and applicant cases are more likely to be short-term recipients or to cycle on and off welfare. Furthermore, the impacts of welfare reform could differ across the three applicant cohorts, which faced reform policies at different points in time. The implementation of reform policies may have changed over time as welfare offices developed practices for meeting the requirements of reform policies. Also, the *estimated* impacts of the reforms presented in this chapter could vary across cohorts even if the actual impacts did not. As welfare reform became firmly established in 1995 and 1996, it may have become more difficult for caseworkers to apply pre-reform, AFDC policies to

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[2]More specifically, ongoing FIP cases were cases that were classified as "opened," "reinstated," "reopened/no application," or "suspended" as of September 17, 1993.

control group members. If so, the estimated impacts of welfare reform would be larger for earlier cohorts than for later cohorts, and the findings for earlier cohorts would provide a more accurate picture of the impacts of welfare reform.

B. EMPLOYMENT AND EARNINGS

Welfare reform in Iowa was designed to encourage welfare recipients to work. As described in Chapter I, the reform policies modified FIP's work requirements so that they apply more strictly and to a broader population of welfare recipients, and modified the FIP benefit formula to encourage work. Reform policies have increased both the threat of being sanctioned for not working and the financial rewards for working.

Exhibit III.1 shows the employment and earnings trends since random assignment among cases subject to the reform policies. The employment rates of ongoing cases subject to reform policies rose considerably throughout the analysis period. In contrast, the employment rates of applicant cases subject to those policies remained fairly stable. Quarterly earnings rose for all four treatment samples throughout the analysis period. Based on the employment and earnings trends, we reach the following two conclusions: (1) for applicant cases, rising earnings can be attributed to rising earnings for employed applicant cases, and (2) for ongoing cases, rising earnings can be attributed at least in part to rising employment rates.

As shown in Exhibits III.2 and III.3, welfare reform raised the employment rates and average earnings of ongoing cases and early applicant cases in the short run.[3] The impacts were largest for cohort 1 applicant cases in the year following the quarter of random assignment (year 1). For these cases, the employment and earnings impacts in year 1 were 5.5 percentage points and 170 dollars per quarter, respectively. The impact on quarterly earnings corresponds to a 12 percent increase over the average quarterly earnings of control group members. There is little evidence of long-run impacts on the employment and earnings of ongoing cases or any cohort of applicant cases. However, as explained earlier, the lifting of control group policies in April 1997 may have biased the long-run impact estimates toward zero.

One peculiar finding from Exhibit III.3 is the negative impact estimate for "late" applicants. The average quarterly earnings of cohort 3 applicant cases was lower for treatment group members than for control group members in both years 1 and 2, and the differences are large. However, the year-1 impact estimate is statistically insignificant, and the year-2 impact estimate is statistically significant only at the 10 percent level. Because cohort 3 contains a relatively small number of treatment and control cases, the impact estimates are less precise for cohort 3 than for cohorts 1 and 2. Therefore, we believe some caution is warranted in concluding that welfare reform reduced the earnings of cohort 3 applicant cases.

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[3]As explained in Section A, the estimates reported here are of impacts on *case-level* employment and earnings. The outcome measures capture employment and earnings in UI-covered jobs by all case members age 14 and older. Case members were identified in: (1) the same quarter that the outcomes were measured if the case was contemporaneously participating in FIP, or (2) the most recent prior quarter that the case applied to or participated in FIP if the case was not contemporaneously participating in FIP.

There are at least two ways that welfare reform could have raised employment rates: (1) by reducing the prevalence of "infrequent employment" (defined as employment in 0 to 25 percent of quarters in the analysis period), and (2) by increasing the prevalence of "frequent employment" (defined as employment in 75 to 100 percent of quarters in the analysis period). We test these two explanations and present the findings in Exhibit III.4. For ongoing cases, welfare reform significantly reduced the prevalence of infrequent employment. For early applicants (cohort 1), welfare reform significantly increased the prevalence of frequent employment.

C. WELFARE PARTICIPATION AND BENEFITS

For cases subject to reform policies, as well as those subject to pre-reform policies, FIP participation rates and benefits declined in the years after random assignment, as shown in Exhibit III.5. Exhibit III.6 shows similar declines for Food Stamp participation rates and benefits. By definition, all ongoing cases received FIP benefits in September 1993. For applicant cases, the participation rate in the quarter of random assignment depended largely on the rate at which applications were completed and accepted. For each year after random assignment and for each of the four groups, Panel A in Exhibit III.5 shows the percentage of treatment cases remaining on FIP.

The impacts of Iowa's welfare reform on FIP participation by both ongoing and applicant cases were generally positive and small in the short run, and zero in the long run, as shown in Exhibit III.7. The impact in the first year following random assignment was 1 percentage point for ongoing cases and 3 to 6 percentage points for applicant cases, depending on the application cohort. These impacts may have been due to the more generous earned income disregards under welfare reform: at some income levels, cases that would have been ineligible for FIP pre-reform policies were eligible under reform policies.

For applicant cases, Exhibit III.8 shows that the reforms raised FIP participation rates in the application quarter, suggesting that applications were more likely to be accepted under reform policies. Furthermore, these impacts are approximately equal to the impacts on the average quarterly FIP participation rate in the following year (year 1), as reported in Exhibit III.7. Therefore, the short-run positive impacts on FIP participation rates for applicant cases can probably be attributed to policies that raised the rates at which FIP applications were accepted. Our findings indicate that looser eligibility requirements specifically for two-parent families were not responsible for this increase.[4] The impacts in the quarter of application were positive for both one- and two-parent families and they were not significantly different from each other.[5] This indicates that the higher acceptance rates under welfare reform policies should be attributed

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[4]The changes in eligibility requirements for two-parent families are discussed in Chapter I, Section A.3. They are also identified in the first three bullets of the "Family Stability" section of Exhibit I.1.

[5]For one-parent families, the impacts on FIP participation in the quarter of application were 5 percentage points for cohort 1 applicants, 6 percentage points for cohort 2, and 3 percentage points for cohort 3. For two-parent families, the analogous impacts were 0 percentage points, 11 percentage points, and 2 percentage points. The differences in these impacts between one- and two-parent families are statistically insignificant.

to reform policies that applied to both one- and two-parent families, such as the more generous earned income disregards, rather than to looser eligibility criteria that applied only to two-parent families.[6]

Exhibit III.7 provides no evidence that welfare reform in Iowa affected FIP participation in the long run. Furthermore, there is no evidence that welfare reform in Iowa changed the prevalence of "welfare dependence", which we defined as the receipt of FIP benefits in 75 percent or more of the calendar quarters during the analysis period. The estimated impact on the prevalence of welfare dependence is statistically insignificant for all four groups, as shown in Exhibit III.9. Therefore, Exhibits III.7 and III.9 indicate that welfare reform had little impact on the rate of FIP participation in the long run or on the prevalence of welfare dependence.

Among ongoing cases, the reforms reduced the Food Stamp participation rate, as shown in Exhibit III.10. The impacts for the first four years after random assignment ranged from -2.1 percentage points to -2.8 percentage points. The negative impact on Food Stamp participation rates but not on FIP participation rates for ongoing cases may result from differences in the FIP and Food Stamp reforms. The reforms raised earned income disregards under FIP but not under Food Stamps. Therefore, the reform-induced increase in earnings may have reduced the Food Stamp eligibility rate without reducing the FIP eligibility rate.

Despite positive short-run impacts on FIP participation rates, welfare reform may have generated modest cost savings through reduced FIP and Food Stamp benefits for ongoing cases.[7] The average quarterly impact on the FIP benefits of ongoing cases over the five-year analysis period was -$22, relative to the control group's mean benefit of 521 dollars, as shown in Exhibit III.11. In addition, the average quarterly impact on Food Stamp benefits was almost the same: -$27, relative to the control group's mean benefit of 361 dollars, as shown in Exhibit III.12. The negative impacts on Food Stamp benefits for ongoing cases can be attributed at least in part to negative impacts on Food Stamp participation rates shown in Exhibit III.10. For applicant cases, the estimated impacts on FIP and Food Stamp benefits are difficult to interpret because they vary considerably across cohorts.[8]

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[6]We investigated whether the loosened eligibility requirements for two-parent families induced ongoing and applicant cases that were classified as "regular" FIP cases (i.e., one-parent cases) at random assignment to become reclassified as "unemployed parent" FIP cases (i.e., two-parent cases). As reported in Appendix A, we found no evidence that welfare reform induced transitions from regular to unemployed parent status.

[7]Findings from an extensive cost-benefit analysis of the first two years of welfare reform in Iowa are provided in an earlier project report (Gordon and Martin, 1999). This report shows positive net benefits to government (federal, state, and local combined) for ongoing cases due to reduced expenditures on FIP, Food Stamps, Medicaid, and child support. It also shows *negative* net benefits to government for applicant cases due to increased expenditures on those four programs. The difference in net benefits between ongoing and applicant cases is consistent with the findings in Exhibits III.10 and III.11 that welfare reform reduced FIP and Food Stamp benefits only for ongoing cases.

[8]The estimated impacts on FIP and Food Stamp benefits tend to be negative for cohort 2, positive for cohort 3, and near zero for cohort 1.

D. INCOME SOURCES AND LEVELS

One long-run goal of Iowa's welfare reform is to reduce welfare dependence through increased earnings. However, an important short-run goal of welfare reform is to increase employment and earnings of current welfare cases. As a result, it was expected that welfare reform would increase the rate of combining work and welfare in the short run. The reforms made this combination more desirable financially—due to more generous earned income disregards—but they also made the combination more feasible: the more generous earned income disregards implicitly raised the maximum income threshold for eligibility. The estimates in Exhibit III.13 indicate that welfare reform in Iowa raised the rate of combining work and welfare for both ongoing and applicant cases. In year 1, the estimated impacts for ongoing cases, cohort 1 applicant cases, cohort 2 applicant cases, and cohort 3 applicant cases were 2.7 percentage points, 4.9 percentage points, 4.6 percentage points, and 5.3 percentage points, respectively.

Positive impacts on the rate at which cases combined work and welfare persisted for four years for ongoing cases and for one or two years for each cohort of applicant cases. However, for both types of cases, the estimated impacts are insignificant in the long run, suggesting that the actual impacts may have diminished over time.[9]

Not surprisingly, the short-run positive impacts on the rate of combining work and welfare are associated with short-run positive impacts on cash income, at least for ongoing cases and early applicants. As shown in Exhibit III.14, the year 1 impacts on income from earnings and FIP for ongoing cases and for cohort 1 applicant cases are 185 dollars per year and 755 dollars per year, respectively. The impacts on cash income roughly follow the same time trend as the impacts on the rate of combining work and welfare, and the long-run impact estimates (years 3 – 5) are statistically insignificant. Thus, there is no compelling evidence that welfare reform had long-run impacts on cash income levels.

When the measure of income is broadened to include the value of Food Stamp benefits, as shown in Exhibit III.15, there is still no evidence of long-run impacts on income. Furthermore, the negative short-run impacts on Food Stamp benefits observed in Exhibit III.12 attenuate the positive impacts on cash income (see Exhibit III.14). As a result, we only find evidence of short-run, positive impacts on total income for cohort 1 applicant cases.

To the extent that our two income variables measure economic well-being, there is no evidence that Iowa's welfare reforms have affected the well-being of ongoing or applicant cases in the long run. Results from our analysis of the Iowa core survey, which are presented in

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[9]We should note that the trends in estimated impacts tend to be statistically insignificant. Furthermore, declining treatment-control differences in combining work and welfare could be attributed to the lifting of control group policies with the implementation of federal welfare reform. In fact, the pattern of impacts for all four groups except cohort 3 applicants is consistent with the hypothesis that the reforms had short- *and* long-run impacts, but that the long-run impact estimates are insignificant due to the lifting of control group policies.

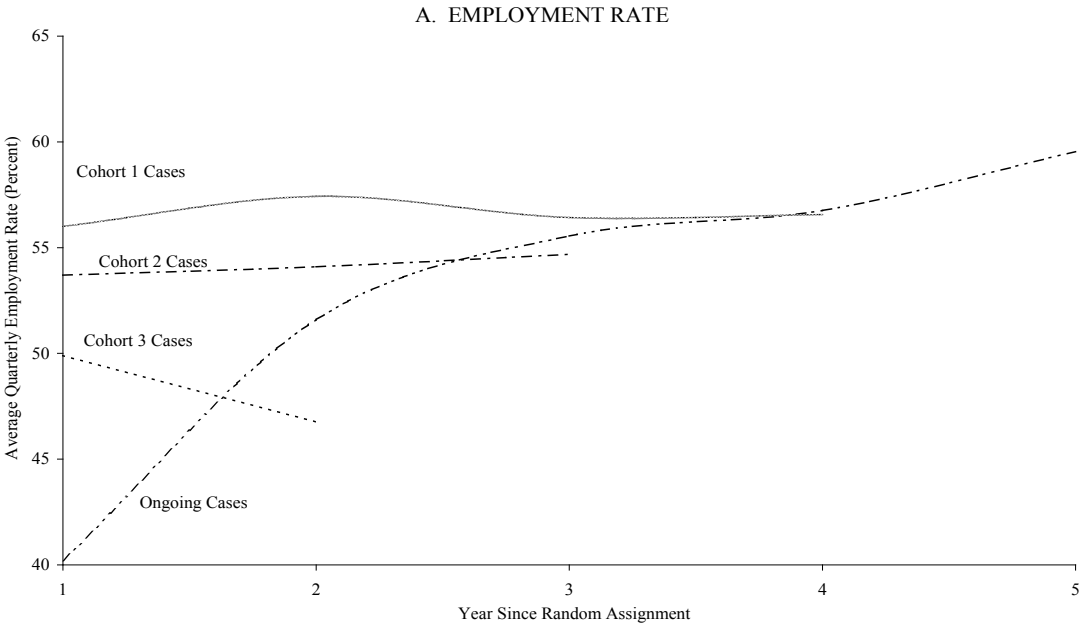
Chapter IV, provide additional evidence on the impacts of welfare reform on the economic well-being of FIP cases.

E. IMPACTS ON SUBGROUPS OF CASES

A subgroup analysis can reveal whether the impacts of Iowa's welfare reform were uniform across all ongoing FIP cases and all applicant FIP cases or, alternatively, varied with certain characteristics of those populations. Findings of variability across subgroups might suggest that specific components of the reform package were critical in generating the overall impacts. We conducted such an analysis of case-level outcomes as measured in state administrative data files for subgroups defined by five baseline characteristics. Comprehensive findings from that analysis are presented in Appendix B. Selected findings pertaining to several specific reform policies are discussed in detail in Appendix I.

EXHIBIT III.1

LABOR MARKET OUTCOMES FOR TREATMENT CASES



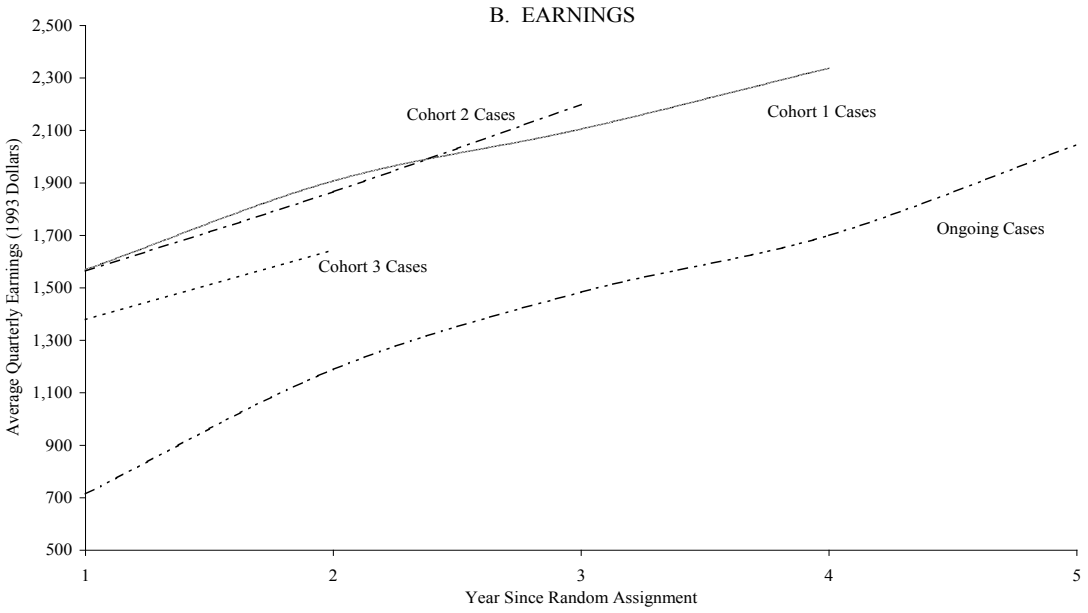


EXHIBIT III.2

AVERAGE QUARTERLY EMPLOYMENT RATE
(Percentages)

Year Since Random Assignment	Outcome: Treatment Group (T)	Outcome: Control Group (C)	Impact: Absolute (T - C)	Impact: Relative (T - C) / C
Ongoing FIP Cases				
Year 1	40.2	39.4	0.8	1.9
Year 2	51.6	49.8	1.8*	3.7
Year 3	55.5	53.2	2.3**	4.4
Year 4†	56.8	54.3	2.5**	4.5
Year 5†	59.5	57.8	1.7	3.0
Years 1 – 5	52.7	50.9	1.8**	3.6
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	56.0	50.5	5.5***	11.0
Year 2	57.4	53.6	3.8**	7.1
Year 3†	56.4	55.1	1.4	2.5
Year 4†	56.6	55.0	1.6	2.9
Years 1 – 4	56.6	53.5	3.1**	5.7
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	53.7	52.2	1.5	2.9
Year 2†	54.1	53.7	0.4	0.7
Year 3†	54.7	53.7	1.0	1.8
Years 1 – 3	54.2	53.2	0.9	1.8
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	49.9	48.4	1.5	3.0
Year 2†	46.7	48.9	-2.1	-4.3
Years 1 – 2	48.3	48.7	-0.3	-0.7
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (paid employment by any case member age 14+ at any time during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT III.3

AVERAGE QUARTERLY EARNINGS
(Dollars)

Year Since Random Assignment	Outcome: Treatment Group (T)	Outcome: Control Group (C)	Impact: Absolute (T - C)	Impact: Relative (T - C) / C
Ongoing FIP Cases				
Year 1	715	669	46*	6.8
Year 2	1,190	1,103	86**	7.8
Year 3	1,483	1,412	71	5.0
Year 4†	1,700	1,671	29	1.7
Year 5†	2,046	2,002	44	2.2
Years 1 – 5	1,427	1,372	55	4.0
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	1,569	1,399	170***	12.2
Year 2	1,908	1,775	133	7.5
Year 3†	2,105	2,089	16	0.8
Year 4†	2,338	2,357	-19	-0.8
Years 1 – 4	1,980	1,905	75	3.9
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	1,564	1,548	16	1.0
Year 2†	1,867	1,916	-50	-2.6
Year 3†	2,199	2,162	37	1.7
Years 1 – 3	1,876	1,875	1	0.1
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	1,379	1,513	-134	-8.9
Year 2†	1,644	1,877	-233*	-12.4
Years 1 – 2	1,512	1,695	-184	-10.8
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (earnings in covered employment for case members age 14+ during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

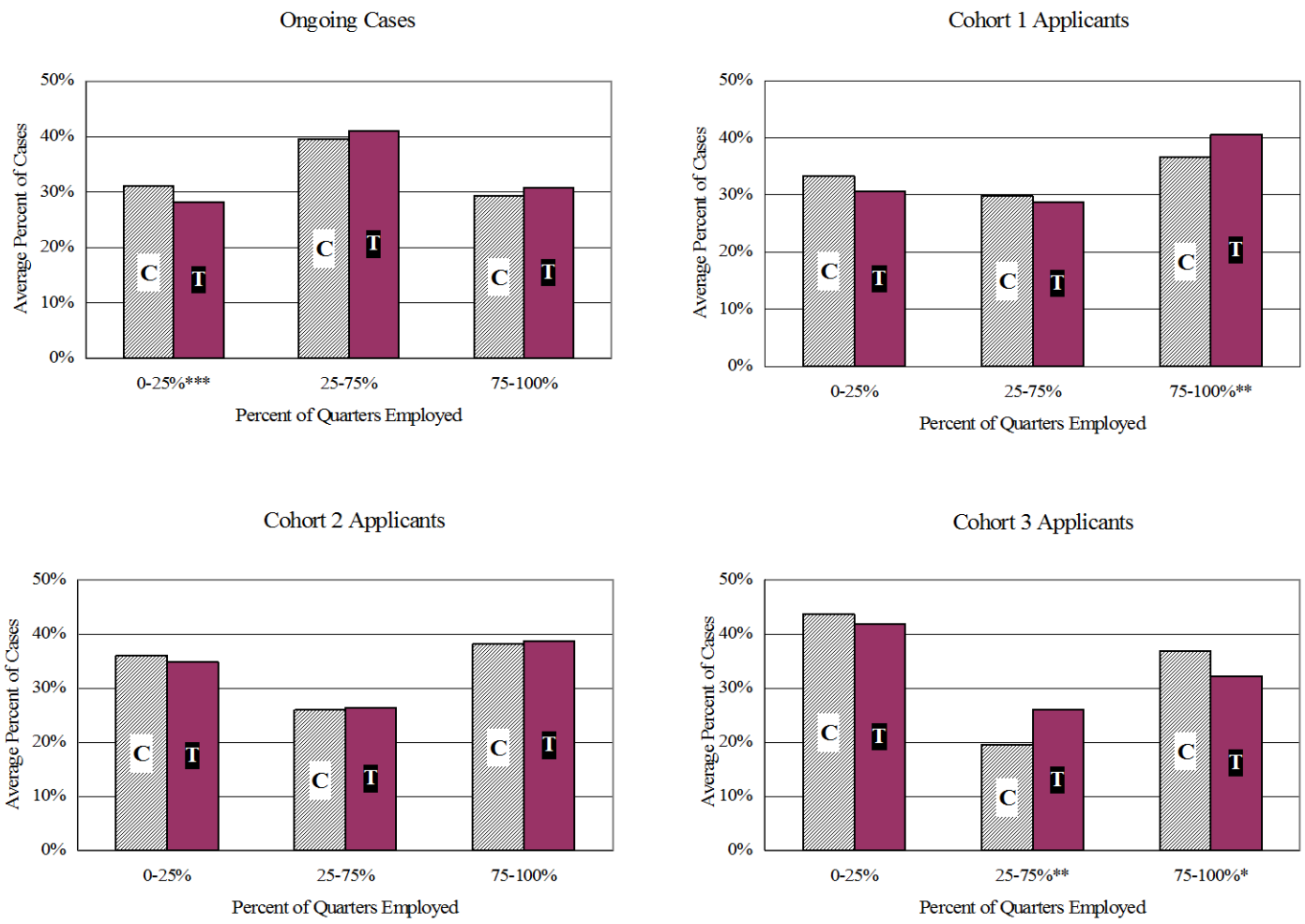
METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT III.4

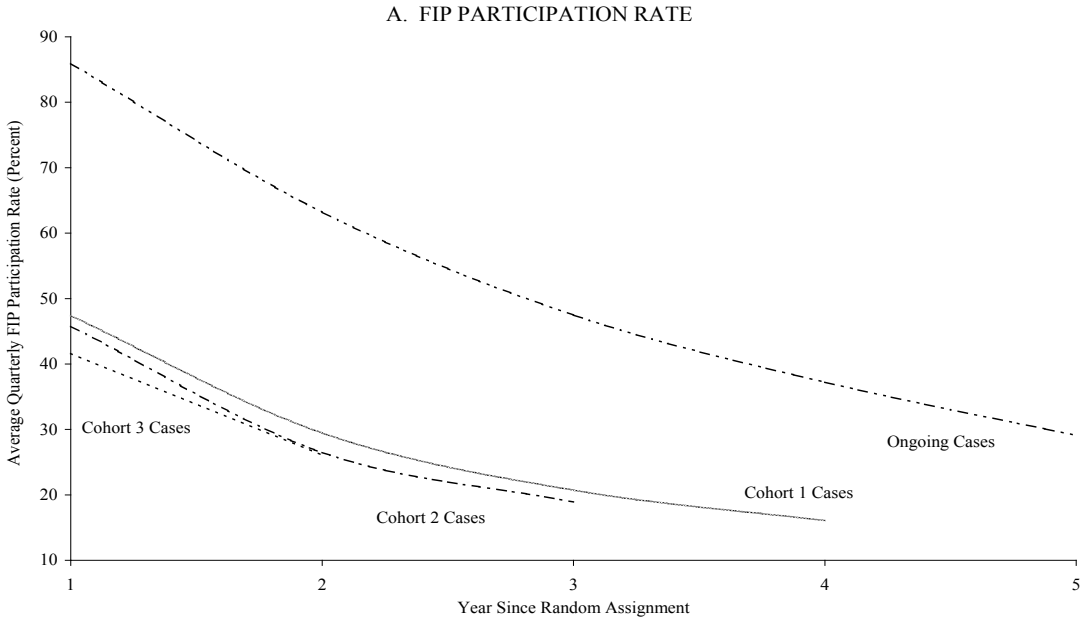
DISTRIBUTION OF QUARTERLY EMPLOYMENT RATES



Statistical significance levels for treatment-control differences: * = .01 level, ** = .05 level, and * = .10 level.**

EXHIBIT III.5

CASH ASSISTANCE FOR TREATMENT CASES



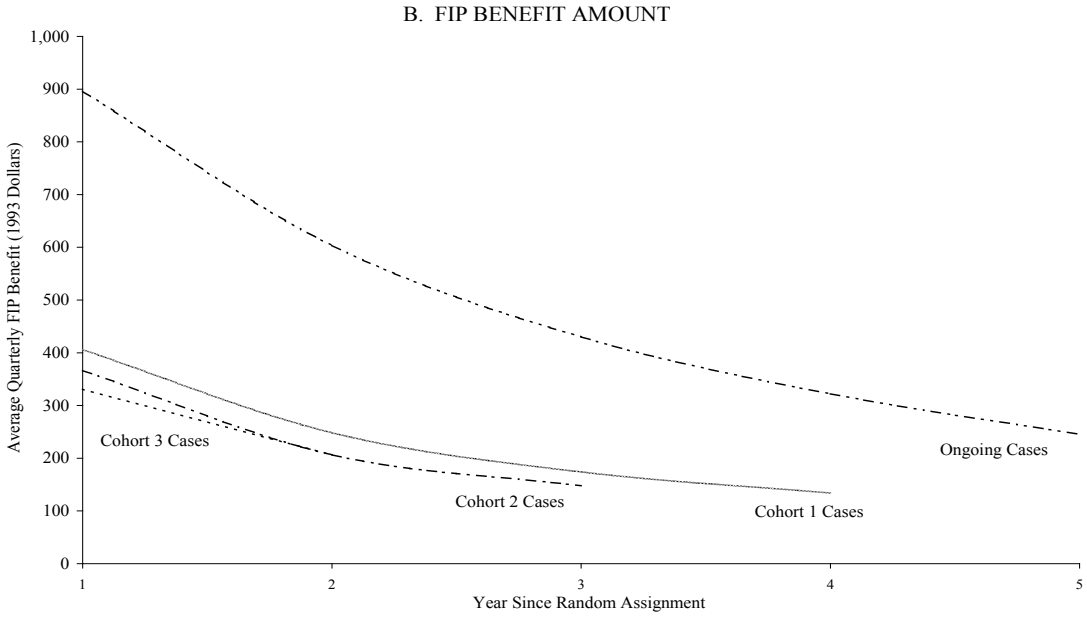
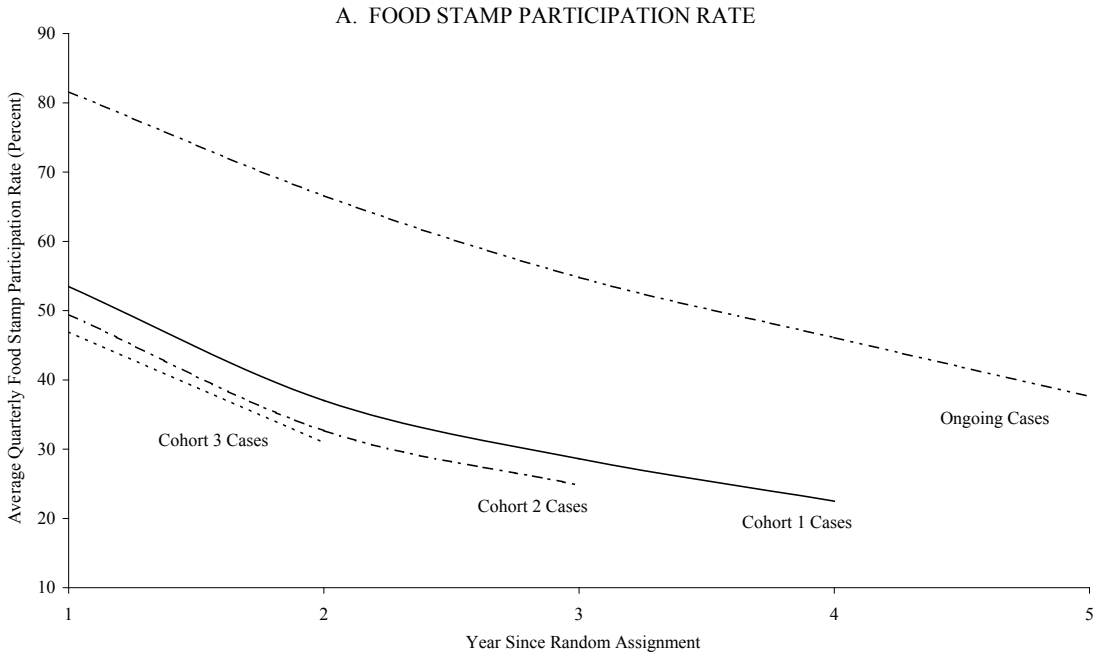


EXHIBIT III.6

FOOD STAMPS FOR TREATMENT CASES



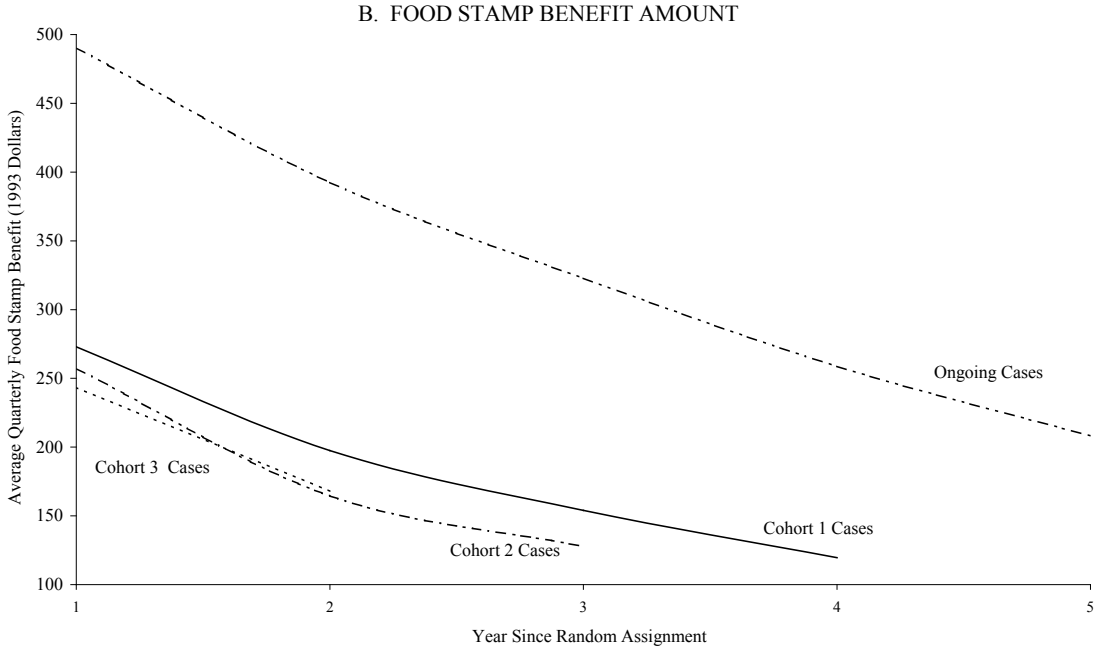


EXHIBIT III.7

AVERAGE QUARTERLY FIP PARTICIPATION RATE
(Percentages)

Year Since Random Assignment	Outcome: Treatment Group (T)	Outcome: Control Group (C)	Impact: Absolute (T - C)	Impact: Relative (T - C) / C
Ongoing FIP Cases				
Year 1	85.9	84.8	1.1*	1.3
Year 2	63.2	61.6	1.6	2.6
Year 3	47.5	47.2	0.3	0.7
Year 4†	37.2	37.8	-0.6	-1.6
Year 5†	29.1	29.5	-0.4	-1.4
Years 1 – 5	52.6	52.2	0.4	0.8
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	47.4	43.9	3.5**	8.0
Year 2	29.4	27.0	2.4	9.0
Year 3†	20.7	19.4	1.3	6.6
Year 4†	16.1	15.4	0.7	4.3
Years 1 – 4	28.4	26.4	2.0*	7.5
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	45.8	42.5	3.3**	7.7
Year 2†	26.5	27.2	-0.7	-2.6
Year 3†	18.9	21.0	-2.1*	-10.2
Years 1 – 3	30.4	30.2	0.1	0.5
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	41.6	35.7	5.9**	16.4
Year 2†	26.1	20.7	5.4**	26.0
Years 1 – 2	33.8	28.2	5.6**	20.0
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (FIP participation at any time during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT III.8

FIP PARTICIPATION IN QUARTER OF RANDOM ASSIGNMENT (APPLICATION)
(Percentages)

	Outcome		Impact	
Applicant Cohort	Treatment Group (T)	Control Group (C)	Absolute (T - C)	Relative (T - C) / C
Cohort 1	56.9	53.6	3.3*	6.2
Cohort 2	61.0	54.4	6.6***	12.0
Cohort 3	53.9	50.9	3.0	5.9

SOURCE: The outcome measure (FIP participation at any time during the quarter) is based on IABC data for 10/93 - 3/96.

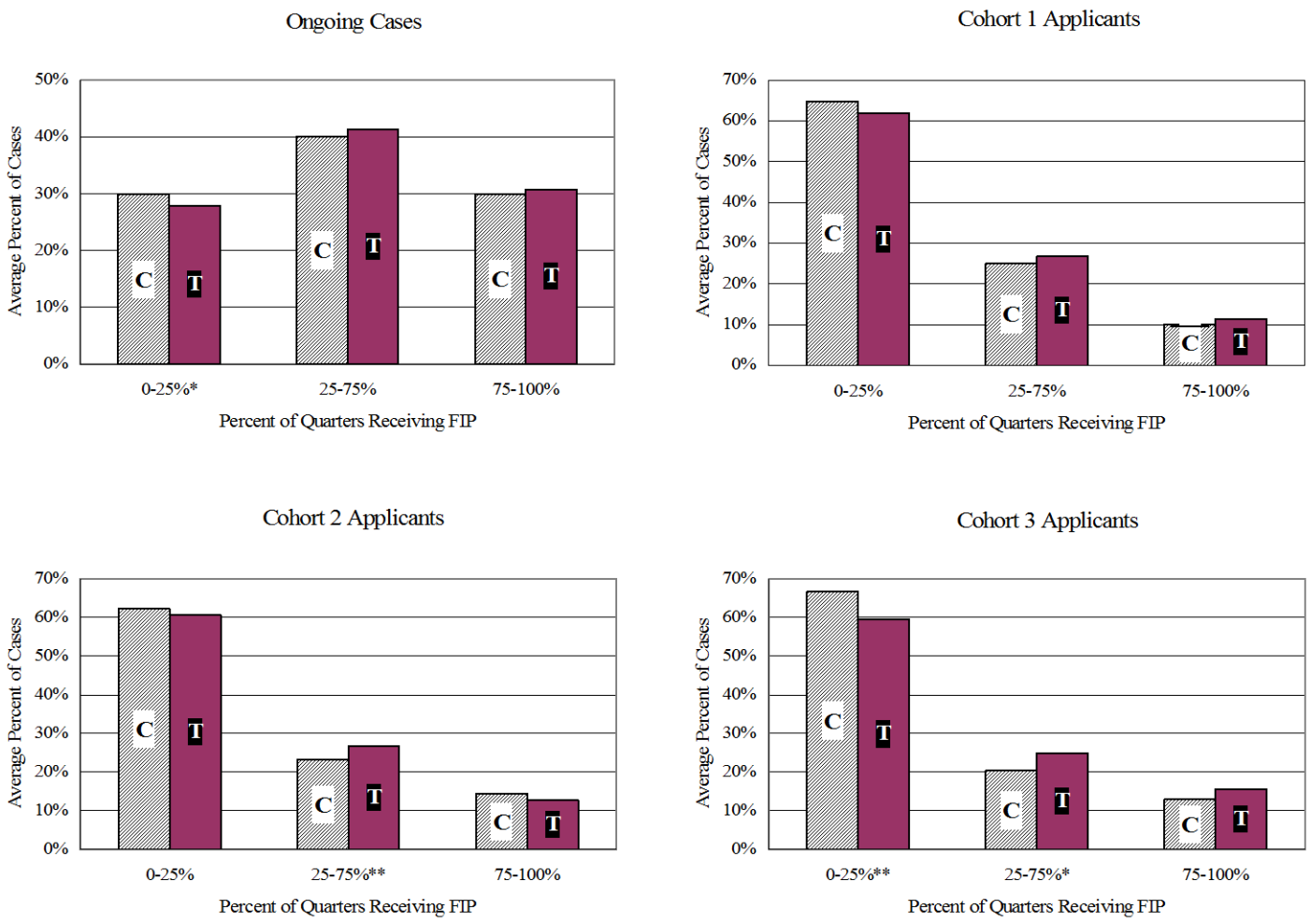
SAMPLE: *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT III.9

DISTRIBUTION OF QUARTERLY FIP PARTICIPATION RATES



Statistical significance levels for treatment-control differences: * = .01 level, ** = .05 level, and * = .10 level.**

EXHIBIT III.10

AVERAGE QUARTERLY FOOD STAMP PARTICIPATION RATE
(Percentages)

Year Since Random Assignment	Outcome: Treatment Group (T)	Outcome: Control Group (C)	Impact: Absolute (T - C)	Impact: Relative (T - C) / C
Ongoing FIP Cases				
Year 1	81.6	83.6	-2.1***	-2.5
Year 2	66.6	68.9	-2.3**	-3.3
Year 3	54.8	57.7	-2.8***	-4.9
Year 4†	46.1	48.3	-2.2**	-4.6
Year 5†	37.6	38.8	-1.1	-3.0
Years 1 – 5	57.3	59.4	-2.1***	-3.6
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	53.5	52.6	0.8	1.6
Year 2	37.0	34.9	2.1	6.1
Year 3†	28.6	27.3	1.3	4.8
Year 4†	22.5	21.8	0.7	3.2
Years 1 – 4	35.4	34.2	1.2	3.6
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	49.4	50.5	-1.1	-2.1
Year 2†	32.7	33.4	-0.7	-2.0
Year 3†	24.8	26.4	-1.6	-6.2
Years 1 – 3	35.6	36.8	-1.1	-3.1
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	46.9	44.9	2.0	4.5
Year 2†	30.9	25.6	5.4**	21.0
Years 1 – 2	38.9	35.2	3.7	10.5
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (Food Stamp participation at any time during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT III.11

AVERAGE QUARTERLY FIP BENEFIT AMOUNT
(Dollars)

Year Since Random Assignment	Outcome: Treatment Group (T)	Outcome: Control Group (C)	Impact: Absolute (T - C)	Impact: Relative (T - C) / C
Ongoing FIP Cases				
Year 1	896	895	0	0.1
Year 2	604	625	-22*	-3.5
Year 3	430	462	-32***	-6.9
Year 4†	322	358	-36***	-10.0
Year 5†	245	265	-19*	-7.3
Years 1 – 5	499	521	-22**	-4.2
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	406	388	18	4.8
Year 2	248	240	8	3.5
Year 3†	174	170	4	2.2
Year 4†	134	134	0	-0.2
Years 1 – 4	241	233	8	3.3
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	366	365	1	0.4
Year 2†	206	239	-32**	-13.6
Year 3†	148	170	-22**	-13.0
Years 1 – 3	240	258	-18*	-6.9
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	331	283	48**	16.9
Year 2†	206	156	50**	32.1
Years 1 – 2	268	219	49**	22.3
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (total FIP benefits during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT III.12

AVERAGE QUARTERLY FOOD STAMP BENEFIT AMOUNT
(Dollars)

Year Since Random Assignment	Outcomes: Treatment Group (T)	Outcomes: Control Group (C)	Impacts: Absolute (T - C)	Impacts: Relative (T - C) / C
Ongoing FIP Cases				
Year 1	490	520	-29***	-5.6
Year 2	392	424	-31***	-7.3
Year 3	323	352	-29***	-8.2
Year 4†	259	285	-26***	-9.2
Year 5†	208	226	-18**	-7.8
Years 1 – 5	334	361	-27***	-7.4
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	273	287	-14	-4.8
Year 2	198	194	4	1.9
Year 3†	154	146	8	5.5
Year 4†	120	118	2	1.6
Years 1 – 4	186	186	0	0.0
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	257	269	-12	-4.5
Year 2†	165	180	-16*	-8.7
Year 3†	128	136	-8	-5.8
Years 1 – 3	183	195	-12*	-6.1
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	243	229	15	6.3
Year 2†	168	130	38**	29.0
Years 1 – 2	206	179	26*	14.6
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (total Food Stamp benefits during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT III.13

AVERAGE QUARTERLY RATE OF EMPLOYMENT WITH FIP PARTICIPATION
(Percentages)

	Outcome		Impact	
Year Since Random Assignment	Treatment Group (T)	Control Group (C)	Absolute (T - C)	Relative (T - C) / C
Ongoing FIP Cases				
Year 1	33.3	30.6	2.7***	8.8
Year 2	31.3	26.8	4.5***	16.7
Year 3	24.8	21.7	3.2***	14.6
Year 4†	20.7	17.9	2.8***	16.0
Year 5†	17.1	16.3	0.8	4.7
Years 1 – 5	25.4	22.6	2.8***	12.3
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	24.2	19.2	4.9***	25.6
Year 2	16.7	13.0	3.6***	28.0
Year 3†	11.4	10.2	1.2	11.6
Year 4†	9.1	9.1	0.0	-0.4
Years 1 – 4	15.3	12.9	2.4***	18.8
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	23.4	18.8	4.6***	24.2
Year 2†	14.6	13.3	1.3	9.7
Year 3†	11.2	11.7	-0.5	-4.0
Years 1 – 3	16.4	14.6	1.8**	12.3
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	20.5	15.2	5.3***	34.6
Year 2†	13.3	9.2	4.1***	45.0
Years 1 – 2	16.9	12.2	4.7***	38.5
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (both employment and FIP participation during the quarter) is based on IABC data for 10/93 - 9/98 and IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT III.14

AVERAGE ANNUAL INCOME FROM EARNINGS AND FIP
(Dollars)

Year Since Random Assignment	Outcome: Treatment Group (T)	Outcome: Control Group (C)	Impact: Absolute (T - C)	Impact: Relative (T - C) / C
Ongoing FIP Cases				
Year 1	6,444	6,259	185**	3.0
Year 2	7,172	6,913	259*	3.7
Year 3†	7,655	7,498	156	2.1
Year 4†	8,087	8,115	-28	-0.3
Year 5†	9,165	9,066	99	1.1
Years 1 – 5	7,705	7,570	134	1.8
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	7,900	7,145	755***	10.6
Year 2	8,625	8,060	565*	7.0
Year 3†	9,119	9,039	80	0.9
Year 4†	9,888	9,964	-77	-0.8
Years 1 – 4	8,883	8,552	331	3.9
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	7,721	7,651	70	0.9
Year 2†	8,292	8,620	-328	-3.8
Year 3†	9,387	9,330	58	0.6
Years 1 – 3	8,467	8,534	-67	-0.8
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	6,839	7,185	-346	-4.8
Year 2†	7,402	8,133	-731	-9.0
Years 1 – 2	7,120	7,659	-539	-7.0
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (total earnings and FIP benefits during the year) is based on IABC data for 10/93 - 9/98 and IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT III.15

AVERAGE ANNUAL INCOME FROM EARNINGS, FIP AND FOOD STAMPS
(Dollars)

Year Since Random Assignment	Outcome: Treatment Group (T)	Outcome: Control Group (C)	Impact: Absolute (T - C)	Impact: Relative (T - C) / C
Ongoing FIP Cases				
Year 1	8,405	8,337	68	0.8
Year 2	8,742	8,607	135	1.6
Year 3†	8,946	8,905	41	0.5
Year 4†	9,122	9,255	-133	-1.4
Year 5†	9,997	9,968	29	0.3
Years 1 – 5	9,042	9,015	28	0.3
(Sample Size)	(4,952)	(2,466)	(7,418)	
Applicant FIP Cases, Cohort 1				
Year 1	8,992	8,292	699***	8.4
Year 2	9,415	8,835	580*	6.6
Year 3†	9,734	9,622	112	1.2
Year 4†	10,366	10,436	-70	-0.7
Years 1 – 4	9,627	9,296	330	0.0
(Sample Size)	(3,049)	(1,477)	(4,526)	
Applicant FIP Cases, Cohort 2				
Year 1	8,750	8,729	21	0.2
Year 2†	8,950	9,341	-391	-4.2
Year 3†	9,899	9,872	26	0.3
Years 1 – 3	9,200	9,314	-114	0.0
(Sample Size)	(2,745)	(1,376)	(4,121)	
Applicant FIP Cases, Cohort 3				
Year 1	7,812	8,100	-288	-3.6
Year 2†	8,073	8,653	-580	-6.7
Years 1 – 2	7,943	8,377	-434	-0.1
(Sample Size)	(821)	(459)	(1,280)	

SOURCE: The outcome measure (total earnings, FIP benefits and Food Stamp benefits during the year) is based on IABC data for 10/93 - 9/98 and IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

†Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

CHAPTER IV

IMPACTS ON ADULTS AND FAMILIES: FINDINGS BASED ON CORE SURVEY DATA

From July 1998 through August 1999, MPR interviewed 2,951 of the 17,345 FIP cases that had been randomly selected into the evaluation of welfare reform in Iowa. These interviews, which we refer to collectively as the Iowa core survey, yielded data on a much broader range of outcomes for impact analysis than are available from the state administrative files that were the basis for the estimates presented in Chapter III. The survey-based outcomes include details on the following: employment (wage rates, hours of work, and fringe benefits); family structure; housing and neighborhood characteristics; health insurance coverage; reliance on private support networks; and expectations regarding future participation in FIP. Some of these outcomes pertain to the family or household in which the FIP case was a subunit, while others pertain to the adult who completed the survey interview for the FIP case. The impact estimates presented in this chapter are based on data from the core survey on this diverse set of outcomes.

The most important findings from our analysis of the Iowa core survey data that apply to both ongoing and applicant cases are the following:

1. ***Welfare reform raised participation by both ongoing and applicant cases in the PROMISE JOBS program, which provides employment-related services to FIP participants.*** This impact is probably due to a tightening of the requirement to participate in PROMISE JOBS under welfare reform and to more severe penalties for failure to participate.
2. ***Welfare reform increased the proportion of both ongoing and applicant cases that had been informed by a DHS staff member of their potential eligibility for post-FIP Medicaid.*** The design for welfare reform in Iowa did not address the issue of providing information on post-FIP eligibility for Medicaid, but this finding suggests that DHS staff did more consistently provide such information under welfare reform.

For ongoing cases only, we found positive impacts on earnings and benefits from employment:

3. ***Welfare reform increased monthly earnings by the heads of ongoing cases by 10 percent.*** This impact pertains to earnings on the primary job in the month prior to the core survey interview. We also found positive impacts on the availability of paid leave for vacation and illness. In contrast to the findings based on administrative data for the entire FIP case reported in Chapter III, these survey-based findings for the case head indicate that welfare reform had positive effects on employment-related outcomes that persisted for as long as five or six years after random assignment.

Welfare reform had no other notable impacts on survey-based outcomes for ongoing cases. Additional important findings that apply to applicant cases only include the following:

4. ***Welfare reform reduced the proportion of applicant cases for which the case head had ever been married at the time of the survey interview.*** This impact was concentrated among cases headed by a single female adult at random assignment. Apparently, some aspect of the reforms discouraged these women from marrying.

5. ***Among applicant cases in the month prior to the survey interview, welfare reform did not affect the head's employment and earnings, but it reduced the entire household's earnings and income by about $200 per month.*** The latter impacts appear to have been generated by a negative impact on the earnings of other household members, which may be related to the aforementioned negative impact on marriage. Poverty rates were unaffected.

6. ***Welfare reform increased participation by applicant cases in public or subsidized housing, Medicaid, FIP, and Food Stamps.*** Survey respondents in cases that were initially exposed to reform policies rather than pre-reform policies reported higher rates of participation in these programs during the month preceding the interview. Perhaps related to their heavier reliance on public/subsidized housing, these respondents also more frequently reported concerns about the quality of their neighborhoods.

A. THE IOWA CORE SURVEY

The estimates of the impacts of welfare reform that were presented in Chapter III are based on administrative data for all 17,345 cases in the evaluation's four samples: (1) ongoing treatment cases, (2) ongoing control cases, (3) applicant treatment cases, and (4) applicant control cases.[1] To support an analysis of impacts on a broader set of outcomes, MPR conducted two surveys of these cases: a "core survey" of cases randomly selected from each of the four evaluation samples and a follow-up "child impact survey" of cases that had participated in the core survey and had reported the presence in the household of a child age 5 to 12 years old who had been a member of the case at the time of random assignment.[2] The core interviews were conducted primarily by telephone; in-person contact was made as necessary. The survey field period (July 1998 - August 1999) was 16 to 29 months after Iowa began to apply reform policies to the control group in April 1997; consequently, estimates of the impacts of welfare reform based on the survey data may understate the true impacts. This section describes the sample and the interview response rate for the core survey, which is the basis for the impact estimates that are reported in this chapter. Appendix C provides technical information on weights for the core survey data that account for the designs of the survey samples and for nonresponse to the survey. Chapter V discusses the child impact survey and its associated impact estimates.

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[1]The population of ongoing FIP cases in the nine research counties in September 1993 was 16,308. From this population, 4,952 cases were randomly assigned to the evaluation's sample of ongoing treatment cases and 2,466 cases were randomly assigned to the sample of ongoing control cases. The population of cases in the nine research counties that applied for FIP assistance between October 1993 and March 1996 was 20,819. From this population, 6,615 cases were randomly assigned to the evaluation's sample of applicant treatment cases and 3,312 were randomly assigned to the sample of applicant control cases.

[2]The survey instruments (Mathematica Policy Research 1998a and 1998b) may be ordered from MPR. See www.mathematica-mpr.com/publications for ordering instructions.

1. The Core Survey Sample

From the 17,345 cases in the evaluation, 4,163 were selected into the sample for the core survey. This selection was conducted randomly with unequal probabilities in eight cells defined by three dichotomous case characteristics: ongoing/applicant, treatment/control, and presence/absence of a child age 5 to 12 years old. A case was classified into one of these cells on the basis of its characteristics as of the time of random assignment as recorded in state administrative files. The designated survey respondent was the person who submitted the application for assistance or, for a recipient case, the person whose name appeared on the FIP benefit check.[3] Fifty-two of the cases in the core survey sample were subsequently dropped because the designated survey respondent was either deceased at the time the interview was attempted or was the designated survey respondent for multiple cases in the sample. After this adjustment, 4,111 cases remained and are hereafter referred to as the "core survey sample."

2. Survey Participation Rate

Of the 4,111 cases in the core survey sample, 2,951, or 72 percent, actually participated in the survey by completing an interview (see Exhibit IV.1).[4] Cases that were subject to treatment policies were three percentage points more likely to complete an interview than were those initially subject to control policies (73 percent versus 70 percent, respectively). Ongoing FIP cases were more likely to complete an interview than were applicant FIP cases (76 percent versus 69 percent, respectively). One-third of the ongoing-applicant differential in survey participation rates is due to the greater difficulty of locating applicant cases. Two factors may have contributed to this differential. First, applicant cases tended to have younger heads than ongoing cases and therefore were presumably more mobile.[5] Second, the contact information in DHS administrative files was less complete and accurate for applicant cases. This may have been because nearly half of the cases that applied for cash assistance did not receive it in the quarter of application. Since no FIP benefit checks were subsequently mailed to most of these cases, it was less critical for them to have accurate addresses on file with Iowa DHS.

Outright refusals by sampled cases to complete the interview varied little across the four categories defined by the intersection of treatment/control policies and ongoing/applicant cases. Exhibit IV.1 shows that the interview refusal rate ranged from 9.5 percent for ongoing cases subject to treatment policies to 10.4 percent for applicant cases initially subject to control policies. In the aggregate, refusals accounted for one-third of all nonparticipation in the survey.

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[3]In FIP terminology, this individual is the "payee." In a child-only case, the payee is not a member of the case but a guardian of the children in the case.

[4]We subsequently use the term "survey participant" to refer to a case for which a survey interview was completed. Also, we use the term "survey respondent" (or simply "respondent") to refer to the specific individual in a case who completed an interview.

[5]"Case head" is an MPR term, not a FIP term. We use it to refer to the FIP case member in whose name the application for assistance was filed. For a case that includes a parent or guardian of a child in the case, the case head is a parent or guardian. For a case that does not include a parent or guardian (a child-only case), the case head is one of the children in the case. The FIP term for this individual is the "case-name person."

B. ESTIMATION METHODS

The methods that we used to estimate the impacts of welfare reform in Iowa on a broad range of outcomes measured in the core survey are very similar to those that we used to estimate impacts on outcomes obtained from administrative files.[6] The most notable of the few differences is that the estimates presented in this chapter are based on outcomes reported by the 2,951 cases that participated in the Iowa core survey, rather than on administrative outcomes for all 17,345 cases in the evaluation. Ongoing cases completed the survey interview five to six years after their random assignment. The earliest applicant cases completed the interview six years after random assignment and the latest completed it two and a half years after random assignment.[7] Thus, the impact estimates presented in this chapter are for a point in time that is a year or two later than the most recent of the impact estimates discussed in the previous chapter. We occasionally make comparisons between impacts on outcomes as measured in the survey data and as measured in the administrative data. When doing so, we refer to the most recent of the impact estimates based on administrative data. Note that all estimates based on the survey data pertain to a period during which Iowa was applying reform policies to the control group and, hence, may be biased in the direction of understating the true impacts of welfare reform.

While the outcome measures that are the basis for the impact estimates presented in this chapter were obtained through the Iowa core survey, the control variables in the multivariate regression models that generated the estimates were, with one exception, obtained from Iowa administrative files. These are the same control variables that were used to generate the Chapter III impact estimates. They include characteristics of the case head at the time of random assignment, such as age, sex, race and ethnicity, education, marital status, and number of dependents. They also include characteristics of the entire case, such as the county of residence and number of case members at random assignment, and earnings in the year prior to the quarter of random assignment. The only control variable in the survey data analysis that differs from the control variable in the administrative data analysis is education. Because of a high incidence of missing data (greater than 50 percent) on education in the IABC system (a main source of information for the analysis based on administrative data), we substituted a survey-based measure of the education of the survey respondent as of the time of random assignment. The latter measure is missing for fewer than 4 percent of the cases that participated in the survey.

We estimated impacts on survey-based outcomes for all applicant cases combined. This differs from our approach to the estimation of impacts on administrative outcomes, in which we divided applicant cases into three cohorts according to the date of application. We then used the regression model to estimate impacts separately for each cohort. Because the number of applicant cases that participated in the core survey was relatively small (1,538 cases, compared

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[6]Our methodology for generating impact estimates from the core survey data included the use of the weights that we had developed for that data set.

[7]Ongoing cases completed the interview between 4 years and 10 months and 5 years and 11 months after random assignment. We characterize this range as "five to six years after random assignment." Applicant cases completed the interview between 2 years and 4 months and 5 years and 11 months after random assignment. We characterize this range as "two and a half to six years after random assignment."

with 9,927 applicant cases in the administrative data analysis), we were concerned that survey-based impact estimates would be unacceptably imprecise if we obtained them separately for each cohort of applicants. Consequently, we pooled all applicant cases in the survey data analysis.[8]

Section C below presents survey-based estimates of impacts on all ongoing cases and all applicant cases. Section D refers the reader to other components of this report that present survey-based estimates of impacts on selected subgroups of ongoing and applicant cases.

C. IMPACTS ON ADULTS AND FAMILIES

The impact estimates of Iowa's welfare reform presented in this section pertain to all cases in the nine research counties that were either on FIP at the outset of welfare reform or that applied for FIP benefits during the subsequent two-and-one-half-year period of random assignment. The results show that the reforms increased participation of ongoing and applicant cases in the state's employment and training program for FIP participants. Beyond this, we found very few impacts on ongoing cases over a broad range of survey-based outcome measures. However, for applicant cases, the reforms increased participation in a core set of government assistance programs as well as the likelihood that a survey respondent remained unmarried following random assignment. The reforms also reduced total household income.

1. Education and Training

According to several key survey-based measures, welfare reform increased rates of involvement in the PROMISE JOBS program, which provides training, job placement assistance, and other employment-related services to FIP participants.[9] Exhibit IV.2 shows that the reforms increased the rate of participation by survey respondents in any PROMISE JOBS activity by five percentage points among ongoing cases and by seven percentage points among applicant cases. The reforms had even larger positive impacts on the rates at which survey respondents developed and signed plans designed to move them toward independence from welfare. These plans were referred to as "employability plans" under the pre-reform program and are known as "family investment agreements (FIAs)" under welfare reform. These findings can be viewed as evidence that services were delivered to, and requirements were imposed on, higher percentages of cases under the reform program than under the pre-reform program.

Under welfare reform, an adult member of a FIP case can be assigned to the Limited Benefit Plan (LBP) if she or he fails to comply with requirements to participate in PROMISE JOBS.[10] An adult may also request assignment to the LBP for any reason, including a desire to avoid PROMISE JOBS. At the outset of welfare reform, the LBP provided three months of full FIP

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[8]Exhibits D.8a and D.8b in Appendix D present selected impact estimates by cohort of application.

[9]Fraker et al. (1998) present estimates of the impacts of Iowa's welfare reform on participation in the PROMISE JOBS program that are based on measures obtained from Iowa DHS administrative files. Those estimates confirm the survey-based estimates presented here—welfare reform increased participation by both ongoing and applicant FIP cases in the PROMISE JOBS program.

[10]Fraker et al. (1997a and 1997b) describe the LBP and the experiences of those who have entered it.

cash benefits, three months of reduced benefits, and then six months of no benefits for the entire case. Subsequent revisions to the LBP reduced the lag between entry into the plan and the full cessation of benefits.[11] Adults in treatment cases could have been assigned to the LBP at any time following random assignment. In contrast, adults in control cases could not have been assigned to the LBP until they became subject to reform policies in April 1997. Thus, it is not surprising that survey respondents in treatment cases were far more likely than those in control cases to have reported that they (or their spouses) had been assigned to the LBP at some time following random assignment. This is true for both ongoing and applicant cases.

Despite higher rates of assignment to the LBP under welfare reform, respondents in treatment cases were no more likely than those in control cases to perceive that they had been sanctioned for failing to carry out an FIA or employability plan (see Exhibit IV.2). This pattern in the findings indicates that assignments to the LBP were often viewed as voluntary rather than as sanctions for not satisfying program requirements.

Welfare reform in Iowa emphasizes rapid entry into jobs. In general, it places less emphasis on the enhancement of skills through participation in education and training programs.[12] However, the reform program does emphasize education in one specific area—it requires most mothers under the age of 18 to remain in school for the purpose of obtaining a high school diploma or GED. Teenage mothers and their children constitute a larger proportion of applicant cases than ongoing cases, so it is among applicants that this particular feature of Iowa's welfare reform is most likely to be manifested in educational outcomes. Exhibit IV.2 shows that, as expected, the reforms had few impacts on educational outcomes, with the noteworthy exception of a positive impact on the acquisition of a high school diploma or GED by survey respondents in applicant cases.

2. Family Structure and Stability

Iowa's welfare reform includes several provisions that make it easier for two-parent families with children to qualify for assistance and to retain eligibility for assistance even though one or both parents has income from employment. What policymakers had in mind when they established these provisions was that welfare reform would foster and/or preserve two-parent families. The results, however, indicate that these goals were not realized (see Exhibit IV.3). Among both ongoing and applicant FIP cases, the reforms had no impact on the proportion of survey respondents who were either currently married or in long-term cohabiting relationships. Furthermore, among applicants, the reforms appear to have actually discouraged marriage—respondents were six percentage points more likely to have never been married two

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[11]Footnote 5 in Chapter I provides additional details on the history of revisions to the LBP.

[12]Treatment and control cases had equal access to education and training through PROMISE JOBS. Among ongoing and applicant FIP cases, Exhibit IV.2 shows that about half of the heads of treatment cases and half of the heads of control cases inparticipated in any type of education following random assignment.

and a half to six years after random assignment if they were in a treatment case than if they were in a control case.[13, 14]

We further investigated the finding of an impact of welfare reform on marital status by restricting the analysis to applicant cases that are of particular concern to many policy makers—cases headed by adult single women.[15] Exhibit D.6d (column 3) in Appendix D shows that the impact of welfare reform on the subsequent marital status of the survey respondent was especially pronounced among these cases. Specifically, the reforms increased by eight percentage points the likelihood that the survey respondent in such a case had never been married two and a half to six years after random assignment. Correspondingly, they reduced by eight percentage points the likelihood that the respondent was married and living with her spouse.[16, 17] Some provisions of the reforms apparently discouraged the women in this subgroup

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[13]Our analysis suggests that the higher rate of never-marriedness among treatment versus control applicant cases was accompanied by lower rates of being married and of being separated or divorced, as shown in Exhibit IV.3. However, our estimates of the latter two impacts are not significantly different from zero.

[14]The higher rate of never-marriedness among treatment applicant cases relative to control applicant cases at the time of the survey interview cannot be attributed to a difference at random assignment. We conducted a t-test to determine whether the proportion of case heads who were never married at random assignment was different for these two groups of applicant cases. The test was based on administrative data for cases that participated in the core survey. We found less than a one percentage point treatment-control difference in the proportion of applicant case heads who were never married at random assignment. The P-value for this difference is greater than .8, implying that it is not statistically significant. This finding of no significant treatment-control difference in the baseline rate of never-marriedness is invariant to whether the survey weights are used in the analysis.

[15]We included an applicant case in this analysis if, at the time of random assignment, it was headed by a single woman who was either (a) 18 years of age or older, or (b) 16 or 17 years old and the mother of a child under 5 years of age. We defined a woman to be "single" if she was not married and living with her spouse. Thus, single women included those who had never been married and those who were divorced, separated, or widowed.

[16]Among applicant cases headed by adult single women at random assignment, survey respondents in 34.2 percent of control cases and 42.0 percent of treatment cases reported that they had never been married at the time of the core survey. Among these same cases, survey respondents in 32.6 percent of control cases and 24.2 percent of treatment cases reported that they were married at the time of the core survey.

[17]In an extension of our investigation into the impact of welfare reform on marital status, we further restricted our analysis to cases headed by adult women who had never been married at the time of random assignment. This is a subset of the cases that were headed by adult single women at random assignment. Given this further restriction on the analysis sample, 100 percent of the heads of both treatment and control cases had never been married as of the time of random assignment. Our analysis revealed that at the time of the core survey, the respondents in 54.0 percent of treatment cases and 44.5 percent of control cases had never been married. The 9.5 percentage point difference between these two values is our estimate of the impact of welfare reform on the likelihood of that these women were never married two and a half to six years after random assignment. We also estimated the impact of welfare reform on marriage for this subgroup. The survey respondents in 24.1 percent of treatment cases and 33.5 percent of control cases were married when we interviewed them. Thus, welfare reform reduced by 9.4 percentage points the likelihood that these women were married two and a half to six years after random assignment. The estimated impacts on being never married and on being married are both statistically significant at the .05 level.

from marrying. Possibly those are the expanded PROMISE JOBS participation requirements, which apply to both parents in a two-parent case and, hence, to both heads in a married-couple case. They could have this effect by reducing the amount of time that women can devote to the development of strong intimate relationships or by deterring potential spouses who are averse to having their employment status come under the purview of PROMISE JOBS. However, this attribution is highly speculative; the findings from the evaluation provide little guidance regarding the source of the impacts on marriage.

Turning to measures of family stability, our analysis of the core survey data produced no evidence that reform policies affected the likelihood of giving birth to or fathering a child. But it did yield some evidence that the reforms increased the percentage of respondents in applicant cases with a child in foster care. The estimated impact is small—just two percentage points on top of a control base of only one percent—but statistically significant. Our confidence in this finding is undermined by the fact that a very small number of treatment cases account for it. On the other hand, as reported in Chapter V, findings from our analysis of data from Iowa's child welfare data system suggest that the reforms increased the use of foster care services among the latest applicants in the evaluation. These impacts are based on a small number of FIP cases actually receiving foster care, but they provide a second piece of evidence that points in the same direction, indicating that the reforms may have increased the placement of children in applicant FIP cases in foster care.

3. Housing, Neighborhood, and Access to Transportation

Welfare reform in Iowa had no effect on the current housing arrangements of ongoing or applicant cases, as shown in Exhibit IV.4. It also had no impact on the rate at which families were homeless or living in shelters, either at the time of the survey interview or over the previous year. The reforms did increase the percentage of applicant cases that were living in publicly owned or subsidized housing at the time of the survey interview. The latter is one of several research findings that reflect an increase in participation in a group of interrelated public assistance programs among applicant FIP cases under welfare reform.

The reforms had negative impacts on perceptions of neighborhood quality and access to transportation by applicant cases, also shown in Exhibit IV.4. An index of neighborhood quality was five percentage points less likely to be in the moderate-to-high range for treatment cases than for control cases. Treatment cases were also more likely to view their neighborhoods as having deteriorated over the past year. Finally, the reforms reduced access to local bus service and possession of a driver's license among applicant cases. We cannot link these impacts to specific provisions of Iowa's welfare reform, either analytically or through a review of the reform provisions, suggesting that the transmittal mechanisms were indirect. For example, we have seen that welfare reform increased reliance on public housing by applicant cases. Such housing may be more likely than private housing to be located in troubled neighborhoods. If so, the negative impacts of welfare reform on the characteristics of the neighborhoods in which FIP cases reside could be byproducts of its impact on their reliance on public assistance and, more specifically, their use of public housing.

4. Health Insurance Coverage

Compared with their approach in a pre-reform context, FIP caseworkers and PROMISE JOBS counselors under welfare reform more consistently informed cases of their potential eligibility for continued Medicaid coverage after leaving FIP. Exhibit IV.5 shows that both ongoing and applicant cases were more likely to have been informed of their potential post-FIP Medicaid eligibility if they were in the treatment group rather than the control group.

Five to six years after random assignment, we observed no effects of welfare reform on ongoing FIP cases in terms of their rates of current coverage by Medicaid and private health insurance or in terms of the continuity of their coverage by some form of health insurance over the entire interval since random assignment.[18] In contrast, applicant FIP cases were more likely to be currently covered by Medicaid and less likely to be currently covered by private health insurance if they had been randomly assigned to Iowa's welfare reform program, rather than to its pre-reform program, two and a half to six years earlier. Exhibit IV.5 shows that applicant cases were six percentage points more likely to be covered by Medicaid and eight percentage points less likely to be covered by private health insurance if they were in the treatment group as opposed to the control group.[19] These impacts have important implications for who pays for health care for these families, but the exhibit also shows that the reforms did not affect the rate at which applicant cases were currently covered by any health insurance.

In terms of the survey respondent, applicant cases in the treatment group were more likely than their control counterparts to have experienced gaps in health insurance coverage. More specifically, the reforms reduced by seven percentage points the likelihood that the respondent for an applicant FIP case was continuously covered by health insurance during the years following random assignment (see Exhibit IV.5). The reforms did not have this negative effect on the continuity of health insurance coverage for children in applicant cases. These differential findings for respondents and children may be a function of the more liberal criteria under which children, relative to adults, qualify for Medicaid coverage.

5. Use of Private Support Networks

Welfare reform had virtually no impacts on the use of private support networks by either ongoing or applicant FIP cases. Exhibit IV.6 shows that welfare reform did not affect the award, receipt, or amount of formal child support. It also did not affect the likelihood that a case would receive informal cash payments from an absent parent; however, it did increase the average amount of such payments to applicant cases. But this impact was so small in absolute terms that it probably made little difference in family well-being. The exhibit also shows that welfare

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[18]In the analysis of current family health insurance coverage, a family was defined to have been covered by health insurance if any member of the family was covered. By this definition, some members of a covered family may themselves have lacked coverage.

[19]The finding of a positive impact on Medicaid participation by applicant FIP cases is another manifestation of the positive impact on participation in a group of interrelated public assistance programs.

reform did not affect the rates at which FIP cases received assistance from family, friends, and neighbors or from community organizations.

6. Participation in Government Programs

With a few noteworthy exceptions discussed below, welfare reform in Iowa did not affect participation in a broad range of government assistance programs two and a half to six years after random assignment. Neither did it affect the dollar amount of benefits received. Exhibit IV.7 presents findings for eight individual programs and for a residual category of "other" programs. The findings for all of these programs combined may be the most revealing (see the panel, "All Government Programs," on the second page of the exhibit). For ongoing FIP cases, the rate of participation in one or more government assistance program was 63 percent for the treatment group, compared with 60 percent for the control group. The three-percentage-point difference is not significantly different from zero. The corresponding participation rates for applicant FIP cases were 55 percent for the treatment group and 53 percent for the control group. Again, the treatment-control difference in participation rates is not statistically significant. The same panel of the exhibit also shows that the reforms did not affect the average dollar value of benefits received through all government programs by either ongoing or applicant FIP cases.

Our analysis of the core survey data produced some evidence that Unemployment Insurance was a more important source of support for treatment cases (both ongoing and applicant) than for control cases. Increased reliance by households on Unemployment Insurance when they are unable to support themselves through employment can be viewed as a positive outcome of welfare reform because the receipt of this benefit indicates that household members were working in the recent past and were contributing taxes to this self-sustaining program. The absolute sizes of the impacts of welfare reform on Unemployment Insurance participation and benefit amounts are, however, small.

FIP and Food Stamps—Applicant Cases. For applicant cases, welfare reform increased FIP and Food Stamp participation and benefits (see Exhibit IV.7).[20] The impact estimates shown in the exhibit deviate from those based on administrative data and presented in Chapter III. The weighted averages of the latter estimates across the three applicant cohorts for the latest year following random assignment are close to zero for each of the four outcomes—FIP participation and benefits and Food Stamp participation and benefits.[21] Thus, the survey data analysis indicates that welfare reform increased FIP and Food Stamp participation and benefits for applicant cases two and a half to six years after random assignment, whereas the administrative data analysis indicates that welfare reform had no impacts on these outcomes two to four years after random assignment. Note that the estimates in Chapter III are based on all of the cases in

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[20]In Exhibit IV.7, the estimated four-percentage-point impact on participation in the Food Stamp Program by applicant FIP cases is almost statistically significant at the 10 percent level (P-value = .11).

[21]Across the three applicant cohorts, the weighted averages of the impact estimates based on administrative data for the latest year following random assignment are: 0.9 percentage points for FIP participation, -$3 per quarter for the FIP benefit amount, 0.3 percentage points for Food Stamp participation, and $2 per quarter for the Food Stamp benefit amount. Sources: Exhibits III.7, III.10, III.11, and III.12.

the evaluation, whereas the estimates in this chapter are based on the subset of those cases that participated in the core survey. Furthermore, administrative records of program participation and benefits are likely to be more reliable than self-reports on these outcomes. Considering these two factors, we believe that the findings from the analysis of administrative data, i.e., essentially no impacts of welfare reform on FIP and Food Stamp participation and benefits, are more reliable than the survey findings, i.e., small positive impacts on these outcomes.

The survey-based estimates of the impacts of welfare reform on the reliance of applicant cases on FIP and Food Stamps should be considered in the context of the previously discussed estimated impacts on their participation in public/subsidized housing and Medicaid (see Sections C.3 and C.4, above, and Exhibits IV.4 and IV.5). FIP, Food Stamps, public/subsidized housing, and Medicaid make up a package of core assistance programs. Participation in each by applicant FIP cases two and a half to six years after random assignment was four to six percentage points higher among those in the treatment group than those in the control group. We recommend that these findings be interpreted as evidence of an impact of welfare reform on a single broadly defined outcome (participation in a core group of public assistance programs), rather than as evidence of independent impacts on multiple unrelated outcomes.

FIP and Food Stamps—Ongoing Cases. For ongoing FIP cases, the absence of statistically significant survey-based estimated impacts of welfare reform on FIP and Food Stamp participation is consistent with the findings from the administrative data analysis (Chapter III). However, the survey data analysis revealed no impacts on benefit amounts under these programs, whereas the administrative data analysis revealed that welfare reform reduced benefit amounts by about six dollars per month, on average.

7. Job Characteristics and Earnings

The core survey data can support a more detailed analysis of employment-related outcomes than is possible with administrative data from the Unemployment Insurance Program. This section presents survey-based estimates of the impacts of welfare reform on the characteristics of the primary current job held by the survey respondent—hours of work, wage rate, and fringe benefits. It also presents estimates of impacts on earnings by the survey respondent and by the respondent's entire household.

Survey Respondents. Welfare reform had a few modest, desirable impacts on the earnings and on the job characteristics of survey respondents in ongoing FIP cases. It had essentially no impacts on these outcomes for survey respondents in applicant FIP cases.

Welfare reform increased monthly earnings on the primary current formal job held by survey respondents in ongoing cases by $72 (about 10 percent) but had no impact on the earnings of respondents in applicant cases (Exhibit IV.8). The impact for ongoing cases appears to have occurred via an increase in employment in jobs that paid a moderately high hourly wage ($7 to $9 per hour). Survey respondents in ongoing treatment cases were four percentage points more likely to have held such jobs than were their counterparts in control cases. The reforms did not affect the probability of survey respondents not being employed or the probability of their being employed in jobs at specified hours of work in either ongoing cases or applicant cases.

Welfare reform also increased the percentage of survey respondents in ongoing cases who were employed in jobs providing fringe benefits. Relative to their counterparts in control cases, respondents in ongoing treatment cases were 5.5 percentage points more likely to be employed in jobs providing paid vacation leave and 4 percentage points more likely to be employed in jobs providing paid sick leave.[22] There were no similar impacts among applicant cases.

Households. The positive impact of welfare reform on earnings from the primary formal job of survey respondents in ongoing FIP cases does not translate into a positive impact on total household earnings. For ongoing treatment cases, the second page of Exhibit IV.8 shows that the mean total earnings from all formal and informal jobs by all household members in the month prior to the survey interview was $1,077, compared with $1,035 for ongoing control cases. The $42 difference is not statistically significant.

Although welfare reform had no impact on earnings from the primary formal job held by survey respondents in applicant FIP cases, it nevertheless reduced the total household earnings of these cases by $202 per month, or 12 percent. Treatment cases had total household earnings of $1,469 compared to $1,671 for control cases. This negative impact on FIP applicants was concentrated among cases that, at the time of random assignment, were headed by a single female. Exhibit D.6c in Appendix D shows that welfare reform reduced total household earnings among single-female applicant cases by an average of $301 per month. This finding is statistically significant, whereas the estimated impact of a positive $39 per month on the household earnings of married-couple applicant cases is not significantly different from zero.

The negative impact of welfare reform on the household earnings of applicant cases headed by a single female at random assignment can probably be explained by a positive impact on being never-married and negative impact on being currently married for survey respondents in these cases (see Exhibit D.6.d). It appears that the reforms reduced total household earnings among applicant cases headed by a single female by reducing the likelihood that respondents had spouses who were contributing earnings to their households two and a half to six years after random assignment.

The survey-based finding of no impact of welfare reform on household earnings for ongoing cases five to six years after random assignment is consistent with the finding from the administrative data analysis that there was no impact on case earnings in the fifth year following random assignment. For applicant cases, there is no consistency in impacts on earnings estimated from the two data sources. Across the three cohorts of applicants examined in the administrative data analysis, the weighted average of the estimated impact on case earnings as measured in Unemployment Insurance files two to four years after random assignment was -$22 per quarter or -$7 per month (Exhibit III.3). This estimate contrasts sharply with the estimated impact on household earnings as measured by the survey two and a half to six years after random assignment of -$202 per month. The survey-based measure of earnings is broader than the

[22]With a P-value of .104, this estimate barely exceeds the study's .10 threshold for statistical significance.

measure based on administrative data.[23] Consequently, we believe that the estimate based on survey data is more useful in developing a full understanding of the impacts of welfare reform.

8. Income and Poverty

In our analysis of survey data on income and poverty, household income was defined as earnings from the following: all formal and informal jobs, formal and informal child support payments received, cash assistance from government programs, and the face value of Food Stamp benefits received. As in our analysis of household earnings, we found that welfare reform had no impact on household income for ongoing cases and a negative impact on household income for applicant cases (Exhibit IV.9). Among the applicant cases, the mean monthly household income was $1,775 for those in the treatment group and $1,988 for those in the control group. The $213 difference is statistically significant and amounts to 11 percent less household income for treatment cases relative to control cases. The negative impact of welfare reform on household income was concentrated among applicant cases headed by a single female at the time of random assignment (see Exhibit D.6c in Appendix D).

The negative impact of welfare reform on the household income of applicant FIP cases does not translate into an increased incidence of poverty among those cases. Exhibit IV.9 shows that the rate of poverty among applicant cases in the treatment group (39 percent) was not significantly higher than the rate among applicants in the control group (37 percent). A detailed analysis of household poverty categories reveals that the negative impact of welfare reform on the household income of applicant cases was accompanied by a decrease in the percentage of cases with incomes of 200 percent or more of the poverty threshold and an increase in the percentage with incomes from 100 to 150 percent of poverty.

9. Financial Accounts

Welfare reform did not affect whether ongoing or applicant FIP cases had checking or savings accounts, nor did it affect the average balances in those accounts, as shown in Exhibit IV.10. The exhibit also shows that welfare reform did not affect either the possession of any financial account or the average total balance in all such accounts combined. The exhibit does present evidence that the reforms had a negative impact on the possession of 401K accounts among applicant FIP cases.

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[23]The survey-based measure of household earnings is substantially larger than the measure of case-level earnings obtained from Unemployment Insurance files. Consider ongoing treatment cases: The mean value of the survey-based measure of household earnings for this group was $1,077 per month five to six years after random assignment (Exhibit IV.10). That translates to $3,231 per quarter. In contrast, the mean value of quarterly case earnings for this group, as obtained from UI files, was $2,046 in the fifth year following random assignment (Exhibit III.3). The survey-based measure is 58 percent larger than the measure based on administrative data. This discrepancy could be due to a number of factors. Two possibilities are: (1) the survey household was more inclusive than the FIP case (for example, the *suvey household* would include a spouse who joined the household at the time of or subsequent to exit from FIP, but the *FIP case* would not), and (2) the definition of earnings used in the survey was broader than that used in the Unemployment Insurance Program.

10. Future Participation in FIP

Welfare reform raised the expectations of respondents in applicant cases that they would be participating in FIP in the future. This finding is not surprising, given the positive impacts of welfare reform on participation in FIP and several other core assistance programs by applicant cases at the time of the core survey interview. Among applicant cases, seven percent of respondents in the treatment group, compared with five percent in the control group, expected to be receiving FIP cash assistance one year after the core survey interview date (see Exhibit IV.11). The difference between these expectations, while small in an absolute sense, is statistically significant. The reforms did not affect expectations by these same respondents regarding FIP participation five years into the future. Nor did they affect expectations by respondents in ongoing cases regarding FIP participation either one or five years into the future.

D. IMPACTS ON SUBGROUPS OF ADULTS AND FAMILIES

As noted in Chapter III, a subgroup analysis can reveal whether the impacts of Iowa's welfare reform were uniform across ongoing and applicant FIP cases or, instead, varied with characteristics of those populations. We conducted such an analysis of outcomes measured in the core survey for subgroups defined by eight baseline characteristics. Comprehensive findings from that analysis are presented in Appendix D. Selected findings pertaining to several specific reform policies are discussed in detail in Appendix I.

EXHIBIT IV.1

THE IOWA CORE SURVEY:
SAMPLE SIZES AND RATES OF PARTICIPATION IN THE SURVEY

	Ongoing FIP Cases		Applicant FIP Cases		Total Cases	
	Number	Percentage	Number	Percentage	Number	Percentage
Treatment Cases						
Sample size	1,230	100.0	1,497	100.0	2,727	100.0
Survey participants	945	76.8	1,039	69.4	1,984	72.8
Survey nonparticipants						
Not located	36	2.9	77	5.1	113	4.1
Refused	117	9.5	149	10.0	266	9.8
Barrier	7	0.6	34	2.3	41	1.5
Survey field pd. ended	125	10.2	198	13.2	323	11.8
Total nonparticipants	285	23.2	458	30.6	743	27.2
Control Cases						
Sample size	636	100.0	748	100.0	1,384	100.0
Survey participants	468	73.6	499	66.7	967	69.9
Survey nonparticipants						
Not located	14	2.2	38	5.1	52	3.8
Refused	63	9.9	78	10.4	141	10.2
Barrier	11	1.7	26	3.5	37	2.7
Survey field pd. ended	80	12.6	107	14.3	187	13.5
Total nonparticipants	168	26.4	249	33.3	417	30.1
All Cases						
Sample size	1,866	100.0	2,245	100.0	4,111	100.0
Survey participants	1,413	75.7	1,538	68.5	2,951	71.8
Survey nonparticipants						
Not located	50	2.7	115	5.1	165	4.0
Refused	180	9.6	227	10.1	407	9.9
Barrier	18	1.0	60	2.7	78	1.9
Survey field pd. ended	205	11.0	305	13.6	510	12.4
Total nonparticipants	453	24.3	707	31.5	1,160	28.2

EXHIBIT IV.2

EDUCATION AND TRAINING
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Participation in PROMISE JOBS Since						
Participated in a PROMISE JOBS activity	55.6	50.4	5.2*	39.2	31.8	
Signed FIA or employability plan	41.8	31.6	10.2***	26.8	18.2	
Assigned to LBP (voluntary or involuntary)	16.7	11.0	5.7***	10.7	5.3	
Sanctioned for failing to sign or carry out an FIA	6.7	6.3	0.5	6.1	4.0	
Participation in Education Since Random						
Adult basic education classes	7.0	7.5	-0.5	6.4	6.3	0.2
High school or GED classes	18.8	21.7	-2.9	16.3	14.8	1.5
Vocational/technical/college classes	34.3	33.9	0.4	27.1	28.0	-0.8
Any education classes	54.6	55.9	-1.2	48.3	48.4	-0.1
Education Credential Earned Since Random Assignment						
ABE or ESL certificate	0.0	0.4	-0.4	0.2	0.0	0.2*
High school diploma or GED	8.3	6.6	1.7	9.8	6.5	3.3**
Vocational or technical certificate	7.6	6.3	1.2	5.1	6.3	-1.2
Associate's or bachelor's degree	10.4	11.2	-0.8	6.4	5.8	0.6
Any education credential	25.5	23.4	2.1	20.4	17.9	2.4
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT IV.3

FAMILY STRUCTURE AND STABILITY
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Marital Status						
Never married	33.2	36.1	-2.9	30.3	23.8	6.5***
Married and living with spouse	25.1	27.5	-2.4	34.7	39.5	-4.8
Separated or divorced	39.2	35.2	4.0	32.4	34.6	-2.2
Widowed	2.5	1.2	1.3*	2.5	2.1	0.4
Long-Term Cohabitation						
Has lived unmarried with cur. partner 1+ years	11.3	11.5	-0.2	12.5	11.4	1.1
Married (spouse present) or cohab. 1+ years	36.4	39.0	-2.6	47.3	51.0	-3.6
Family Stability						
Birth of child since random assignment	26.4	26.4	0.0	35.4	35.7	-0.3
Minor child is in foster care	2.2	3.8	-1.7	2.7	0.8	1.9***
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT IV.4

HOUSING, NEIGHBORHOOD, AND ACCESS TO TRANSPORTATION
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Current Housing Arrangement						
Rent or own home	85.1	86.7	-1.6	86.9	87.3	-0.3
Live with friends or relatives	13.7	12.4	1.4	11.6	11.6	0.0
Prison	0.5	0.2	0.3	1.0	0.4	0.6
Shelter or homeless	0.4	0.7	-0.3	0.1	0.2	-0.2
Other housing arrangement	0.3	0.0	0.3	0.4	0.4	-0.1
Other Housing Outcomes						
Currently in public/subsidized housing	22.2	22.6	-0.4	15.9	12.2	3.6*
In shelter or homeless during past year	6.3	5.4	0.9	5.5	4.5	1.0
Neighborhood Characteristics						
Neighborhood good/excellent place to raise kids	86.2	85.2	1.1	85.7	87.6	-2.0
Index of neighborhood quality moderate to high	85.6	84.3	1.3	86.7	91.7	-4.9***
Neighborhood deteriorated over past year	11.4	13.1	-1.7	12.8	9.6	3.2*
Access to Transportation						
Neighborhood served by local bus	71.1	69.7	1.4	64.5	69.8	-5.3**
Possesses driver's license	76.9	74.4	2.5	79.4	83.8	-4.3*
Owns or has access to a working car	84.1	80.6	3.4	89.1	90.1	-1.0
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT IV.5

HEALTH INSURANCE COVERAGE
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Information About Post-FIP Medicaid						
FIP/PROMISE JOBS provided information on Medicaid eligibility post-FIP	54.0	48.7	5.3*	41.5	35.3	6.2**
Family's Current Health Insurance Coverage						
Medicaid	50.8	49.4	1.4	41.7	36.0	5.7*
Private	39.3	40.1	-0.7	50.8	59.1	-8.2***
Any (Medicaid or private)	80.3	79.8	0.5	81.1	83.6	-2.5
Combinations of Medicaid and private						
Neither Medicaid nor private	19.7	20.2	-0.5	18.9	16.4	2.5
Medicaid only	40.8	39.6	1.2	30.2	24.6	5.6**
Private only	29.4	30.3	-1.0	39.3	47.6	-8.3***
Medicaid and private	10.0	9.7	0.3	11.3	11.5	-0.1
Health Insurance Coverage Since Random Assignment						
Survey respondent continuously covered	43.4	46.5	-3.1	38.0	44.7	-6.7**
Survey resp's children continuously covered	56.2	56.2	0.0	51.1	54.9	-3.8
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT IV.6

USE OF PRIVATE SUPPORT NETWORKS

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Absent Parents Formal Child Support						
Child support award in effect last month (%)	37.8	34.4	3.4	31.6	29.0	2.6
Child support received last month (%)	18.1	17.6	0.5	18.7	17.3	1.5
Amount of child support received last month, including zeros ($)	$52.50	$45.33	$7.17	$56.56	$54.84	$1.72
Absent Parents Informal Cash Payments						
Informal payment received last month (%)	3.1	4.0	-0.9	4.0	3.2	0.8
Amount of informal payments received last month, including zeros ($)	$4.41	$3.64	$0.77	$5.38	$2.28	$3.10**
Family, Friends, and Neighbors						
Rec'd transportation, phone use, lodging, food, money, or children's things last month (%)	50.5	47.0	3.5	46.4	47.8	-1.5
Community Organizations						
Rec'd help from food pantry, soup kitchen, crisis center, or thrift shop last year (%)	45.0	45.3	-0.4	36.8	36.9	-0.1
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT IV.7

PARTICIPATION IN GOVERNMENT ASSISTANCE PROGRAMS
(By Household in Month Prior to Survey)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Women, Infants, and Children (WIC) Program						
Received benefit (%)	18.8	15.6	3.2	25.7	24.9	0.7
Benefit amount, including zeros ($)	NA	NA	NA	NA	NA	NA
Foster Care Assistance						
Received benefit (%)	1.2	0.8	0.3	1.8	2.0	-0.2
Benefit amount, including zeros ($)	$4	$5	-$1	$8	$7	$1
Family Investment Program (FIP)						
Received benefit (%)	24.2	24.1	0.1	18.8	14.6	4.2**
Benefit amount, including zeros ($)	$84	$82	$3	$62	$43	$19**
Food Stamps						
Received benefit (%)	41.9	38.8	3.1	29.1	25.1	4.0
Benefit amount, including zeros ($)	$87	$81	$7	$62	$49	$13**
Supplemental Security Income						
Received benefit (%)	18.5	20.5	-2.1	11.2	11.0	0.3
Benefit amount, including zeros ($)	$89	$90	$0	$48	$56	-$8
Social Security						
Received benefit (%)	6.5	6.5	0.0	5.0	5.4	-0.4
Benefit amount, including zeros ($)	$30	$19	$11*	$23	$27	-$4
Unemployment Insurance						
Received benefit (%)	2.2	1.0	1.2*	2.1	1.8	0.3
Benefit amount, including zeros ($)	$10	$6	$4	$11	$4	$7**
General Assistance						
Received benefit (%)	1.4	1.4	0.0	1.3	0.3	1.0
Benefit amount, including zeros ($)	$4	$3	$1	$1	$0	$0

EXHIBIT IV.7 *(continued)*

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Other Government Assistance Programs						
Received benefit (%)	5.3	5.8	-0.4	3.2	3.1	0.1
Benefit amount, including zeros ($)	$12	$14	-$2	$5	$7	-$2
All Government Asst. Pgms. (Any of the Above)						
Received any benefit (%)	62.7	59.5	3.1	55.3	52.5	2.8
Total benefit amount, including zeros ($)	$320	$291	$29	$221	$189	$32
Federal Earned-Income Credit (EIC)						
Aware of EIC (%)	78.7	76.2	2.5	79.6	78.4	1.2
Claim/use EIC (%)	51.9	52.3	-0.4	53.5	53.6	-0.2
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

NA Not applicable

EXHIBIT IV.8

JOB CHARACTERISTICS AND EARNINGS

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Hours per Week on Primary Current Formal Job (%)						
Not employed on formal job	39.8	43.1	-3.3	34.2	33.6	0.6
Employed part-time on formal job						
1 to 19 hours	2.7	1.5	1.1	3.3	5.1	-1.7
20 to 29 hours	5.4	6.8	-1.3	7.7	6.5	1.2
Employed full-time on formal job						
30 to 34 hours	7.8	7.9	-0.1	6.4	5.9	0.5
35 to 44 hours	34.8	33.6	1.2	37.0	38.3	-1.2
45 or more hours	9.2	6.9	2.3	11.2	10.2	1.0
Hourly Wage on Primary Current Formal Job (%)						
Not employed on formal job	39.8	43.1	-3.3	34.2	33.6	0.6
Employed on formal job						
Wage less than $5	2.7	3.9	-1.2	4.3	2.8	1.5
Wage $5 to $6.99	17.6	16.1	1.5	15.9	16.3	-0.4
Wage $7 to $8.99	21.9	18.0	3.8*	22.7	21.5	1.2
Wage $9 or more	16.8	17.7	-1.0	21.7	24.9	-3.1
Fringe Benefits on Primary Current Formal Job (%)						
Not currently employed on formal job	39.8	43.1	-3.3	34.2	33.6	0.6
Employed on formal job						
No paid sick leave	27.0	27.2	-0.1	31.5	30.2	1.3
Paid sick leave	32.1	27.8	4.3	33.0	35.1	-2.1
No paid vacation	19.1	21.4	-2.3	21.3	18.3	3.1
Paid vacation	40.5	35.0	5.5**	44.1	47.7	-3.6
Employer doesn't offer health plan	19.7	20.5	-0.8	21.3	20.3	1.0
Not enrolled in employer's health plan	14.0	13.1	0.9	14.4	15.2	-0.8
Enrolled in employer's health plan	25.8	23.1	2.7	29.5	30.2	-0.7
Never promoted on this job	44.4	42.6	1.8	48.3	51.4	-3.1
Promoted on this job	15.7	14.3	1.4	17.3	15.0	2.3

EXHIBIT IV.8 (*continued)*

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Employment Status (%)						
Currently employed on a formal job	60.2	56.9	3.3	65.8	66.4	-0.6
Currently employed on additional formal jobs	3.8	4.9	-1.1	3.6	4.5	-0.9
Employed last month on informal job(s)	9.0	8.9	0.1	9.3	10.4	-1.1
Any formal or informal job	63.4	60.2	3.2	69.4	69.6	-0.2
Survey Respondent: Monthly Earnings From All Jobs, Including Zeros ($)						
Primary current formal job	$787	$715	$72*	$913	$947	-$34
Additional current formal jobs	$18	$25	-$7	$19	$33	-$14
Informal job(s) last month	$18	$30	-$12*	$30	$52	-$22
All formal and informal jobs	$826	$774	$53	$969	$1,053	-$84
All Household Members: Total Earnings						
Any earnings last month (%)	75.0	75.6	-0.5	83.9	86.8	-2.9
Total earnings last month, including zeros ($)	$1,077	$1,035	$42	$1,469	$1,671	-$202**
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT IV.9

INCOME AND POVERTY
(Household in Month Prior to Survey)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Household income, including Food Stamps ($)	$1,468	$1,413	$55	$1,775	$1,988	-$213***
Household income is below poverty (%)	52.6	51.3	1.2	38.9	37.4	1.5
Zero household income (%)	2.4	2.6	-0.1	1.3	1.9	-0.6
Household poverty categories (%)						
0.00 ≤ income/poverty threshold < 0.50	12.0	14.0	-2.0	11.8	10.6	1.3
0.50 ≤ income/poverty threshold < 1.00	40.6	37.4	3.2	27.1	26.9	0.2
1.00 ≤ income/poverty threshold < 1.50	22.6	23.3	-0.7	26.3	21.7	4.7*
1.50 ≤ income/poverty threshold < 2.00	10.3	14.0	-3.7*	13.9	13.7	0.2
2.00 ≤ income/poverty threshold	14.6	11.4	3.2*	20.8	27.2	-6.4**
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT IV.10

FINANCIAL ACCOUNTS

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Checking Account						
Has account (%)	40.9	45.0	-4.1	57.9	56.9	1.0
Account balance, including zeros ($)	$92	$139	-$47	$192	$196	-$4
Savings Account						
Has account (%)	37.8	35.3	2.5	43.6	46.3	-2.8
Account balance, including zeros ($)	$136	$103	$32	$282	$240	$42
Other Accounts						
Has IRA account (%)	0.7	1.3	-0.6	1.7	1.3	0.5
Has 401K account (%)	2.5	2.0	0.4	3.0	5.7	-2.7**
Has IDA account (%)	0.4	0.3	0.1	0.6	0.8	-0.2
All Accounts (All the Above, Plus Others)						
Has any account (%)	56.4	58.4	-2.0	69.5	69.3	0.2
Total balance over all accounts, incl. zeros ($)	$388	$406	-$18	$817	$712	$105
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT IV.11

FUTURE PARTICIPATION IN FIP
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Expects to Participate in FIP 1 Year Hence						
Yes	11.5	9.2	2.3	7.1	4.7	2.5*
No	84.0	86.5	-2.6	89.2	90.3	-1.1
Don't know	4.5	4.3	0.3	3.7	5.0	-1.3
Expects to Participate in FIP 5 Years Hence						
Yes	2.9	2.1	0.8	1.0	1.3	-0.3
No	92.2	93.2	-1.0	95.7	93.7	2.0
Don't know	4.9	4.7	0.2	3.3	5.0	-1.7
Sample Size	945	468	1,413	1,039	499	1,538

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

CHAPTER V

IMPACTS ON FAMILIES AND CHILDREN: FINDINGS BASED ON CHILD IMPACT SURVEY DATA

Iowa's welfare reform program emphasized the employment and economic self-sufficiency of adults, and success in achieving these goals was expected to improve family life and the well-being of children. For this reason, a study of family and child well-being was added to the study of adult and family outcomes described in Chapter IV. Families included in the additional study were FIP cases that had been interviewed for the Iowa core survey and that included a child age 5 to 12. Interviewing these cases a second time in the "child impact survey," we sought to obtain information about family well-being (perceptions of financial strain or hardship, family structure and stability, and adult mental health and social support); parenting; child care use; and children's educational progress, behavior, and health. In addition to survey data, we used state administrative data to examine the use of child welfare services for all treatment and control cases in the full Iowa evaluation sample. The impact estimates presented in this chapter are based on data from both sources.

Our most important findings regarding the impacts of welfare reform on the well-being of families and children pertain to applicant FIP cases:

- ***Welfare reform had unfavorable impacts on the economic well-being and family stability of applicant cases.*** Increases in financial strain, family instability (including household moves, doubling up of households, and partners entering and leaving the household), domestic abuse by partners, and the use of unsupervised child care may reflect stresses associated with the reduction in family income and the decline in rates of marriage among applicant cases described in Chapter IV.
- ***Welfare reform altered child care arrangements for children age 5 to 12 in applicant cases.*** Welfare reform increased the use of formal child care and reduced the use of informal care by relatives at the time of the child impact survey. These impacts may be a product of parents' greater understanding of the child care subsidy system and broader knowledge of available child care options due to their involvement in welfare reform and its support for child care.
- ***Welfare reform led to a decline in school engagement and an increase in tardiness among children age 5 to 12 in applicant cases.*** These impacts may be related to the unfavorable effects of welfare reform on economic well-being and family stability noted above. We detected no other impacts of welfare reform on children's educational, behavioral, or health outcomes.

We found only a few impacts of welfare reform on the well-being of families and children in ongoing FIP cases. These impacts, which follow no consistent pattern, pertain to family stability:

- ***Welfare reform had mixed impacts on the family stability of ongoing cases.*** Increases in domestic abuse may reflect greater instability, but decreases in the proportion of children leaving the household suggest more stability.

A. THE IOWA CHILD IMPACT SURVEY

To estimate impacts of Iowa's welfare reform program on family and child well-being, we conducted a child impact survey of cases that had participated in the core survey and had a child age 5 to 12 in the household. Interviews were conducted in person and took place in families' homes. The survey field period (August 1998 through August 1999) occurred 17 to 29 months after Iowa began to apply reform policies to the control group in spring 1997; consequently, estimates of the impacts of welfare reform based on the survey data should be interpreted with caution. This section provides additional information on the child impact survey, which is the basis for most of the impact estimates reported in this chapter. Section B provides information about the state administrative data from the child welfare system, which is the basis for impact estimates pertaining to the use of key child welfare services, including foster care.

1. The Child Impact Survey Sample

As discussed in Chapter IV, Section A, the sample for the core and child impact surveys was drawn randomly from the 17,345 cases in the evaluation on the basis of unequal sampling probabilities in eight cells defined by three dichotomous case characteristics: ongoing/applicant, treatment/control, and presence/absence of a child at random assignment who would be age 5 to 12 years old at the time of the core and child impact interviews. A total of 4,111 cases constituted the core survey sample. Four of the strata contained cases potentially eligible for the Child Impact Study.

The Child Impact Study focused on families with a child who was a member of the ongoing or applicant case at random assignment and who was age 5 to 12 at the time of the core and child impact surveys. Within each family, one "focal" child was selected at random from those who were in the household at baseline and were expected to be age 5 to 12 at the time of the core and child impact surveys.[1] In addition, we restricted the sample to biological or adopted children, step-children, or other custodial children of the core survey respondent because we believed that parents or guardians would know more about these children. We also restricted the sample to children living with the parent at the time of the survey or who at least were living with the case head two nights or more per week within the past three months.[2] Information on the relationship between the focal child and the core survey respondent, and on the child's presence in the home could not be ascertained from administrative data, so we obtained this information from the core survey.

Among the 2,951 cases interviewed for the core survey, 1,962 were eligible for the Child Impact Study. Most of the core survey cases excluded from the Child Impact Study had no children in the age range for the study. A small number were excluded because of the other sample restrictions. Exhibits H.1a and H.1b in Appendix H compare demographic characteristics of core sample members who were eligible and ineligible for the Child Impact Study. Ongoing families eligible for the child impact survey compared to those ineligible for the

[1]The child-related information collected in the child impact survey primarily pertains to the focal child.

[2]In addition, if the child had not lived with the parent for two nights or more in the past three months, but the parent had seen the child at least once per week in the past three months, then the child was eligible for the child impact survey.

survey were younger, more likely to be never-married, and had younger children, and they were more likely to have a high school degree or GED and less likely to have worked just prior to random assignment. Applicant families eligible for the child impact survey compared with those ineligible for the survey were more likely to be married and less likely to be never-married; had younger children and larger families; were more likely to have a high school degree or GED, and had higher average earnings just prior to random assignment.

2. Survey Participation Rate

Of the 1,962 cases eligible for the child impact survey, we interviewed 1,475 primary caregivers in their homes, for a survey participation rate of 75 percent. The primary reason for nonparticipation in the survey, which closely followed the core survey, is the in-home administration of the child impact survey. Of the 25 percent of cases that were interviewed for the core survey but did not participate in the child impact survey, nearly half had moved out of state, and it was not feasible to extend in-home survey operations outside Iowa. Another 30 percent of the nonparticipation was due to refusals. If we combine the participation rate for the core survey, 72 percent, with the 75 percent participation rate for the child impact survey, the overall participation rate by families with a child age 5 to 12 is estimated to be 54 percent.

Exhibit V.1 shows the number of survey participants and nonparticipants in the ongoing and applicant cases by treatment and control status. Within each sample, the participation rates are fairly similar for treatment and control cases. Comparing ongoing and applicant cases, rates of participation in the child impact survey by cases that had already participated in the core survey were higher among ongoing cases by seven to eight percentage points. This discrepancy is primarily attributable to the fact that more applicant cases than ongoing cases had moved out of state and therefore could not be interviewed for the child impact survey. Exhibits H.1a and H.1b in Appendix H compare demographic characteristics of participants and nonparticipants in child impact survey. For both ongoing and applicant cases, differential survey participation slightly increased the proportion of white families and decreased the proportion of black families in the final sample. In addition, for applicant families, parents who had worked just prior to random assignment and those with higher average earnings just prior to random assignment were more likely to participate in the child impact survey.[3]

In most, but not all, instances the same adult was interviewed for both the core and the child impact survey. In a few cases, different adults were interviewed because different information was required for the two surveys. For instance, the designated respondent to the core survey was the adult who headed the FIP case because this person was most directly responsible for fulfilling the household's responsibilities under welfare reform. For the child impact survey, however, we asked to speak to the child's primary caregiver or to the adult in the home who was most knowledgeable about the child. For 91 percent of the cases in the Child Impact Study, the respondent in the core survey interview was the mother or female caregiver, and she was also the

[3]In these comparisons of respondents and nonrespondents, as well as in the impact analyses reported in this chapter, we have used sampling weights. Appendix C provides technical information on weights for the core survey data that account for the design of the survey sample and survey nonresponse. The weights for the child impact survey data are based on the weights developed for core survey data, but they have been adjusted to account for nonparticipation in the child impact survey.

respondent to the child impact survey. In 6 percent of the cases, the respondent to the core survey was the father or male caregiver, and he also responded to the child impact survey. In 3 percent of the cases, the respondents to the two surveys were different, most often because the father, the respondent to the core survey, referred us to the mother or female caregiver for the child impact survey.

B. ADMINISTRATIVE DATA ON CHILD WELFARE SERVICES

The Iowa Family and Child Services System (FACS) records information about the receipt of child welfare services provided by the Iowa DHS Division of Behavioral, Development and Protective Services for Families, Adults and Children. The major categories of services are family-centered services, family-preservation services, and foster care. The former two are designed to keep families intact, and the latter is for children temporarily unable to return to their home. Information about the types, dates, and costs of services is recorded for each child receiving the services. We obtained data for the period July 1994 through August 1999.[4]

Because a very small percentage of families is likely to use child welfare services, estimates of the impact of FIP on the receipt of child welfare services can be unreliable if they are measured by using the relatively small samples that responded to the core and child impact surveys. Therefore, we used a full, unduplicated sample of all children in the FIP evaluation sample who were under 18 years old at random assignment as the basis for searching records of receipt of child welfare services since random assignment. Any child who received child welfare services in Iowa during the period we examined would have had a service record in the FACS.[5] For each child encountered in the FACS data, we obtained information on the type of service received and the dates of service.[6]

C. ESTIMATION METHODS

The methods that we used to estimate the impacts of welfare reform in Iowa on a broad range of survey-based outcomes for children and families are very similar to those used to estimate impacts in the core survey data. Two differences are worth noting.

As discussed in Chapter II, Section D, to obtain more precise impact estimates, we adjusted the estimates using multivariate models. The control variables in the multivariate models that generated impact estimates for the Child Impact Study are the same as those used in the core impact analyses, with a few exceptions. For the Child Impact Study, we added control variables that would relate to behavioral differences that can affect child outcomes, including the number of children in the case, the gender and age of the focal child, and whether the case head was on

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[4]The Iowa FACS data system replaced a previous state child welfare service data system in July 1994, so data for the period October 1993 through June 1994 were not available for this study.

[5]Any families receiving child welfare services outside Iowa would not be counted as receiving services in this analysis. Approximately 10 percent of the families responding to the core survey and eligible for the child impact survey were living outside the state of Iowa at the time of the surveys (August 1998-August 1999), although it is possible that a different fraction of nonrespondents was living out of state.

[6]The match between children in the evaluation sample and those in the FACS data was made by using the state identification number, which is common across the cash welfare and child welfare systems.

public assistance most of the time while the child was growing up. We also included an indicator of whether the respondent to the child impact survey was the biological mother, biological father, or another relative or primary caregiver to control for the extent of the respondent's knowledge of the child. Similarly, we omitted two control variables used in the analysis of administrative and core data because they did not help to reduce the variance in impact estimates for this study.[7]

In the analysis of administrative and core survey data, the estimation technique used for binary outcomes was ordinary least squares. For the analysis of child impact survey data, we estimated binary outcomes using logit methods. In all of the analyses, we used ordinary least squares techniques for continuous outcomes. We examined the sensitivity of the impact estimates to the choice of estimation methods and found that the estimates were largely insensitive to either the choice of the estimation methods or the set of variables included in the regression models.[8]

Our estimation methods for child welfare service outcomes based on state administrative data are exactly the same as those used to estimate other impacts based on analysis of administrative data, as described in Chapter II, Section D. Our methodologies for generating impact estimates from the administrative data as well as the child impact survey data included the use of the weights that we had developed for those data sets.

D. IMPACTS ON FAMILIES AND CHILDREN

Any impacts of welfare reform on children are likely to be indirect, arising because of changes in parental employment, family income, household composition and stability, and other factors that, in turn, affect other aspects of family well-being, parenting, and child care environments. Several researchers have discussed the pathways by which welfare reform may affect children (Brooks-Gunn et al. 2001; Collins and Aber 1997; Morris et al. 2001; Wilson, Ellwood, and Brooks-Gunn 1995; Zaslow et al. 1995 and 1997). In brief, welfare reform policies are expected to affect adult economic behavior, including employment and welfare program participation, and changes in these economic decisions, in turn, are likely to affect family income and economic well-being. These changes, in turn, may affect family formation and stability along with adult psychological well-being and social support. Changes in aspects of family well-being may affect parenting and the stimulation and support available in home and child care environments. Many of the changes that can come about because of welfare reform—in family income, family formation and stability, parental psychological well-being, parenting practices, the home environment, and child care environments—have all been associated with child outcomes.

The relationships described above provided a framework at the study design phase for identifying outcomes to measure in the Iowa Child Impact Study. Despite the relevance of this

[7]These control variables were the number of individual records matching to the case and the number of good or bad social security numbers in the case.

[8]In particular, the results of analyses using unadjusted mean differences are largely similar to those obtained using adjusted means based on regression models. Similarly, the regression-adjusted means were not very sensitive to alternative model specifications.

model, however, a single survey conducted two and a half to six years after random assignment does not enable us to test the expected relationships between intermediate outcomes of welfare reform and child outcomes. Exhibit V.2 shows the major categories of outcomes that are expected to influence children's well-being, and we will use this framework to organize our discussion in this chapter of the impacts of welfare reform (outcomes discussed in previous chapters appear in italics).

The previous two chapters of this report discussed the impacts of welfare reform on adult economic behavior and some aspects of family well-being. We have noted that the child impact sample differs in some ways from the overall core and full research samples, and therefore, we estimated impacts of welfare reform on the economic behavior and certain aspects of family well-being for families with a child 5 to 12 years old. The impacts were broadly consistent with those reported in Chapter IV for the full core sample, and are presented in Appendix H, Exhibits H.2 through H.9. In the discussion below, we briefly integrate these findings as appropriate to enhance our understanding of the impacts of welfare reform on family well-being, parenting, child care use, and child well-being for families with a child 5 to 12 years old.

1. Family Well-Being

We estimated the impacts of FIP on three aspects of family well-being that can be affected by welfare reform policies and can, in turn, influence children's development: economic well-being, family formation and stability, and adult psychological well-being and social support. The impacts of Iowa's welfare reform program on several aspects of family well-being were discussed in Chapter IV. In this section, we expand the discussion of impacts on family well-being to encompass measures of resource sufficiency, father involvement, household stability, psychological well-being, and supportive relationships.

a. Economic Well-Being

Earnings, family income, and poverty status provide objective information about the impacts of Iowa's welfare reform program on the economic well-being of families, and these outcomes were discussed in Chapters III and IV. We briefly summarize those findings here because family income can influence the other aspects of family and child well-being described in this chapter. We also expand the discussion of economic well-being to perceptions of financial strain and experiences of material hardship and food insecurity that were measured as part of the Child Impact Study.

In brief, Iowa's welfare reform program increased the earnings of ongoing cases in the first two years after random assignment and the earnings of the first cohort of applicant cases in the first year after random assignment. Looking at annual income from earnings, FIP, and Food Stamps, welfare reform increased the income of the first cohort of applicant cases in the first two years after random assignment. However, five to six years after welfare reform began, we detected no impacts of welfare reform on the survey respondent's own earnings, household income, or poverty status for ongoing cases in our analysis of core survey data. For applicant cases two and a half to six years after applying for assistance, we detected no impacts of welfare reform on the respondent's earnings, but welfare reform did reduce household income for applicants. We also found that welfare reform reduced the likelihood of marriage among women

who were unmarried at application for FIP. In the child impact survey sample, we found a similar pattern of impacts for the ongoing and applicant groups.[9]

For the Child Impact Study, we measured respondents' perceptions of whether the family's economic resources meet its needs and respondents' experiences with any inability to pay basic monthly bills or to afford food. Insufficient resources can lead to the temporary loss of utility services or the need to move in with relatives or friends because of an inability to afford rent, which may increase family stress and adversely affect children. Financial strain can also lead families to economize on food purchases, resulting in periods of hunger and/or poor nutrition for adults and children. The measures of economic well-being used in this study are described in Exhibit V.3.

Iowa's welfare reform had no impact on any measures of economic well-being for ongoing cases, which is consistent with the finding of no impact on household income presented in Chapter IV (see Exhibit V.4). For applicant cases, however, welfare reform increased the perception among respondents that resources are inadequate relative to their needs, as measured by the Financial Strain scale. Welfare reform also led to an increase in reported experiences of problems paying monthly bills, as measured by the Material Hardship scale.[10] Average reported levels of material hardship were relatively low among applicants overall. Nevertheless, the finding that welfare reform led to greater financial strain and material hardship among applicant cases is consistent with the finding that family income declined for this group. However, welfare reform did not affect the average level of food security among applicant families or the percentage of applicant families reporting food insecurity with periods of hunger.

Numerous studies have found that family income is positively related to child development. Families with more resources can enhance the learning opportunities in the home environment; live in safer, healthier housing and neighborhoods; and provide children with access to health care and opportunities to learn (Blau 1999; Bradley and Whiteside-Mansell 1998; Duncan and Brooks-Gunn 1997; Huston 1991; Korbin 1992; Mayer 1997). Economic hardship has been linked to parental psychological distress, parenting behavior, and the socio-emotional development of children (McLoyd 1990). Therefore, if we consider only the short run, reform-induced changes in family income, we would expect children's development to be favorably influenced by the early impacts of Iowa's welfare reform on earnings in both the ongoing and applicant samples. However, since the impacts of Iowa's reform program on family income faded in the longer term for ongoing cases and were negative for applicant cases, these longer-term impacts on family income could at least partly offset the earlier favorable influences of Iowa's reform program on children's well-being.

b. Family Structure and Stability

One of the most important aspects of family structure for children's development is the marital status of parents. Children living in married, two-parent families appear to fare better than those in single-parent families, effects that are not completely explained by differences in

[9]We discuss the marital status findings in the next subsection.

[10]In Exhibit V.4, the estimated 0.2 impact on the material hardship scale for applicant FIP cases is almost statistically significant at the 10 percent level (P-value = .101).

income (McLanahan and Sandefur 1994). Children in married-couple families are more likely than those in single-parent families to perform well in school and to avoid teenage childbearing. In addition, many believe that a father contributes uniquely to the development of children, and therefore, that regular contact between children and the biological father or another man who acts as a father may be a positive influence on children even if the father does not live with his children.

Household mobility and changes in family composition can have negative effects on children, although not in all cases. More frequent moves can be chaotic and stressful for children and may result in lower school performance and a greater incidence of behavioral problems (Ingersoll, Scamman, and Eckerling 1989; Simmons, Burgeson, Carlton-Ford, and Blyth 1987; and Wood, Halfon, Scarlata, Newacheck, and Nessim 1993). At the same time, a move can mean a safer neighborhood and better schools, which are likely to improve the child's well-being. On the other hand, more frequent changes in schools can increase the risk of lower student achievement among children who do not adapt well to their new environment (Ingersoll, Scamman, and Eckerling 1989). (Factors other than moves, such as age, adjustment problems, or the search for a better learning environment, can also lead to school changes.) In terms of changes in household composition, "doubling up" households may increase family stress and the likelihood of domestic abuse or violence. Measures of family structure and stability used in the Child Impact Study are described in Exhibit V.5.

In the previous chapter, we concluded that Iowa's welfare reform program had no impacts on marital status for ongoing cases but appeared to discourage marriage among applicant single women. Estimated impacts on marital status among applicant cases in the child impact survey sample were similar to those estimated for the core survey sample.[11]

Iowa's welfare reform had no impact on measures of father involvement among either ongoing or applicant cases, including whether the biological father lived in the household at the time of the survey, whether the child regularly spent time with the biological father or a father-figure, and whether the child had any contact at all with the biological father (see Exhibit V.6). Analysis results in the previous chapter indicate that the welfare reform program also had no impact on the receipt of either formal or informal child support at the time of the survey.

Among ongoing cases in the child impact survey sample, welfare reform appeared to have mixed effects on household stability. Welfare reform did not affect household stability as measured by the number of different types of household changes or the proportion of households that moved or that moved in with friends and relatives. However, it did moderately reduce the likelihood that ongoing cases with children would set up their own households—that is, move from a shared housing arrangement with friends or relatives to one in which the family lives on its own. At the same time, welfare reform reduced the proportion of focal children who went to live outside the household in the two years prior to the survey.

[11]Appendix H, Exhibit H.3, contains estimates of the impacts of welfare reform on marital status for cases in the child impact sample. The impact of welfare reform on the proportion of applicants with a child age 5 to 12 who were never married at follow-up is smaller than the estimate for the core sample, but the difference between the estimates is not statistically significant.

Welfare reform in Iowa reduced several aspects of household stability for applicant cases in the child impact survey sample. When we consider residential moves and changes in household composition together, families in the applicant treatment group experienced more types of household changes in the two years prior to the survey than did families in the applicant control group. Residential moves were the most common type of change, and Iowa's reform program increased the likelihood that applicant families with children experienced this type of change. Among applicant cases in the child impact survey sample, 58.8 percent of treatment cases moved in the two years prior to the survey, compared with 51.2 percent of control cases, for an impact of 7.6 percentage points. Welfare reform also nearly doubled the proportion of applicant families who moved in with other families in the two years prior to the survey. Families are likely to move in with friends and relatives when their income cannot meet their housing costs, so this finding is consistent with the findings reported earlier that welfare reform led to lower household income and greater financial strain among applicant households. Finally, welfare reform appears to have increased instability associated with beginning and ending living arrangements with unmarried partners. Welfare reform nearly doubled the proportion of heads of applicant cases who started or stopped living with a partner during the two years prior to the survey.[12] These changes could involve either a residential move or the entry or exit of an adult from the household, but either the residential move or the change in household composition can be related to economic pressures and can be stressful for children.

The impacts of Iowa's welfare reform program on family formation and stability for applicant cases could adversely affect children's well-being. The decline in the likelihood that single women would marry along with the higher rates of household moves, doubling up of households, and entry and exit of unmarried partners are outcomes that have been linked with less favorable outcomes for children. Among ongoing cases, the small, reform-induced reduction in the proportion of children living outside the household would suggest a favorable impact on children. However, for the most part, we found no impacts of welfare reform on family formation and household stability in ongoing cases and would therefore predict no impact stemming from these factors on children.

c. Adult Psychological Well-Being and Supportive Relationships

The psychological well-being of parents and the availability of emotional, financial, or in-kind support from friends and relatives can affect not only the parents' success in employment activities but also the supportiveness of parenting behavior. Depression has been found to be more prevalent among low-income women than in the general population (California Institute for Mental Health 2000; Danziger et al. 2000). Many welfare recipients have also been the victims of domestic violence, either at the time they are receiving welfare or at some earlier period (Tolman and Raphael 2000; Tolman 1999). Welfare officials and researchers have long noted that both depression and domestic violence pose significant challenges to the employment of low-income parents, and indeed, some welfare offices seek to address these issues as part of the transition to employment (Olson and Pavetti 1996; Pavetti and Strong 2001).

[12]We looked separately at the percentage of heads of applicant cases who started living with a partner and stopped living with a partner, and the number of times the respondent started or stopped living with a partner in the previous two years, and found a statistically significant impact of welfare reform on each of these outcomes (estimates not shown).

The benefits of improving the psychological well-being of parents can extend to children's educational and behavioral outcomes. A broad set of child development studies have found that children of depressed parents show higher levels of behavior problems, have less favorable social and academic competence, and are in poorer physical health than children of non-depressed parents (reviewed in Downey and Coyne 1990). Other studies show that these effects may come about through changes in parenting practices that occur as a result of the parents' diminished emotional well-being (Duncan, Brooks-Gunn and Klebanov 1994; Aber, Brooks-Gunn, and Maynard 1995). Children who witness domestic violence are more likely to be abused themselves (Strauss, Gelles, and Steinmetz 1980) and to suffer negative social and emotional development, including behavior problems and criminal activity (Hotaling, Straus, and Lincoln 1990; Debowitz and King 1995).

We measured parents' psychological well-being using the Center for Epidemiological Studies' Depression scale (CES-D, Radloff 1977). This short scale, used widely in population surveys, taps the frequency of 20 symptoms of depression (see Exhibit V.7). We expected the effects of Iowa's welfare reform program on symptoms of depression to be mixed. The emphasis on work activities and the parents' success in such activities could improve psychological well-being, but if work requirements and low-wage jobs instead lead to greater stress and financial difficulty, welfare reform could reduce psychological well-being. Our estimates indicate that Iowa's reform program had no impact on the average level of the symptoms of depression reported by parents and no impact on the proportion of parents who reported elevated levels of symptoms associated with clinical depression (see Exhibit V.8).

Parents' psychological well-being may also be influenced by the strength of relationships with other adults, who may be called upon for emotional, financial, or in-kind support to meet basic needs or for help with child care, transportation, or other services in support of employment. Social support of various kinds might be needed more frequently when a parent of a young child goes to work, and support may increase if parents form constructive relationships with other adults in the workplace. At the same time, employment activities may strain relationships with family and friends as roles are re-negotiated. The strain may lead family members and friends to create obstacles to employment, for example, by discouraging work activities or inducing feelings of guilt in the working parent; by going back on promises to help with child care, transportation, or housework; or by harassing the individual on the job. At the extreme, a strain on adult relationships could precipitate or intensify domestic abuse or violence.

As reported in Chapter IV, we found no impacts of Iowa's welfare reform program on the use of social support networks among ongoing and applicant cases in the core sample. The same is true for the child impact sample except for a moderate increase in the use of social support networks in financial emergencies among ongoing cases.[13] This result could imply either that ongoing cases in the treatment group had a greater need for financial assistance or that their

[13]Chapter IV reported the impacts of Iowa's welfare reform on a composite social support variable, comprising those reporting receipt of phone use, lodging, food, money, or children's things from family or friends. We looked separately at receipt of lodging, food, and money for the child impact survey sample (see Table H.6). Among ongoing cases, 14.4 percent of those subject to welfare reform policies received money from family or friends, while 10.1 percent of those subject to AFDC policies received financial assistance, for an impact of 4.4 percentage points (statistically significant at the .10 level). No impacts on other forms of social support were detected for ongoing cases.

social support networks were stronger so they could reach out for such assistance more readily. Since we found no impact of welfare reform on the level of earnings or family income for ongoing cases, this would suggest that the social networks could be stronger as a result of welfare reform.

Iowa's welfare reform program had no impact overall on the percentage of heads of FIP cases whose family or friends discouraged employment or made it more difficult to work. Discouragement of employment includes experiences in which family or friends instill guilt, refuse to help with household chores or child care or go back on promises to do so, harass the parent at work, cause the parent to quit, or prevent the parent from working. We estimated impacts separately for each of these categories of barriers to work because they involve different levels of stress for the parent and different potentials for negative consequences for employment. Welfare reform had no impact on any type of discouragement of employment by friends or family among ongoing cases. Among applicant cases, welfare reform increased the percentage of case heads who were made to feel guilty about working by family or friends, but had no impact on any of the other forms of discouragement.

Domestic abuse was prevalent among both ongoing and applicant cases in the two and a half to six years between random assignment and the child impact survey (see Exhibit V.9). Approximately half of the heads of ongoing cases (both treatment and control), and less than half of the heads of applicant cases, experienced domestic abuse following random assignment. The apparent incidence of domestic abuse among applicant cases may not indicate a lower probability of abuse for this group because the follow-up period was shorter, on average, for these cases than for ongoing cases. We looked separately at verbal and physical abuse. Verbal abuse was more common, experienced by approximately 75 percent to 85 percent of the heads of ongoing and applicant cases who experienced any domestic abuse over the full follow-up period. The incidence of physical abuse was lower, experienced by 43 percent to 54 percent of those who experienced any domestic abuse.

Welfare reform had no impact on the incidence of domestic abuse among the heads of ongoing cases over the full follow-up period. However, during the last year of that period, it increased the incidence of physical abuse by anyone, as well as the incidence of verbal abuse by an intimate partner or ex-partner.[14] Among ongoing treatment cases, 13.1 percent of heads experienced physical abuse in the last year, compared with 8 percent of the heads of ongoing control cases, for an impact of 5.1 percentage points. Similarly, 14.4 percent of the heads of ongoing treatment cases experienced verbal abuse by a partner, compared with 9.1 percent of the heads of ongoing control cases, for an impact of 5.3 percentage points. Thus, although domestic abuse was experienced by about half of the heads of both ongoing treatment and control cases in the five to six years following random assignment, the outcomes were different for the last year of that period. During that year, the heads of treatment cases were more likely than the heads of control cases to have experienced physical abuse generally, and verbal abuse by a partner.

[14]Because the child impact survey asked for the timing of the most recent event of abuse, but not every event, we do not know the extent to which our estimates of impacts of welfare reform on domestic abuse during the last year in the follow-up period indicate that differential rates of abuse of the heads of treatment cases begun earlier were more likely to continue into the last year or whether the differential rates of abuse were more likely to have begun in the last year.

Among applicant cases, welfare reform increased the incidence of physical abuse of heads by an intimate partner or ex-partner over the full follow-up period and during the last year of that period. The heads of 21.6 percent of applicant treatment cases experienced physical abuse by a partner over the full follow-up period, compared with 14.4 percent of the heads of applicant control cases, for an impact of 7.2 percentage points. The corresponding impact during the last year was 5.2 percentage points. Also during the last year, the incidence of verbal abuse of the head by a partner was 6.2 percentage points greater among treatment cases (9.3 percent) than among control cases (4.1 percent).

The increase in domestic abuse associated with welfare reform among ongoing and applicant FIP cases with children could have had a negative influence on children's behavioral outcomes. On the other hand, the increase in the use of social support networks for financial assistance by ongoing cases, to the extent that it reflected stronger social support for the family, could have had a beneficial effect on children.

2. Parenting Behavior and Practices

Iowa's welfare reform program did not have a generally-available component designed specifically to improve parenting knowledge, practices, or behavior, but unmarried teenage parents (parents under 20 years old) were required to attend parenting classes starting in 1996. Parenting could also be affected indirectly through changes in work requirements, employment activities, and income. The expected direction of many parenting outcomes is uncertain, as it depends on whether employment and other work-related aspects of welfare reform make family life more or less stressful. We included measures of aspects of parenting that are likely to be affected by work activities or changes in family income and that, in turn, are linked with children's well-being (see Exhibit V.10).

The parent's warmth or harsh behavior toward the child and the level of stress in the parenting role could be adversely affected by low-wage employment or an increase in hours of work, or favorably affected by enhanced psychological well-being associated with steady employment. Employment could lead to more regular family routines as the parent makes a greater effort to function in her job and parenting roles. Alternatively, if employment schedules change frequently or include evening or weekend hours, or if employment is intermittent, family routines could be more difficult to maintain, and monitoring children after school or during school holidays could also be more difficult.

Greater experience in the labor market is expected to demonstrate to children the importance of obtaining a high school diploma and pursuing further schooling, and this understanding should be reflected in the parent's aspirations for the child's educational attainment. Finally, income gains may enable the parent to purchase books and other educational materials for the home and to take advantage of educational opportunities for the child in the community, such as museums or the theater.

As shown in Exhibit V.11, Iowa's welfare reform program had no impact on any of the aspects of parenting measured in this study. All of the measures of parenting practices and behavior in the child impact survey are based on information reported by the parents themselves, which may lead to biases if the parent believes certain responses are socially desirable. Nevertheless, the absence of impacts on parenting outcomes is consistent with the fact that no

generally-available components of Iowa's welfare reform program directly addressed parenting skills or practices. The finding of no impact on parenting outcomes is also consistent with the absence of an impact on any employment outcomes at the time of the core and child impact surveys. Although Iowa's welfare reform program was associated with a reduction in family income among applicant families, which, in turn, could result in fewer educational materials in the home, we found no impact of welfare reform on measures either of the quality of the home environment or of cognitive stimulation in the home.

We also examined the impacts of Iowa's welfare reform program on the receipt of child welfare services. These services are designed to protect children and support families through crises that could be harmful to the children and do not necessarily imply that the family has abused or neglected the child. Services may be provided in response to severe parenting stress exacerbated by financial worries, mental health problems, a lack of social support, or by a child with challenging behavioral problems. Families often receive more than one type of service in response to a particular issue (Kauff et al. 2001). We used the full evaluation sample for the analysis of impacts on child welfare services, since administrative data on the use of child welfare services were available for the full sample and reliable analyses of rare outcomes require a large sample. Exhibit V.12 describes the measures of child welfare services used in the study.

As shown in Exhibit V.13, we found that there were no impacts of welfare reform on the receipt of foster care services, family-centered services, or family-preservation services for either ongoing cases or the first two cohorts of applicant cases. No impacts were found either in the period after random assignment but before control policies were lifted (spring 1997, represented as March 1997 in this analysis) or in the period after control policies were lifted. Thus, even in the early period after random assignment, when we found impacts of Iowa's welfare reform on employment, earnings, and the rate at which families combined employment and welfare (see Chapter III), we estimated no impact of welfare reform on the use of child welfare services in Iowa.

For the third cohort of applicant cases, however, there is a significant treatment-control difference in the use of all three types of child welfare services in the period after control policies were ended, although the smaller size of this sample leads us to be cautious about this finding. Among applicant treatment cases in the third cohort, 7.2 percent received foster care services between March 1997 and August 1999, compared with 3.2 percent of control families, for an impact of 3.9 percentage points. More than double the proportion of applicant treatment cases compared to applicant control cases from cohort 3 received family-centered services in the same period. These findings are based on only two quarters of applicant cases, resulting in a smaller sample than we used to estimate impacts for either ongoing cases or for the other two cohorts of applicants. The numbers of cases receiving child welfare services that are represented by the percentages for the third cohort in Exhibit V.13 are thus quite small, and therefore, it is possible that these impact estimates are not as reliable as those estimated for the other cohorts.[15]

[15]For example, the number of treatment cases in the third cohort that received foster care services between March 1997 and August 1999 was 45, compared with 11 control cases, for a difference of 34 cases. Moreover, the significant impacts on all three types of child welfare services in this cohort does not add to our confidence in the findings, since families receiving one type of child welfare service often receive another concurrently.

Some support for the validity of the finding regarding child welfare services in the applicant group may be found in the economic impacts of welfare reform on this cohort reported in Chapter III.[16] There, we reported a negative impact on earnings among cohort 3 applicant cases, accompanied by an increase in both FIP and Food Stamp Program participation. These impacts reflect changes in income and welfare program participation that occurred more broadly across the sample than was true of the change in receipt of child welfare services. These impacts may indicate greater financial strain, which could lead to family stress, and greater welfare program participation may lead to an increase in reports to the child welfare system about these families. An alternative hypothesis would suggest that under welfare reform, the family would have more in-depth contact with income maintenance and PROMISE JOBS staff, and this contact might have increased DHS's awareness of the family's need for child welfare services even without a real increase in such need relative to the control group. Nevertheless, we urge caution in interpreting these findings, as the number of cases affected is small.

Parenting practices and parent-child interaction have an important influence on children's cognitive and behavioral development (Maccoby and Martin 1983). Moreover, features of the home environment, such as the cognitive stimulation and emotional support available to children in the home setting, are associated with a wide range of child outcomes, especially measures of school achievement and cognitive development (Bradley and Caldwell 1979, 1980; Bradley, Caldwell, and Rock 1988; Caldwell and Bradley 1984; Ramey, Yates, and Short 1984). However, the general absence of impacts of Iowa's welfare reform program on parenting behavior and practices leads us to predict no impact on children's well-being arising from effects on parenting. The increase in the use of child welfare services among a small group of families in the third applicant cohort could affect children's behavioral outcomes and educational progress, but we would not be likely to detect these impacts in the sample of all applicant families surveyed for this study.

3. Child Care Use

Since an important goal of Iowa's welfare reform program is to increase the rate and stability of parental employment, and since we have found that welfare reform did indeed increase employment rates in the short run, we would expect to find an accompanying increase in the use of child care in the years immediately following random assignment. The impact of welfare reform on employment was not sustained through the period of the core and child impact surveys, however, so we would not expect that welfare reform would lead to a greater use of child care at the time of the survey. Indeed, as Exhibit V.14 shows, welfare reform had no impact on the proportion of focal children age 5 to 12 using child care at the time of the survey or on the number of hours of child care per week.

Parents required to work or to engage in work-related activities under Iowa's welfare reform program are provided with financial assistance to pay for child care while they are receiving cash welfare and, until recently, for up to two years after their cash welfare case closed because of

[16]The finding of a statistically significant impact on a survey-based measure of the placement of children in foster care among applicant cases (Chapter IV, Section C.2) also provides support for the finding based on administrative data that is reported here. However, both of these findings share the same limitation of being based on small numbers cases receiving foster care services.

earnings or employment.[17] The purpose of the child care subsidies is to enable parents with children to arrange acceptable child care while they work. Child care subsidies are structured so that the parent makes a modest co-payment based on family income and size, and Iowa DHS pays the remaining cost of child care, up to the provider's regular fee for private-paying families or the state's maximum payment rate, whichever is lower. The subsidy is meant to provide parents with access to most child care arrangements available in their communities, so that they have the opportunity to find stable, good-quality child care arrangements. Under Iowa's welfare reform, Iowa DHS provided a child care subsidy for two years (rather than one year under pre-reform rules) to families leaving FIP because of employment.

Among applicant cases, the school-age children in the evaluation's treatment group were more likely than those in the control group to be in center-based care, before- or after-school care, or summer camp as their primary child care arrangement, and less likely to be cared for by relatives at the time of the survey (see Exhibit V.14).[18] Children in the treatment group were also more likely to be in a formal (licensed) care arrangement at the time of the survey, at least for some time during the week, although there was no impact on the proportion using formal care in the two years prior to the survey. Formal child care arrangements, including center-based care, before- or after-school care, and summer camps, are likely to be more expensive than care by relatives because the facilities that provide care have to meet licensing requirements established by the state for group child care settings. It is possible that families in the applicant treatment group used formal arrangements in greater numbers than did families in the control group because the child care support they obtained under welfare reform policies helped them to learn more about how to obtain child care subsidies and about the availability and benefits of formal child care. Formal child care settings may provide children with more structured educational opportunities than care by relatives, but they are less likely to be flexible as the parent's child care needs change (Cost, Quality, and Child Outcomes Study Team 1995; Galinsky et al. 1994; Emlen 1999).

Welfare reform had no impact on the stability of child care arrangements, measured by the number of current child care arrangements, or on the number of arrangements used over the past two years. Child care arrangements appear to be fairly stable along these two dimensions, with the vast majority of families using one arrangement in the past week and fewer than five arrangements in the previous two years for their school-age children.

We also found no evidence that welfare reform led to an increase in the use of unsafe child care arrangements, measured by the proportion of children who had had an accident or had been injured or poisoned in child care since random assignment. Although children in the treatment group were likely to have spent more time in child care since random assignment and thus to have had more opportunities for an accident, injury, or poisoning, we found no impact of welfare reform on the proportion of children experiencing these outcomes.

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[17]Iowa's Transitional Child Care (TCC) program, which provided up to two years of child care subsidy assistance after the cash welfare case was closed because of earnings or employment, was ended in July 1999. At that point, no new cases could enter the program. Cases already participating in the program could continue until their eligibility ended. All TCC cases were closed by July 2001.

[18]The primary child care arrangement is defined as the one used for the most hours per week.

As school-age children grow older, parents may begin to allow them to care for themselves unsupervised for short periods, often to fill the gap between school hours and the parent's work hours (Capizzano et al. 2000). A small proportion of children in both ongoing and applicant cases had cared for themselves in the week prior to the survey, not necessarily as a regular child care arrangement, but for any reason while the parent and other adults were away from home. We estimated no impact of Iowa's welfare reform on the proportion of focal children age 5 to 12 who were permitted to care for themselves at any time in the previous week. However, welfare reform was associated with a small increase in the proportion of children age 5 to 12 in applicant cases who cared for themselves on a regular basis at some point in the two years prior to the child impact survey. Among applicant treatment cases, 15.3 percent of the focal children age 5 to 12 had cared for themselves regularly at some point during the two years prior to the survey, while among applicant control cases, 10.9 percent cared for themselves regularly, for an impact of 4.4 percentage points.

Numerous studies have linked the emotional supportiveness of caregivers and the educational opportunities available in child care for children from birth to five years with positive educational and behavioral outcomes (Lamb 1998; Love et al. 1996). However, we cannot estimate the impacts of Iowa's welfare reform program on the quality of child care arrangements for preschool-age children because the design of the child impact study did not include measures of the quality of child care received by children who were younger than five at random assignment. The measures of child care use we have discussed in this section are less closely linked in the child care literature with children's well-being than is the quality of child care received by younger children. Therefore, we must be cautious in predicting how our findings on the impacts of welfare reform on child care use are likely to affect children's outcomes. Among applicant families, the decline in care provided by relatives and the increase in formal care does not lead to definitive conclusions about children's well-being. Arrangements that help keep children safe, that provide supervision so that children avoid high-risk behavior, and that support intellectual and social development will yield the most favorable outcomes for children (Capizzano et al. 2000). The modest increase in unsupervised care among applicant families could have a negative influence if this lack of supervision puts children at risk of physical or emotional harm. However, the proportion of children using self-care is very small, making it unlikely that any adverse impacts on children's well-being stemming from the increase in self-care could be detected in the full sample of children.

4. Children's Well-Being

In the previous three sections, we have summarized how the impacts of Iowa's welfare reform program on family well-being, parenting, and child care use might indirectly affect children's well-being. Our predictions about this relationship are based on a large body of literature in which the outcomes we have discussed are linked with favorable or unfavorable outcomes for children.

To briefly recap, the impacts of welfare reform on household income and the family stability of applicant FIP cases with children age 5 to 12 tended to be unfavorable. Welfare reform led to a reduction in household income with an associated increase in perceived financial strain and material hardship, and increases in family instability that could be associated with more difficult economic circumstances. Along with these generally unfavorable impacts, we also found that welfare reform increased use of formal child care and decreased use of relative care. Welfare

reform had no impacts on many other important outcomes for applicant families, including parental employment, earnings and job characteristics, child support, father involvement, the parent's psychological well-being, and parenting behavior and practices. Most of the outcomes we have measured are from the period just before or at the time of the survey, which omits many important aspects of family and child care experiences that could have been influenced by welfare reform in the period just after random assignment. Based on these findings, however, we would expect Iowa's welfare reform program to have only a modest negative impact on the well-being of children among applicant cases.

We found only a few mixed impacts of welfare reform on family stability among ongoing FIP cases with children age 5 to 12. We found no other impacts of welfare reform on family well-being, parenting, or child care use among ongoing cases. Therefore, we would not expect to find impacts of welfare reform on the well-being of children among ongoing cases.

Our measures of children's well-being span educational, behavioral, and health outcomes. Specific measures are described in Exhibit V.15.

a. Children's Educational Outcomes

We estimated the impacts of Iowa's welfare reform program on children's educational outcomes, including academic functioning, school attendance, and participation in extracurricular activities, because these outcomes can be most readily associated with the likelihood of completing school and the well-being of children when they reach adulthood. Measures of children's educational outcomes were obtained by parent report and have been used successfully in other national studies.

Among children in ongoing cases, welfare reform in Iowa had no impact on children's engagement in school, their performance in school, grade repetition, or placement in special education (see Exhibit V.16). Welfare reform had no impact on the participation of children in extracurricular activities, including lessons, clubs, and team sports. Parents may use these activities partly as a form of developmentally enhancing child care for school-age children, but participation in these activities may also reflect a child's positive orientation toward school and encouragement from parents to engage in learning activities.

School engagement, or the child's interest in and willingness to do school work as perceived by the parent, was lower among children in applicant treatment cases compared with those in applicant control cases. However, no other impacts on academic functioning, including school performance, grade repetition, or placement in special education, were detected for children in applicant cases. Children in applicant treatment cases were more likely than children in applicant control cases to have been late for school three or more days in the month prior to the survey, which could reflect the lower level of engagement, but there was no impact of welfare reform on absence from school. Finally, welfare reform had no impact on participation in extracurricular activities among children in applicant cases.

b. Children's Behavioral Outcomes

Behavioral problems during childhood are associated with achievement problems in adolescence and employment difficulties in young adulthood (Caspi et al. 1998). For the child

impact study, we included measures of positive behavior (helpfulness, compliance, warmth, and sharing) and measures of behavioral problems (dependence, aggression, and depression). We obtained information on these measures from parents' reports, so our outcome measures are likely to most closely reflect the child's behavior at home. Since children may behave differently at home and at school, we also asked whether children had been suspended or expelled from school, actions that would indicate serious behavioral issues at school.

As shown in Exhibit V.17, welfare reform had no impacts on measures of positive behavior, behavior problems, or on the proportion of children ever suspended or expelled from school in either the ongoing or applicant samples.

c. Children's Health Status and Access to Care

Good health can provide a foundation for children's development in other areas, for example, by making it possible for them to participate fully in school and in social activities. Children whose health is impaired by inadequate nutrition or a lack of access to appropriate health care may suffer longer-term consequences, including poor school performance, behavioral problems, and increased morbidity and mortality. Analyses in this chapter have shown that welfare reform had no impact on experiences of hunger or the food security of ongoing or applicant families. Exhibit V.18 presents estimates of the impacts of welfare reform on children's health status, safety, and access to health care.

We detected no impacts of welfare reform on children's health status ratings or on the percentage of children reported to be in fair or poor health. Parents reported that their children's health was very good to excellent, on average. Similarly, we detected no impact of welfare reform on the proportion of focal children reported to have had an accident or injury requiring a visit to the hospital emergency room or clinic since random assignment. We estimated no impact of welfare reform on access to health care or on the use of preventive health care for focal children age 5 to 12.

E. IMPACTS ON SUBGROUPS OF FAMILIES AND CHILDREN

As we did with administrative data and core survey data, we used data from the child impact survey to conduct a subgroup analysis of the impacts of welfare reform. Comprehensive findings from that analysis of subgroup impacts on family and child outcomes are presented in Appendix F. Selected findings pertaining to several specific reform policies are discussed in detail in Appendix I.

EXHIBIT V.1

THE IOWA CHILD IMPACT SURVEY:
SAMPLE SIZES AND RATES OF PARTICIPATION IN THE SURVEY

	Ongoing FIP Cases With a Child Age 5-12		Applicant FIP Cases With a Child Age 5-12		Total Cases With a Child Age 5-12	
	Number	Percentage	Number	Percentage	Number	Percentage
Treatment Cases						
Sample size	682	100.0	614	100.0	1,296	100.0
Survey participants	540	79.2	442	72.0	982	75.8
Survey nonparticipants						
Moved	65	9.5	98	16.0	163	12.6
Refused	42	6.2	47	7.7	89	6.9
Other nonparticipants	35	5.1	27	4.4	62	4.8
Total nonparticipants	142	20.8	172	28.0	314	24.2
Control Cases						
Sample size	351	100.0	315	100.0	666	100.0
Survey participants	273	77.8	220	69.8	493	74.0
Survey nonparticipants						
Moved	31	8.8	56	17.8	87	13.1
Refused	32	9.1	23	7.3	55	8.3
Other nonparticipants	15	4.3	16	5.1	31	4.7
Total nonparticipants	78	22.2	95	30.2	173	26.0
All Cases						
Sample size	1,033	100.0	929	100.0	1,962	100.0
Survey participants	813	78.7	662	71.3	1,475	75.2
Survey nonparticipants						
Moved	96	9.3	154	16.6	250	12.7
Refused	74	7.2	70	7.5	144	7.3
Other nonparticipants	50	4.8	43	4.6	93	4.7
Total nonparticipants	220	21.3	267	28.7	487	24.8

EXHIBIT V.2

CONCEPTUAL FRAMEWORK FOR THE EFFECTS OF IOWA'S WELFARE REFORM PROGRAM ON CHILDREN

Adult Economic Behavior

Education and training

Employment

Earnings

Asset accumulation

Welfare & other public assistance program receipt and benefit amounts

Health insurance

Family Well-Being

Economic well-being

Total family income

Poverty status

Use of comm'ty supports

Sufficiency of resources

Family formation and stability

Marital status & cohabitation

Birth of a child

Formal & informal child sup'rt

Housing, neighborhood, & access to transportation

Father contact & involvement

Household mobility & changes in composition

Adult psychological well-being & social support

Social support

Depression

Discouragement of employment

Domestic abuse

Child Well-Being

Educational progress

Academic functioning

School attendance

Participation in extracurricular activities

Behavior

Positive behavior

Behavior problems

Suspension or expulsion from school

Health status & access to care

Health and safety

Health insurance coverage

Lack of a medical home

Routine health care

Parenting Behavior and Practices

Parenting behavior

Parenting stress

Structure and supervision

Quality of home environment

Educational aspirations for children

Use of child welfare services

Child Care Use

Current use of child care

Type of child care, including formal

Hours of child care

Stability of child care

Self-care

Note: Italics indicate outcomes discussed in Chapters III and IV; outcomes discussed in this chapter are set in regular text.

EXHIBIT V.3

MEASURES OF ECONOMIC WELL-BEING

Financial Strain scale—measures respondents' perceptions of the degree of financial strain in meeting regular household expenses. Respondents were asked about their perception of their financial situation; whether they worry about money; whether the family can generally afford to buy anything it needs, and whether there is never enough money for something fun. Scores can range from 1 to 4, with higher scores indicating greater financial strain.

Material Hardship scale—measures the degree to which respondents report not having enough income to meet basic needs over the past 12 months. Respondents were asked whether they have been unable to pay rent or utility bills, whether they have been evicted or had any utility service cut off for nonpayment of bills, and whether an adult in the household has needed to see a doctor or dentist but was unable to do so because of inadequate resources. Scores can range from 0 to 7, with higher scores indicating greater material hardship.

Food Security scale—measures the degree to which the family does not get enough to eat because of a lack of money or resources. The scale was developed by the U. S. Department of Agriculture to provide a national, survey-based measure of food security and hunger. We used a 6-item, short form of the Food Security Scale (Andrews et al. 2000; Nord et al. 1999) to ask parents about whether and how frequently in the past year they did not get enough food to eat or the right kinds of food to eat because there was not enough money to buy more food. Values on the scale are 1 (food secure), 2 (food insecure), or 3 (food insecure with hunger).

- **Food Insecure with Hunger**—percentage of respondents with a score of 3 on the Food Security Scale. Indicates a high frequency of food insufficiency and experiences of hunger by adults.

EXHIBIT V.4

ECONOMIC WELL-BEING
FOR FAMILIES WITH CHILDREN AGE 5 TO 12

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T-C)	Treatment (T)	Control (C)	Impact (T-C)
Financial Strain scale	2.6	2.6	0.0	2.5	2.4	0.1**
Material Hardship scale	1.1	1.2	-0.1	1.2	1.0	0.2
Food Security scale	1.4	1.4	0.0	1.4	1.3	0.0
Food insecure with hunger (%)	12.5	11.6	0.9	9.6	10.8	-1.2
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT V.5

MEASURES OF FAMILY STRUCTURE AND STABILITY

Father Involvement—measures the type and frequency of contact by and involvement of the biological father or a social father in the child's life. The following measures of father involvement pertain to the full sample of children in the Child Impact Study:

- **Biological Father Lives in the Household—**measures the percentage of focal children living in a household with their biological father. T he measure includes children in married-couple families and single-parent families in which the biological father is present.
- **Child Spent Time with Biological or Social Father Four Times Per Week or More in the Past Year—**measures the percentage of focal children who see their father or a father-figure frequently each week. The measure includes children in households headed by a single mother who reported that her children see their biological father or a father-figure four times per week or more often. It also includes all focal children living in a household with their biological father or in a married-couple family, who were assumed to see their biological or social father at least four times per week.
- **Child Had Contact with the Biological Father in the Past Year—**measures the percentage of focal children who had any contact in person, by telephone, or by letter with their biological father. The measure includes children in households headed by a single mother who reported such contact with the father of her children. It also includes all focal children living in a household with their biological father.

Household Stability—measures the number of different household changes experienced by the respondent in the past two years. The respondent was asked whether any of 10 types of household change occurred, including whether the respondent moved, began living with a p artner, stopped living with a partner, moved in with another household, took in family or friends who needed a place to live, moved from a doubled-up arrangement to an independent household; and whether the focal child went to live somewhere else or moved back into the household; and whether another child (under age 18) went to live somewhere else or moved back into the household.

Child Changed Schools Two or More Times—measures the proportion of children who changed schools twice or more in the two years prior to the child impact survey. A child could change schools naturally in moving from elementary school to middle or junior high school, because the family moved, because the parent tried to improve the child's educational environment, or because of behavioral or other difficulties.

EXHIBIT V.6

FAMILY STRUCTURE AND STABILITY
FOR FAMILIES WITH CHILDREN AGE 5 TO 12

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T-C)	Treatment (T)	Control (C)	Impact (T-C)
Father Involvement (%)						
Biological father lives in the household	15.8	19.5	-3.7	31.7	32.6	-0.8
Child spent time with a biological or social father four times per week or more in the past year	62.2	64.6	-2.4	71.7	70.4	1.3
Child had contact with biological father in past year	63.1	67.2	-4.1	77.0	74.2	2.8
Household Stability						
Number of different types of household change, past two years	1.9	2.2	-0.2	2.1	1.7	0.4***
Family moved (%)	52.9	52.4	0.5	58.8	51.2	7.6*
Family moved in with another household (%)	19.4	22.8	-3.3	22.1	12.6	9.5***
Family set up own household (%)	29.7	36.8	-7.1**	34.4	28.1	6.3
Started or stopped living with a partner (%)	28.0	25.7	2.3	35.6	24.2	11.4***
Took in family or friends (%)	23.4	28.3	-4.9	24.0	26.5	-2.5
Focal child went to live elsewhere (%)	8.2	12.7	-4.5*	6.1	8.7	-2.6
Child changed schools two or more times (%)	7.1	8.8	-1.7	9.5	7.2	2.2
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT V.7

MEASURES OF MENTAL HEALTH AND SUPPORTIVE RELATIONSHIPS

Center for Epidemiological Studies' Depression Scale (CES-D)—measures the frequency of 20 symptoms of depression (Radloff 1977). Respondents were asked how often in the past week they felt such manifestations of depression as poor appetite, inability to shake off the blues, fearfulness, restless sleep, loneliness, or feelings of being disliked by others. Higher scores indicate more symptoms of depression and greater frequency of those symptoms. Scores can range from 0 to 60. Scores of 16 or above are considered to indicate a risk of clinical depression.

- **At High Risk of Clinical Depression**—indicates those with relatively high scores of 23 or greater.

Discouragement or Lack of Support for Employment—measures whether family members or friends did something to make it difficult for the respondent to find or keep a job since random assignment. Examples include someone trying to discourage the respondent from finding a job or going to work; someone making the respondent feel guilty about working; someone refusing to help with child care, transportation, or housework or going back on promises to do so; someone making it difficult for the respondent to attend or complete programs or classes to help get a good job; someone harassing the respondent with telephone calls or by showing up at the job to harass or bother; someone doing something to cause the respondent to lose or quit the job; someone preventing the respondent from finding a job or going to work; or someone having disagreements with the respondent about whether or not he or she works. The person(s) discouraging employment could be a current or former spouse or boyfriend/girlfriend; friends, parents; children; or others.

Domestic Abuse—measures whether the respondent has ever been verbally or physically abused by a partner, friend or family member, or anyone else since random assignment. Abuse includes yelling or calling names, trying to control every move, threatening or inflicting physical harm, and forcing sexual activities. Measures indicate the timing of the most recent abuse and the perpetrator's relationship to the respondent.

- **Physical Abuse**—respondent has been hit, slapped, kicked or physically harmed by someone.

- **Verbal Abuse**—someone has frequently yelled at the respondent, put down the respondent or called him/her names in order to make the respondent feel bad about self.

EXHIBIT V.8

PARENTS' MENTAL HEALTH AND SUPPORTIVE RELATIONSHIPS
FOR FAMILIES WITH CHILDREN AGE 5 TO 12

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T – C)	Treatment (T)	Control (C)	Impact (T – C)
Mental Health						
Center for Epidemiological Studies Depression scale total score	12.6	12.6	0.0	10.3	9.1	1.2
At high risk of clinical depression (%)	17.6	20.8	-3.2	12.2	10.6	1.7
Barriers to Employment (%)						
Friend or family member discouraged employment or made it more difficult to work since RA	38.2	37.2	1.0	33.3	28.2	5.1
Made respondent feel guilty about working	14.7	13.6	1.1	16.0	10.3	5.7**
Did not help with household chores or child care; or went back on promises to do so	19.4	20.2	-0.8	13.4	10.3	3.2
Harassed respondent at work	6.8	6.2	0.7	5.7	4.3	1.4
Caused respondent to quit work	15.9	14.2	1.7	12.0	8.6	3.4
Prevented respondent from working	9.9	11.2	-1.3	7.1	8.3	-1.2
Intimate or ex-intimate partner discouraged employment or made it more difficult to work since RA	21.2	20.2	0.9	19.2	14.7	4.6
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

EXHIBIT V.9

PARENTS' EXPERIENCES OF DOMESTIC ABUSE
FOR FAMILIES WITH CHILDREN AGE 5 TO 12

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T – C)	Treatment (T)	Control (C)	Impact (T – C)
Domestic Abuse Since Random Assignment (%)						
Parent experienced any domestic abuse	53.0	49.8	3.2	49.2	42.6	6.7
Verbal abuse	44.8	39.3	5.5	38.6	32.1	6.5
Physical abuse	28.4	25.8	2.6	26.7	18.3	8.4**
Parent experienced domestic abuse by an intimate partner or ex-partner	42.6	40.3	2.4	39.5	32.4	7.1
Verbal abuse	37.0	30.8	6.2	31.4	24.7	6.7
Physical abuse	24.3	24.3	0.0	21.6	14.4	7.2**
Domestic Abuse in the Past Year (%)						
Parent experienced any domestic abuse	38.8	32.8	6.1	37.7	30.6	7.1
Verbal abuse	32.2	26.7	5.5	29.8	23.1	6.8
Physical abuse	13.1	8.0	5.1**	13.6	7.3	6.4**
Parent experienced domestic abuse by an intimate partner or ex-partner	30.1	23.2	6.8*	27.9	19.8	8.1**
Verbal	14.4	9.1	5.3*	13.8	7.6	6.2**
Physical	8.2	6.0	2.2	9.3	4.1	5.2**
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT V.10

MEASURES OF PARENTING BEHAVIOR AND PRACTICES

Warmth—measures the frequency with which the parent showed physical affection, praised, or bragged about the child in the past week.

- **Warm Behavior Toward Child**—the proportion of parents who said they showed physical affection or praise or bragged about the child seven or more times in the past week, or once per day on average.

Harshness—measures the frequency with which the parent lost his or her temper with the child or scolded, yelled at, or threatened the child in the past week.

- **Harsh Behavior Toward Child**—the proportion of parents who said they lost their temper or scolded/yelled at/threatened the child three or more times in the previous week.

Aggravation in Parenting scale—measures how frequently the parent feels angry or frustrated by parenting or his or her interactions with the child. The parent was asked about feeling angry toward the child, whether parenting is harder than he or she thought, whether he or she feels trapped by parenting responsibilities; or whether he or she feels the child is harder to care for than most children. Higher scores indicate more frequent and a greater number of feelings of aggravation or difficulty parenting. Scores can range from 1 to 4.

Family Routines scale—measures how frequently the family eats meals together and whether it does so at a regular time, does chores at a regular time, and keeps a regular bedtime for the child. Scores can range from 1 to 4.

Parental Monitoring scale—measures how often the parent knows the child's whereabouts when the child is not at home or at school and whether the parent knows about the child's homework and television watching. The parent was asked about knowing who the child is with, where he or she is, when he or she is expected home, whether he or she arrived back home, what homework was assigned and whether the child did it, and what television shows the child watches. Higher scores indicate knowing more often about a greater number of the child's activities . Scores can range from 1 to 5.

Home Observation for Measurement of the Environment (HOME) Short Form (Modified) scale—measures the quality of stimulation and support available to the child in the home environment (Caldwell and Bradley 1984). A short form of the scale suitable for a structured interview was created for the National Longitudinal Survey of Youth (NLSY; Baker et al. 1993). The short form includes questions directed at the parent and interviewer observations of both the home and the parent's behavior toward the child. We did not include observations of the latter in the total score, since children were often out of the room during the survey interview. Survey questions cover reading, learning activities outside the home such as lessons in the performing arts, attending performances, visiting museums and the library, and visiting relatives or friends; the parent's avoidance of physical punishment; the parent's expectations that the child clean up after him- or herself; cleanliness and safety of the home; and child-father contact four or more times per week. Higher scores indicate more positive features of the home and activities. Scores can range from 0 to 21.

- **Cognitive Stimulation**—this subscale measures the availability of educational items in the home and the frequency of learning activities outside the home. For example, the respondent was asked about the availability of books and a musical instrument in the home, whether the child reads for enjoyment and visits the library, whether hobbies and special lessons or activities are encouraged, and whether the child saw a live performance and visited a museum in the past year. Higher scores indicate more materials and activities. Scores can range from 0 to 8.

EXHIBIT V.11

PARENTING BEHAVIOR AND PRACTICES
FOR FAMILIES WITH CHILDREN AGE 5 TO 12

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T-C)	Treatment (T)	Control (C)	Impact (T-C)
Parenting Behavior (%)						
Frequent warm behavior toward child in the past week	94.3	91.5	2.9	93.1	95.4	-2.3
Three or more instances of harsh behavior toward the child in the past week	29.5	26.6	3.0	28.5	32.1	-3.6
Parenting Stress						
Aggravation in Parenting scale	1.6	1.6	0.0	1.6	1.6	0.0
Structure and Supervision						
Family Routines scale	3.4	3.4	0.0	3.4	3.4	0.0
Parental Monitoring scale	4.6	4.5	0.0	4.6	4.6	0.0
Quality of the Home Environment						
Modified Home Observation for Measurement of the Environment (HOME) Short Form scale	15.3	15.3	0.0	15.6	15.7	-0.2
Modified HOME Short Form, cognitive stimulation subscale	5.4	5.5	-0.1	5.4	5.5	-0.1
Educational Aspirations for Children (%)						
Parent expects children to finish college/graduate school	76.7	79.2	-2.5	81.6	85.9	-4.3
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT V.12

CHILD WELFARE SERVICES IN IOWA

Family-Centered Services—these services are designed (1) to prevent and alleviate child abuse, neglect, and delinquency; (2) to prevent out-of-home placement of children; and (3) to reunite and support families whose children have been placed outside the home. In Iowa, families often receive these services in conjunction with other child welfare services. Family-centered services are the most commonly received child welfare services in Iowa (Kauff et al. 2001).

Foster Care Services—these services provide 24-hour temporary care for children unable to stay in their own home. The Division of Behavioral, Development and Protective Services for Families, Adults and Children works with families receiving these services to implement plans for permanent placement of children.

Family Preservation Services—these services provide intensive, short-term, and in-home crisis intervention to families with children at risk of out-of-home placement. Family preservation services are the least frequently received child welfare services in Iowa.

EXHIBIT V.13

RECEIPT OF CHILD WELFARE SERVICES

Sample and Year Since Random Assignment	Foster Care Services			Family-Centered Services			Family Preservation Services		
	Treatment Group Outcome (T)	Control Group Outcome (C)	Impact (T-C)	Treatment Group Outcome (T)	Control Group Outcome (C)	Impact (T-C)	Treatment Group Outcome (T)	Control Group Outcome (C)	Impact (T-C)
Ongoing FIP Cases									
June 94 – February 97	7.5	7.5	0.0	11.5	11.2	0.2	3.3	3.6	-0.3
March 97 – August 99[H]	9.3	8.6	0.7	13.1	12.3	0.8	2.5	2.8	-0.3
(Sample Size)	(4,406)	(2,215)	6,621)	(4,406)	(2,215)	6,621)	(4,406)	(2,215)	6,621)
Applicant FIP Cases, Cohort 1									
June 94 or RAD – February 97	3.4	3.7	-0.3	6.7	7.3	-0.6	2.1	2.2	-0.1
March 97 – August 99[H]	4.4	4.4	0.0	6.9	8.2	-1.2	1.1	1.5	-0.4
(Sample Size)	(2,463)	(1,223)	(3,686)	(2,463)	(1,223)	(3,686)	(2,463)	(1,223)	(3,686)
Applicant FIP Cases, Cohort 2									
RAD – February 97	3.1	3.8	-0.7	6.3	5.6	0.8	1.7	1.8	-0.1
March 97 – August 99[H]	4.2	4.0	0.2	6.1	6.8	-0.7	1.6	1.5	0.1
(Sample Size)	(2,157)	(1,140)	(3,297)	(2,157)	(1,140)	(3,297)	(2,157)	(1,140)	(3,297)
Applicant FIP Cases, Cohort 3									
RAD – February 97	1.7	1.4	0.3	6.4	4.2	2.2	1.7	1.8	-0.1
March 97 – August 99[H]	7.2	3.2	3.9*	9.6	3.9	5.7***	1.6	0.5	1.1*
(Sample Size)	(625)	(357)	(982)	(625)	(357)	(982)	(625)	(357)	(982)

SOURCE: Outcome measures are based on Family and Child Services system data for 6/94 – 8/99.

SAMPLE: Ongoing FIP cases were active in FIP on 9/17/93. Applicant FIP cases submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RAD Random assignment date

[H]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT V.14

CHILD CARE USE FOR FAMILIES WITH CHILDREN AGE 5 TO 12

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T-C)	Treatment (T)	Control (C)	Impact (T-C)
Currently Using Child Care (%)						
Child is in a regular child care arrangement	49.9	54.8	-5.0	47.7	54.0	-6.3
Type of Current Primary Child Care Arrangement (%)						
Relative care	29.2	33.5	-4.3	23.3	30.8	-7.4*
Nonrelative, home-based care	10.7	9.9	0.8	12.9	15.6	-2.7
Center-based, before- or after-school care, or summer camp	8.1	9.4	-1.3	10.6	5.9	4.6**
Use of Formal Child Care (%)						
Child currently uses formal child care	14.6	14.0	0.6	15.3	9.6	5.7*
Child used formal care in the past two years	38.3	39.9	-1.5	47.2	45.0	2.2
Extent of Child Care						
Hours of child care per week	11.5	12.8	-1.4	11.4	13.0	-1.6
Hours of child care are 20 or more per week (%)	23.6	24.2	-0.6	23.8	24.7	-0.9
Stability of Child Care (%)						
Used more than one child care arrangement in the past week	22.7	27.4	-4.6	24.0	24.9	-0.9
Used five or more child care arrangements in the past two years	13.3	12.9	0.4	16.4	12.8	3.5
Safety (%)						
Child had accident/injury/poisoning in child care requiring visit to emergency room since random assignment	9.7	13.4	-3.7	9.8	6.1	3.7
Self-Care (%)						
Child cared for self in past week	16.2	15.3	0.9	16.8	18.7	-1.8
Child cared for self on a regular basis in the past two years	11.1	12.2	-1.1	15.3	10.9	4.4*
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT V.15

MEASURES OF CHILDREN'S WELL-BEING

EDUCATIONAL OUTCOME MEASURES

School Engagement scale—measures the child's interest in and willingness to do school work. The parent rates whether the child cares about doing well in school, does school work only when forced to do so or just to get by; and whether the child always does homework. The scale was developed by the Institute for Research and Reform in Education in California (Ehrle and Moore 1999). Higher scores indicate more engagement. Scores can range from 4 to 12.

School Performance—parent's report of how well the child has been doing in school overall based on knowledge of school work, including report cards.

BEHAVIORAL OUTCOME MEASURES

Positive Child Behavior scale—measures positive aspects of child behavior, including compliance (helpfulness, thoughtfulness) and social competence (tendency to share, warmth, concern for feelings of others). The scale includes 7 items from a 25-item scale used in the New Chance Demonstration and the New Hope Project. The parent was asked to rate, on an 11-point scale, the degree to which certain statements (for example, the child is warm and loving) are not at all like the child or totally like the child. Higher scores indicate that more types of positive behavior are more characteristic of the child. Scores can range from 0 to 70.

Behavior Problems Index—measures the frequency of problem behaviors such as dependence, aggression, or depression (Peterson and Zill 1986). The scale includes 28 items to which the parent responds "not true," "sometimes true," or "often true" of the child in the past three months. This scale has been used in the National Longitudinal Survey of Youth and in the National Health Interview Study. Scores on the total scale can range from 0 to 56.

- **Externalizing Behavior Problems**—measures the frequency of aggressive and acting-out behaviors, such as bullying, frequent loss of temper, disobedience, and destructive behavior. Higher scores indicate greater frequency of more types of externalizing behavior. Scores can range from 0 to 22.
- **Internalizing Behavior Problems**—measures the frequency of fearfulness, withdrawn behavior, sadness and depression, or feelings of inferiority or of being unloved. Higher scores indicate greater frequency of more types of internalizing behavior. Scores can range from 0 to 10.

HEALTH OUTCOME MEASURES

Health Status—measures the child's overall health, based on the parent's rating of the child's health as excellent, very good, good, fair, or poor. Scores can range from 1 to 5, with higher scores indicating better health.

- **Fair or Poor Health**—measures the proportion of children whose health was rated by their parents as fair or poor.
- **Lack of a Medical Home**—measures the proportion of children who have no regular doctor or clinic for care when they are sick, or who use the emergency room for routine or sick care.

EXHIBIT V.16

EDUCATIONAL OUTCOMES FOR CHILDREN AGE 5 TO 12

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T-C)	Treatment (T)	Control (C)	Impact (T-C)
Academic Functioning						
School Engagement scale	10.2	10.2	0.0	10.2	10.6	-0.4**
School Performance						
Very good (%)	48.2	44.5	3.7	53.0	47.4	5.6
Below average (%)	8.3	7.9	0.4	6.6	6.6	0.0
Ever repeated a grade (%)	7.8	8.2	-0.5	3.1	6.2	-3.0
Ever received special education because of physical, emotional, or behavioral problem (%)	22.8	24.5	-1.7	20.6	22.4	-1.7
School Attendance (%)						
Absent three or more days in past month	10.2	14.2	-4.0	11.6	13.8	-2.2
Late for school three or more days in past month	6.2	7.0	-0.8	7.7	3.8	4.0**
Participation in Extracurricular Activities (%)						
Participates in any sports team, lessons, clubs	45.3	47.8	-2.5	51.4	46.2	5.2
Lessons after school/on weekends in music/dance/language/other	12.7	16.6	-4.0	15.1	15.4	-0.3
Clubs or organizations after school or on weekends	31.5	36.7	-5.3	33.7	33.5	0.2
Team sports in or out of school	23.0	24.9	-1.8	28.8	29.0	-0.2
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT V.17

BEHAVIOR OF CHILDREN AGE 5 TO 12

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T-C)	Treatment (T)	Control (C)	Impact (T-C)
Positive Behavior						
Positive Child Behavior scale	58.2	57.8	0.4	58.7	59.0	-0.3
Behavior Problems						
Behavior Problems Index	11.8	12.0	-0.2	11.3	10.9	0.4
Externalizing behavior problems	5.7	5.6	0.1	5.5	5.3	0.2
Internalizing behavior problems	1.3	1.2	0.1	1.2	1.1	0.1
Ever suspended or expelled from school (%)	7.0	8.0	-1.0	7.4	4.9	2.5
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT V.18

HEALTH STATUS AND ACCESS TO HEALTH CARE FOR CHILDREN AGE 5 TO 12
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T-C)	Treatment (T)	Control (C)	Impact (T-C)
Health and Safety						
Health status is fair or poor	5.5	3.9	1.6	3.4	3.5	-0.1
Ever had an accident or injury requiring a visit to an emergency room or clinic	32.1	32.9	-0.8	33.6	27.8	5.8
Health Insurance Coverage						
Medicaid	56.0	55.0	1.1	36.2	34.7	1.5
Other health insurance	41.1	37.0	4.1	56.1	61.3	-5.2
No health insurance	12.0	14.7	-2.7	15.1	13.1	2.0
Lack of a Medical Home						
Child has no place for routine or sick care or uses emergency room for such care	7.5	8.7	-1.2	8.8	10.9	-2.1
Routine Health Care						
Child had a routine medical check-up in the past year	86.2	81.9	4.3	83.8	87.1	-3.3
Child had a routine dental check-up in the past year	74.9	77.5	-2.6	73.7	73.4	0.3
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

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APPENDIX A

TRANSITIONS FROM REGULAR TO UNEMPLOYED PARENT STATUS UNDER FIP: FINDINGS BASED ON ADMINISTRATIVE DATA

APPENDIX A

TRANSITIONS FROM REGULAR TO UNEMPLOYED PARENT STATUS UNDER FIP: FINDINGS BASED ON ADMINISTRATIVE DATA

This appendix provides results from our analysis of transitions between "regular" FIP status--to which one-parent families are assigned by Iowa DHS--and "Unemployment Parent," or UP FIP, status--to which two-parent families are assigned. The designers of FIP regarded stable two-parent families as a key to self-sufficiency and strong communities. They also believed that many AFDC policies undermined the formation and maintenance of two-parent families by restricting these families' access to public assistance. Motivated by these concerns, policymakers designed FIP to promote and support family stability by making it easier for two-parent families to qualify for cash assistance. For example, FIP eliminates the AFDC requirement that one parent in a two-parent family be identified as the "qualifying parent" and that a history of significant recent attachment to the labor force be documented for that parent. FIP also eliminates the AFDC "100-hour rule," which stipulated that families in which the qualifying parent worked more than 100 hours per month were ineligible for cash assistance. In addition, FIP extends to step-parent families the same deductions from earned income that are available to natural parents; with these deductions, step-parent families are more likely to qualify for assistance under FIP than they were under AFDC.

When Iowa DHS becomes aware that a FIP case has changed from one-parent family to a two-parent family, it may change the status of the case from regular to UP and redetermine the case's eligibility and benefit amount. Because Iowa's welfare reforms made it easier to quality for FIP as a UP case, the reforms could have increased the rate at which regular cases become UP cases.

However, the evidence shown in Exhibit A.1 does not support the hypothesis that the reforms had a positive impact on the regular-to-UP transition rate. The estimated impact of the reforms is statistically insignificant for ongoing cases and for all three cohorts of applicant cases. Exhibit A.1 also shows that regular-to-UP transitions are rare for both groups.

It is noteworthy that because applicant cases were assigned to regular or UP status *after* they were randomly assigned, the impact estimates for applicants may be less reliable than the impact estimates for ongoing cases. We found evidence (not shown in this appendix) that among applicant cases, treatment group members were more likely than control group members to be classified as UP in the quarter of random assignment. Furthermore, by necessity, our analysis of regular-to-UP transitions was restricted to cases classified as regular in the quarter of random assignment. Among such cases, control group members may not be comparable to treatment group members if the treatment influenced whether cases were classified as regular or UP. Therefore, we have more confidence in the results for ongoing cases than for applicant cases.

EXHIBIT A.1

TRANSITION RATES FROM REGULAR TO
UNEMPLOYED PARENT (UP) STATUS UNDER FIP

Sample/Cohort	Outcomes: Treatment Group (T)	Outcomes: Control Group (C)	Absolute Impact (T - C)	Sample Size (Excl. UP Cases)
Ongoing FIP Cases	1.2	1.6	-0.3	7,092
Applicant FIP Cases				
Cohort 1	*2.2*	*1.9*	*0.2*	*4,179*
Cohort 2	*1.6*	*1.8*	*-0.1*	*3,767*
Cohort 3	*3.4*	*3.0*	*0.4*	*1,174*

SOURCE: The outcome measure (an indicator that FIP status changed from regular to UP between the quarter of random assignment and the last quarter of the analysis period) is based on IABC data for 9/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. FIP cases classified as unemployed parent (UP) cases are excluded from the analysis.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. The estimates in italics are *nonexperimental* because (1) UP cases were excluded from the sample, and (2) regular/UP status was assigned *after* random assignment for applicant cases. Therefore, initial regular/UP status could be influenced by the reform provisions. See the explanation in the text preceding this table.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

APPENDIX B

IMPACTS ON SUBGROUPS OF WELFARE CASES: FINDINGS BASED ON ADMINISTRATIVE DATA

APPENDIX B

IMPACTS ON SUBGROUPS OF WELFARE CASES: FINDINGS BASED ON ADMINISTRATIVE DATA

Chapter III reported estimates, based on data from state administrative files, of the *average* impacts of Iowa's welfare reform for ongoing cases and for each of three cohorts of applicant cases. However, the impacts of welfare reform may vary across different subgroups. Since the reforms targeted particular subgroups, such as two-parent families, families without a recent work history, and families with young children, we might expect the impacts to have been larger for these subgroups. To explore this possibility, we used the administrative data to estimate the impacts of welfare reform separately for five pairs of subgroups defined by the following five criteria:

1. ***Age of the youngest child at random assignment*** (under three years old; at least three years old)
2. ***Number of persons on the case at random assignment*** (fewer than three persons; three or more persons)
3. ***Earnings of case members in the year before the quarter of random assignment*** (had no earnings; had earnings)
4. ***Race and ethnicity of the case head*** (minority: black or Hispanic; nonminority: white, non-Hispanic)
5. ***County of residence at random assignment*** (urban; rural)

There are programmatic reasons to expect the impacts of welfare reform to have varied across the subgroups defined by two of these criteria—age of the youngest child at random assignment and earnings of case members in the year before the quarter of random assignment. First, under welfare reform, the parents of children who are at least three months old but younger than three years are required to participate in the PROMISE JOBS program, whereas they were exempt from participation under pre-reform policies. We used the age of the youngest child in a case to distinguish between a subgroup that was more likely to be affected by the lifting of this exemption (youngest child under three years old) and a subgroup that was less likely to be affected by it (youngest child age at least three year old). A second element of welfare reform, the work transition period, or WTP (a four-month period of initial employment during which the FIP cash benefit was not reduced as a consequence of earnings), was available only to individual FIP recipients who had no substantial earnings in the previous year. We used case-level earnings prior to random assignment to distinguish between a subgroup that was more likely to have qualified for the WTP (cases that had no earnings in the year before the quarter of random assignment) and a subgroup that was less likely to have qualified for this element of welfare reform (cases that had earnings in the year before the quarter of random assignment).

1. Estimation Method

The five criteria listed earlier were used to define pairs of subgroups for ongoing cases and for each of the three cohorts of applicant cases. To estimate the impact of welfare reform for each

subgroup, we used the basic regression model that was described in Chapter II and was used to compute the estimates presented in Chapter III. Two-sample t-tests were performed to identify significant differences in the impacts between the two subgroups in each pair.

2. Selected Estimation Results

Estimates of the impacts of welfare reform on labor market and welfare outcomes are presented in Exhibits B.1a – B.5d for the five pairs of subgroups. Findings for the subgroups defined by the age of the youngest child at random assignment and by case earnings in the year before random assignment are discussed in detail in Chapter VI. We believe that those findings are related to the specific policy provisions noted above that were directed more to one subgroup in each of these pairs than to the other

In addition to examining the effects of welfare reform on subgroups specifically targeted by the new policies, we also conducted analyses of subgroups *not* specifically targeted by reform policies. We selected these subgroups because we suspected that they might respond differently from other subgroups to the same package of reforms. The subgroup comparisons we describe in this section are for cases with fewer than three persons versus cases with more than three persons; minority-headed cases versus nonminority-headed cases; and cases residing in urban counties versus cases residing in rural counties.

Impacts by Number of Persons on the Case at Random Assignment. Our analysis suggests that for ongoing cases, smaller cases are more responsive to reform policies than larger cases. As shown in Exhibit B.2b, the estimated earnings impacts were larger for ongoing cases with fewer than three persons (in the quarter of random assignment) than for other ongoing cases. In the first five years after random assignment, the average quarterly impact estimate for ongoing cases with fewer than three children was $164, versus $24 for other ongoing cases; the difference is statistically significant at the 10 percent level.

Impacts by Race and Ethnicity of the Case Head. The subgroup analysis also provides some evidence that the impacts of the reforms vary by race and ethnicity. As shown in Exhibit B.4a, the positive overall employment impacts for ongoing cases were concentrated among nonminorities (white, non-Hispanic). However, the difference in impacts between minority- and nonminority-headed cases is statistically significant for year 3 only. Our findings also suggest that the positive overall impacts on FIP participation rates in the short run were concentrated among nonminorities for ongoing cases but among minorities (black or Hispanic) for applicant cases (see Exhibit B.4c). These racial differences are statistically significant for ongoing cases and cohort 1 applicant cases in year 2.

Impacts by County of Residence at Random Assignment. The subgroup analysis provides no strong systematic evidence that the impacts of Iowa's welfare reform were different for cases residing in urban as opposed to rural counties. For instance, although the employment impacts of welfare reform appear to be concentrated in urban counties (see Exhibit B.5a), the urban-rural differences in the employment impacts are statistically insignificant.

EXHIBIT B.1a

AVERAGE QUARTERLY EMPLOYMENT RATE,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	Youngest Child < 3	Youngest Child ≥ 3	Youngest Child < 3	Youngest Child ≥ 3	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	39.6	41.1	1.6	0.0	No
Year 2	52.0	51.9	3.3**	0.7	No
Year 3	55.9	55.9	3.0*	2.0	No
Year 4[†]	56.4	57.6	3.8**	1.7	No
Year 5[†]	59.0	60.5	2.3	1.7	No
Years 1 – 5	52.6	53.4	2.8**	1.2	No
(Sample Size)			(3,356)	(4,011)	
Applicant FIP Cases, Cohort 1					
Year 1	55.5	60.2	6.5***	4.0*	No
Year 2	57.1	60.8	6.8***	0.5	**Yes**
Year 3[†]	56.7	59.1	4.8**	-2.4	**Yes**
Year 4[†]	55.2	61.0	4.6**	-1.8	**Yes**
Years 1 – 4	56.1	60.3	5.7***	0.1	**Yes**
(Sample Size)			(2,449)	(1,933)	
Applicant FIP Cases, Cohort 2					
Year 1	55.6	56.6	3.1*	-0.9	No
Year 2[†]	55.7	56.8	1.1	-0.7	No
Year 3[†]	56.4	56.6	1.7	-1.3	No
Years 1 – 3	55.9	56.7	1.9	-1.0	No
(Sample Size)			(2,262)	(1,663)	
Applicant FIP Cases, Cohort 3					
Year 1	53.8	54.0	1.9	1.4	No
Year 2[†]	51.6	49.3	-1.6	-2.5	No
Years 1 – 2	52.7	51.7	0.2	-0.6	No
(Sample Size)			(726)	(482)	

SOURCE: The outcome measure (paid employment by any case member age 14+ at any time during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.1b

AVERAGE QUARTERLY EARNINGS,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT
(Dollars)

Year Since Random Assignment	Treatment Outcome: Youngest Child < 3	Treatment Outcome: Youngest Child ≥ 3	Impact: Youngest Child < 3	Impact: Youngest Child ≥ 3	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	723	716	61*	34	No
Year 2	1,197	1,199	120**	65	No
Year 3	1,479	1,504	118*	36	No
Year 4[†]	1,651	1,757	50	17	No
Year 5[†]	1,952	2,142	37	59	No
Years 1 – 5	1,400	1,464	77	42	No
(Sample Size)			(3,356)	(4,011)	
Applicant FIP Cases, Cohort 1					
Year 1	1,515	1,732	230***	68	No
Year 2	1,861	2,065	284***	-68	**Yes**
Year 3[†]	2,054	2,279	263**	-307*	**Yes**
Year 4[†]	2,216	2,595	233*	-362*	**Yes**
Years 1 – 4	1,911	2,168	253***	-167	**Yes**
(Sample Size)			(2,449)	(1,933)	
Applicant FIP Cases, Cohort 2					
Year 1	1,540	1,758	51	-29	No
Year 2[†]	1,833	2,096	29	-135	No
Year 3[†]	2,165	2,426	157	-142	**Yes**
Years 1 – 3	1,846	2,093	79	-102	No
(Sample Size)			(2,262)	(1,663)	
Applicant FIP Cases, Cohort 3					
Year 1	1,359	1,694	-107	-163	No
Year 2[†]	1,713	1,920	-166	-293	No
Years 1 – 2	1,536	1,807	-137	-228	No
(Sample Size)			(726)	(482)	

SOURCE: The outcome measure (earnings in covered employment for case members age 14+ during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.1c

AVERAGE QUARTERLY FIP PARTICIPATION RATE,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	Youngest Child < 3	Youngest Child ≥ 3	Youngest Child < 3	Youngest Child ≥ 3	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	86.8	85.7	0.5	1.9**	No
Year 2	65.4	61.8	-0.2	3.4**	**Yes**
Year 3	50.9	45.0	0.4	0.5	No
Year 4[†]	40.8	34.6	-0.8	-0.2	No
Year 5[†]	32.7	26.3	-1.0	0.3	No
Years 1 – 5	55.3	50.7	-0.2	1.2	No
(Sample Size)			(3,356)	(4,011)	
Applicant FIP Cases, Cohort 1					
Year 1	50.5	45.4	1.9	5.2**	No
Year 2	33.2	25.8	1.2	2.8	No
Year 3[†]	23.8	17.3	0.0	1.7	No
Year 4[†]	18.9	12.9	1.2	-0.2	No
Years 1 – 4	31.6	25.4	1.1	2.4	No
(Sample Size)			(2,449)	(1,933)	
Applicant FIP Cases, Cohort 2					
Year 1	49.4	43.3	4.9***	1.8	No
Year 2[†]	30.3	22.6	-0.2	-1.1	No
Year 3[†]	22.3	15.1	-2.7	-1.4	No
Years 1 – 3	34.0	27.0	0.7	-0.2	No
(Sample Size)			(2,262)	(1,663)	
Applicant FIP Cases, Cohort 3					
Year 1	43.2	44.5	3.1	12.1***	**Yes**
Year 2[†]	27.0	27.0	2.0	9.7**	No
Years 1 – 2	35.1	35.8	2.6	10.9***	**Yes**
(Sample Size)			(726)	(482)	

SOURCE: The outcome measure (FIP participation at any time during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.1d

AVERAGE QUARTERLY FIP BENEFIT AMOUNT,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	Youngest Child < 3	Youngest Child ≥ 3	Youngest Child < 3	Youngest Child ≥ 3	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	955	855	-3	7	No
Year 2	659	562	-42**	-3	No
Year 3	493	382	-34*	-28*	No
Year 4[†]	381	276	-43**	-28*	No
Year 5[†]	293	207	-28	-13	No
Years 1 – 5	556	456	-30**	-13	No
(Sample Size)			(3,356)	(4,011)	
Applicant FIP Cases, Cohort 1					
Year 1	450	372	6	30	No
Year 2	286	210	6	0	No
Year 3[†]	201	144	-11	14	No
Year 4[†]	163	101	9	-11	No
Years 1 – 4	275	207	3	8	No
(Sample Size)			(2,449)	(1,933)	
Applicant FIP Cases, Cohort 2					
Year 1	407	335	17	-17	No
Year 2[†]	243	167	-32*	-35*	No
Year 3[†]	179	114	-26*	-13	No
Years 1 – 3	277	205	-14	-22	No
(Sample Size)			(2,262)	(1,663)	
Applicant FIP Cases, Cohort 3					
Year 1	350	350	31	90**	No
Year 2[†]	219	212	30	85**	No
Years 1 – 2	284	281	30	88**	No
(Sample Size)			(726)	(482)	

SOURCE: The outcome measure (total FIP benefits during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.2a

AVERAGE QUARTERLY EMPLOYMENT RATE,
BY NUMBER OF PERSONS ON CASE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	< 3 Persons	≥ 3 Persons	< 3 Persons	≥ 3 Persons	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	35.7	41.8	1.2	0.6	No
Year 2	47.4	53.1	3.6*	1.3	No
Year 3	52.0	56.8	4.5**	1.7	No
Year 4[†]	52.9	58.2	3.7*	2.1*	No
Year 5[†]	55.2	61.2	3.9*	1.2	No
Years 1 – 5	48.7	54.2	3.4**	1.4	No
(Sample Size)			(1,932)	(5,486)	
Applicant FIP Cases, Cohort 1					
Year 1	50.6	59.9	9.8***	3.0*	**Yes**
Year 2	51.8	61.2	4.3*	3.4*	No
Year 3[†]	51.1	60.0	1.7	1.0	No
Year 4[†]	49.6	61.3	1.0	2.0	No
Years 1 – 4	50.8	60.6	4.2**	2.3	No
(Sample Size)			(1,809)	(2,716)	
Applicant FIP Cases, Cohort 2					
Year 1	45.2	59.9	0.5	2.3	No
Year 2[†]	47.7	58.8	1.3	-0.1	No
Year 3[†]	47.8	59.7	1.7	0.4	No
Years 1 – 3	46.9	59.4	1.2	0.9	No
(Sample Size)			(1,720)	(2,395)	
Applicant FIP Cases, Cohort 3					
Year 1	43.3	55.7	2.4	0.7	No
Year 2[†]	42.4	51.2	-2.0	-1.1	No
Years 1 – 2	42.9	53.4	0.2	-0.2	No
(Sample Size)			(585)	(694)	

SOURCE: The outcome measure (paid employment by any case member age 14+ at any time during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.2b

AVERAGE QUARTERLY EARNINGS,
BY NUMBER OF PERSONS ON CASE AT RANDOM ASSIGNMENT
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	< 3 Persons	≥ 3 Persons	< 3 Persons	≥ 3 Persons	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	577	765	78*	38	No
Year 2	1,063	1,237	195***	55	**Yes**
Year 3	1,349	1,533	263***	9	**Yes**
Year 4[†]	1,543	1,760	156*	-6	No
Year 5[†]	1,810	2,133	126	24	No
Years 1 – 5	1,269	1,486	164***	24	**Yes**
(Sample Size)			(1,932)	(5,486)	
Applicant FIP Cases, Cohort 1					
Year 1	1,021	1,935	103	212**	No
Year 2	1,306	2,314	34	205*	No
Year 3[†]	1,564	2,466	19	4	No
Year 4[†]	1,723	2,742	28	-73	No
Years 1 – 4	1,403	2,364	46	87	No
(Sample Size)			(1,809)	(2,716)	
Applicant FIP Cases, Cohort 2					
Year 1	1,036	1,949	-9	52	No
Year 2[†]	1,312	2,270	-2	-64	No
Year 3[†]	1,506	2,694	17	51	No
Years 1 – 3	1,285	2,305	2	13	No
(Sample Size)			(1,720)	(2,395)	
Applicant FIP Cases, Cohort 3					
Year 1	904	1,797	-100	-149	No
Year 2[†]	1,228	2,028	-52	-343	No
Years 1 – 2	1,066	1,912	-76	-246	No
(Sample Size)			(585)	(694)	

SOURCE: The outcome measure (earnings in covered employment for case members age 14+ during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.2c

AVERAGE QUARTERLY FIP PARTICIPATION RATE,
BY NUMBER OF PERSONS ON CASE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	< 3 Persons	≥ 3 Persons	< 3 Persons	≥ 3 Persons	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	84.7	86.4	2.5*	0.8	No
Year 2	58.5	65.0	1.0	2.1*	No
Year 3	41.6	49.7	-2.4	1.5	No
Year 4[†]	31.9	39.1	-1.2	-0.3	No
Year 5[†]	23.6	31.1	-2.1	0.2	No
Years 1 – 5	48.0	54.3	-0.4	0.9	No
(Sample Size)			(1,932)	(5,486)	
Applicant FIP Cases, Cohort 1					
Year 1	48.6	46.8	4.0	3.7*	No
Year 2	31.5	28.2	3.9	1.7	No
Year 3[†]	21.5	20.3	1.3	1.6	No
Year 4[†]	16.9	15.7	0.3	1.2	No
Years 1 – 4	29.7	27.8	2.4	2.1	No
(Sample Size)			(1,809)	(2,716)	
Applicant FIP Cases, Cohort 2					
Year 1	48.8	43.8	4.2**	3.1*	No
Year 2[†]	28.4	25.3	-2.1	0.6	No
Year 3[†]	21.0	17.7	-3.0	-1.2	No
Years 1 – 3	32.8	28.9	-0.3	0.9	No
(Sample Size)			(1,720)	(2,395)	
Applicant FIP Cases, Cohort 3					
Year 1	42.0	41.4	0.9	10.7***	**Yes**
Year 2[†]	27.5	25.2	4.6	6.9*	No
Years 1 – 2	34.8	33.3	2.7	8.8***	No
(Sample Size)			(585)	(694)	

SOURCE: The outcome measure (FIP participation at any time during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.2d

AVERAGE QUARTERLY FIP BENEFIT AMOUNT,
BY NUMBER OF PERSONS ON CASE AT RANDOM ASSIGNMENT
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	< 3 Persons	≥ 3 Persons	< 3 Persons	≥ 3 Persons	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	729	956	24	-6	No
Year 2	467	653	-29	-17	No
Year 3	323	469	-40**	-27*	No
Year 4[†]	241	351	-21	-40***	No
Year 5[†]	174	271	-23	-18	No
Years 1 – 5	387	540	-18	-21**	No
(Sample Size)			(1,932)	(5,486)	
Applicant FIP Cases, Cohort 1					
Year 1	368	432	13	23	No
Year 2	239	255	11	8	No
Year 3[†]	167	180	0	9	No
Year 4[†]	130	137	-3	3	No
Years 1 – 4	226	251	5	11	No
(Sample Size)			(1,809)	(2,716)	
Applicant FIP Cases, Cohort 2					
Year 1	350	381	16	-3	No
Year 2[†]	205	210	-35**	-27	No
Year 3[†]	155	145	-25	-17	No
Years 1 – 3	237	245	-15	-16	No
(Sample Size)			(1,720)	(2,395)	
Applicant FIP Cases, Cohort 3					
Year 1	308	355	30	76**	No
Year 2[†]	200	218	33	76**	No
Years 1 – 2	254	286	32	76**	No
(Sample Size)			(585)	(694)	

SOURCE: The outcome measure (total FIP benefits during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.3a

AVERAGE QUARTERLY EMPLOYMENT RATE,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	Zero Earnings	Positive Earnings	Zero Earnings	Positive Earnings	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	21.1	60.6	0.6	0.7	No
Year 2	41.3	64.5	3.0**	0.5	No
Year 3	48.4	65.7	3.3**	1.5	No
Year 4[†]	52.1	64.5	4.3***	1.0	No
Year 5[†]	55.8	66.2	2.8*	0.8	No
Years 1 – 5	43.7	64.3	2.8**	0.9	No
(Sample Size)			(3,347)	(3,757)	
Applicant FIP Cases, Cohort 1					
Year 1	35.3	72.4	5.5**	5.4***	No
Year 2	38.3	72.2	5.0*	3.3	No
Year 3[†]	39.1	70.8	4.1	0.8	No
Year 4[†]	38.9	70.7	1.6	2.3	No
Years 1 – 4	37.9	71.5	4.0*	2.9*	No
(Sample Size)			(1,485)	(2,657)	
Applicant FIP Cases, Cohort 2					
Year 1	40.9	70.8	-1.1	3.3**	**Yes**
Year 2[†]	38.7	72.1	-2.2	1.8	No
Year 3[†]	39.6	71.9	-1.7	2.1	No
Years 1 – 3	39.7	71.6	-1.7	2.4*	**Yes**
(Sample Size)			(1,358)	(2,263)	
Applicant FIP Cases, Cohort 3					
Year 1	42.1	66.8	7.0	-1.9	No
Year 2[†]	34.9	65.7	0.3	-3.7	No
Years 1 – 2	38.5	66.3	3.6	-2.8	No
(Sample Size)			(367)	(749)	

SOURCE: The outcome measure (paid employment by any case member age 14+ at any time during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.3b

AVERAGE QUARTERLY EARNINGS,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	Zero Earnings	Positive Earnings	Zero Earnings	Positive Earnings	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	296	1,146	29	58	No
Year 2	841	1,580	114**	48	No
Year 3	1,193	1,845	126**	13	No
Year 4[†]	1,442	2,043	81	-25	No
Year 5[†]	1,747	2,436	77	2	No
Years 1 – 5	1,104	1,810	86*	19	No
(Sample Size)			(3,347)	(3,757)	
Applicant FIP Cases, Cohort 1					
Year 1	716	2,187	109	188**	No
Year 2	1,025	2,536	245**	25	No
Year 3[†]	1,082	2,836	44	-45	No
Year 4[†]	1,209	3,127	-76	-61	No
Years 1 – 4	1,008	2,672	80	27	No
(Sample Size)			(1,485)	(2,657)	
Applicant FIP Cases, Cohort 2					
Year 1	1,052	2,169	44	44	No
Year 2[†]	1,224	2,588	8	-32	No
Year 3[†]	1,465	3,020	-91	147	No
Years 1 – 3	1,247	2,593	-13	53	No
(Sample Size)			(1,358)	(2,263)	
Applicant FIP Cases, Cohort 3					
Year 1	976	1,951	49	-304**	No
Year 2[†]	1,178	2,386	-50	-319*	No
Years 1 – 2	1,077	2,169	0	-311**	No
(Sample Size)			(367)	(749)	

SOURCE: The outcome measure (earnings in covered employment for case members age 14+ during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.3c

AVERAGE QUARTERLY FIP PARTICIPATION RATE,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	Zero Earnings	Positive Earnings	Zero Earnings	Positive Earnings	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	89.6	83.0	0.5	1.9*	No
Year 2	68.5	58.5	1.1	2.7*	No
Year 3	52.3	43.2	0.9	0.9	No
Year 4[†]	40.4	34.1	-0.2	-0.2	No
Year 5[†]	32.9	25.1	1.5	-1.9	No
Years 1 – 5	56.8	48.8	0.7	0.7	No
(Sample Size)			(3,347)	(3,757)	
Applicant FIP Cases, Cohort 1					
Year 1	54.6	43.8	5.2*	2.2	No
Year 2	31.2	28.3	3.5	1.4	No
Year 3[†]	23.3	19.1	5.5**	-1.1	**Yes**
Year 4[†]	18.6	14.6	5.5**	-1.3	**Yes**
Years 1 – 4	31.9	26.5	4.9**	0.3	**Yes**
(Sample Size)			(1,485)	(2,657)	
Applicant FIP Cases, Cohort 2					
Year 1	49.0	42.9	0.2	4.7***	No
Year 2[†]	25.0	27.0	-3.4	0.7	No
Year 3[†]	17.8	19.7	-3.0	-1.8	No
Years 1 – 3	30.6	29.9	-2.1	1.2	No
(Sample Size)			(1,358)	(2,263)	
Applicant FIP Cases, Cohort 3					
Year 1	43.3	44.6	2.0	10.9***	No
Year 2[†]	19.3	30.9	-0.9	9.3***	**Yes**
Years 1 – 2	31.3	37.7	0.5	10.1***	**Yes**
(Sample Size)			(367)	(749)	

SOURCE: The outcome measure (FIP participation at any time during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.3d

AVERAGE QUARTERLY FIP BENEFIT AMOUNT,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	Zero Earnings	Positive Earnings	Zero Earnings	Positive Earnings	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	997	832	1	4	No
Year 2	689	542	-17	-16	No
Year 3	495	382	-21	-28*	No
Year 4[†]	365	289	-32*	-31**	No
Year 5[†]	289	207	-5	-28**	No
Years 1 – 5	567	450	-15	-20	No
(Sample Size)			(3,347)	(3,757)	
Applicant FIP Cases, Cohort 1					
Year 1	513	361	50	-3	No
Year 2	283	231	22	-9	No
Year 3[†]	209	155	40	-20	**Yes**
Year 4[†]	162	118	34	-18	**Yes**
Years 1 – 4	292	216	36	-12	**Yes**
(Sample Size)			(1,485)	(2,657)	
Applicant FIP Cases, Cohort 2					
Year 1	420	338	-33	22	**Yes**
Year 2[†]	198	211	-64***	-18	No
Year 3[†]	144	153	-26	-22	No
Years 1 – 3	254	234	-41**	-6	No
(Sample Size)			(1,358)	(2,263)	
Applicant FIP Cases, Cohort 3					
Year 1	363	361	14	96***	No
Year 2[†]	157	250	2	82***	**Yes**
Years 1 – 2	260	305	8	89***	**Yes**
(Sample Size)			(367)	(749)	

SOURCE: The outcome measure (total FIP benefits during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.4a

AVERAGE QUARTERLY EMPLOYMENT RATE,
BY RACE AND ETHNICITY OF CASE HEAD
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	Non-Minority	Minority	Non-Minority	Minority	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	40.7	39.2	0.5	1.2	No
Year 2	52.6	49.6	2.2*	0.3	No
Year 3	57.6	49.6	3.3***	-1.1	**Yes**
Year 4[†]	59.0	50.3	3.5***	-0.4	No
Year 5[†]	62.0	52.2	2.1*	1.0	No
Years 1 – 5	54.4	48.2	2.3***	0.2	No
(Sample Size)			(5,831)	(1,490)	
Applicant FIP Cases, Cohort 1					
Year 1	60.4	45.1	5.9***	6.2*	No
Year 2	61.7	48.4	4.3**	7.5**	No
Year 3[†]	61.0	44.1	2.8	0.0	No
Year 4[†]	61.1	45.7	2.2	5.2	No
Years 1 – 4	61.0	45.9	3.8***	4.7	No
(Sample Size)			(3,305)	(819)	
Applicant FIP Cases, Cohort 2					
Year 1	58.9	44.4	3.0**	-2.2	No
Year 2[†]	59.5	41.3	0.8	-1.4	No
Year 3[†]	60.0	42.2	0.8	0.1	No
Years 1 – 3	59.5	42.6	1.5	-1.1	No
(Sample Size)			(2,963)	(739)	
Applicant FIP Cases, Cohort 3					
Year 1	58.3	35.5	4.5	-7.2	**Yes**
Year 2[†]	54.3	33.9	-1.5	-4.3	No
Years 1 – 2	56.3	34.7	1.5	-5.7	No
(Sample Size)			(923)	(212)	

SOURCE: The outcome measure (paid employment by any case member age 14+ at any time during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.4b

AVERAGE QUARTERLY EARNINGS,
BY RACE AND ETHNICITY OF CASE HEAD
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	Non-Minority	Minority	Non-Minority	Minority	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	740	628	37	56	No
Year 2	1,241	1,031	82*	87	No
Year 3	1,583	1,161	80	20	No
Year 4[†]	1,825	1,276	49	-50	No
Year 5[†]	2,199	1,518	44	14	No
Years 1 – 5	1,518	1,122	58	25	No
(Sample Size)			(5,831)	(1,490)	
Applicant FIP Cases, Cohort 1					
Year 1	1,668	1,269	177**	260**	No
Year 2	2,066	1,394	189**	176	No
Year 3[†]	2,315	1,394	127	-39	No
Year 4[†]	2,596	1,557	85	88	No
Years 1 – 4	2,161	1,404	145*	121	No
(Sample Size)			(3,305)	(819)	
Applicant FIP Cases, Cohort 2					
Year 1	1,629	1,326	52	-31	No
Year 2[†]	1,991	1,366	30	-305*	**Yes**
Year 3[†]	2,378	1,537	87	-87	No
Years 1 – 3	1,999	1,410	56	-141	No
(Sample Size)			(2,963)	(739)	
Applicant FIP Cases, Cohort 3					
Year 1	1,569	880	-129	-205	No
Year 2[†]	1,900	1,034	-319*	-178	No
Years 1 – 2	1,735	957	-224	-192	No
(Sample Size)			(923)	(212)	

SOURCE: The outcome measure (earnings in covered employment for case members age 14+ during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.4c

AVERAGE QUARTERLY FIP PARTICIPATION RATE,
BY RACE AND ETHNICITY OF CASE HEAD
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	Non-Minority	Minority	Non-Minority	Minority	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	86.1	86.6	1.5**	-0.2	No
Year 2	62.8	65.8	2.6**	-1.8	**Yes**
Year 3	46.2	52.9	0.6	-0.6	No
Year 4[†]	35.4	44.1	-1.0	0.8	No
Year 5[†]	27.3	36.0	-0.4	-0.3	No
Years 1 – 5	51.6	57.1	0.7	-0.4	No
(Sample Size)			(5,831)	(1,490)	
Applicant FIP Cases, Cohort 1					
Year 1	49.1	53.8	3.0	3.7	No
Year 2	29.8	35.0	0.2	7.8**	**Yes**
Year 3[†]	20.0	27.3	-0.6	4.5	No
Year 4[†]	15.4	21.4	-0.8	3.7	No
Years 1 – 4	28.6	34.4	0.5	4.9	No
(Sample Size)			(3,305)	(819)	
Applicant FIP Cases, Cohort 2					
Year 1	47.6	54.7	3.0*	6.9**	No
Year 2[†]	27.2	31.2	-1.1	2.0	No
Year 3[†]	19.5	21.7	-2.1	-1.3	No
Years 1 – 3	31.4	35.9	-0.1	2.5	No
(Sample Size)			(2,963)	(739)	
Applicant FIP Cases, Cohort 3					
Year 1	45.5	45.3	7.7***	2.8	No
Year 2[†]	29.4	25.9	7.3**	6.6	No
Years 1 – 2	37.5	35.6	7.5***	4.7	No
(Sample Size)			(923)	(212)	

SOURCE: The outcome measure (FIP participation at any time during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.4d

AVERAGE QUARTERLY FIP BENEFIT AMOUNT,
BY RACE AND ETHNICITY OF CASE HEAD
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	Non-Minority	Minority	Non-Minority	Minority	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	895	924	11	-31	**Yes**
Year 2	594	654	-17	-35	No
Year 3	408	518	-39***	-9	No
Year 4[†]	300	404	-43***	-15	No
Year 5[†]	221	335	-24**	-4	No
Years 1 – 5	484	567	-23**	-19	No
(Sample Size)			(5,831)	(1,490)	
Applicant FIP Cases, Cohort 1					
Year 1	414	496	5	46	No
Year 2	247	318	-19	92**	**Yes**
Year 3[†]	168	233	-15	44	No
Year 4[†]	125	192	-15	39	No
Years 1 – 4	239	310	-11	55*	**Yes**
(Sample Size)			(3,305)	(819)	
Applicant FIP Cases, Cohort 2					
Year 1	383	444	1	21	No
Year 2[†]	213	244	-35**	-12	No
Year 3[†]	153	173	-21*	-9	No
Years 1 – 3	250	287	-18	0	No
(Sample Size)			(2,963)	(739)	
Applicant FIP Cases, Cohort 3					
Year 1	358	390	57**	54	No
Year 2[†]	230	218	69**	59	No
Years 1 – 2	294	304	63***	56	No
(Sample Size)			(923)	(212)	

SOURCE: The outcome measure (total FIP benefits during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.5a

AVERAGE QUARTERLY EMPLOYMENT RATE,
BY COUNTY OF RESIDENCE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	Urban County	Rural County	Urban County	Rural County	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	40.6	37.8	0.9	-0.1	No
Year 2	51.7	51.2	2.4**	-1.5	No
Year 3	55.7	54.6	2.6**	0.6	No
Year 4[†]	56.6	58.1	2.6**	2.0	No
Year 5[†]	59.4	60.2	2.1*	-0.6	No
Years 1 – 5	52.8	52.4	2.1**	0.1	No
(Sample Size)			(6,044)	(1,374)	
Applicant FIP Cases, Cohort 1					
Year 1	55.2	61.3	5.6***	6.2**	No
Year 2	56.7	62.4	4.5***	0.0	No
Year 3[†]	55.7	61.2	1.5	1.9	No
Year 4[†]	56.1	59.6	2.0	0.2	No
Years 1 – 4	55.9	61.1	3.4**	2.1	No
(Sample Size)			(3,869)	(657)	
Applicant FIP Cases, Cohort 2					
Year 1	53.2	56.9	2.0	-0.9	No
Year 2[†]	53.5	57.2	0.4	-0.4	No
Year 3[†]	53.8	59.5	0.6	2.3	No
Years 1 – 3	53.5	57.9	1.0	0.3	No
(Sample Size)			(3,416)	(705)	
Applicant FIP Cases, Cohort 3					
Year 1	48.4	60.4	0.8	4.7	No
Year 2[†]	45.3	56.9	-1.9	-4.5	No
Years 1 – 2	46.8	58.6	-0.6	0.1	No
(Sample Size)			(1,051)	(229)	

SOURCE: The outcome measure (paid employment by any case member age 14+ at any time during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.5b

AVERAGE QUARTERLY EARNINGS,
BY COUNTY OF RESIDENCE AT RANDOM ASSIGNMENT
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	Urban County	Rural County	Urban County	Rural County	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	716	711	46*	50	No
Year 2	1,184	1,230	101**	0	No
Year 3	1,477	1,528	88*	-32	No
Year 4[†]	1,690	1,768	43	-50	No
Year 5[†]	2,032	2,138	53	-12	No
Years 1 – 5	1,420	1,475	66	-9	No
(Sample Size)			(6,044)	(1,374)	
Applicant FIP Cases, Cohort 1					
Year 1	1,544	1,739	155**	292**	No
Year 2	1,881	2,110	129	228	No
Year 3[†]	2,080	2,312	7	166	No
Year 4[†]	2,323	2,481	3	-51	No
Years 1 – 4	1,957	2,161	74	159	No
(Sample Size)			(3,869)	(657)	
Applicant FIP Cases, Cohort 2					
Year 1	1,555	1,619	22	-7	No
Year 2[†]	1,847	1,962	-63	18	No
Year 3[†]	2,174	2,335	11	175	No
Years 1 – 3	1,859	1,972	-10	62	No
(Sample Size)			(3,416)	(705)	
Applicant FIP Cases, Cohort 3					
Year 1	1,330	1,809	-120	-85	No
Year 2[†]	1,594	2,063	-202	-342	No
Years 1 – 2	1,462	1,936	-161	-213	No
(Sample Size)			(1,051)	(229)	

SOURCE: The outcome measure (earnings in covered employment for case members age 14+ during the quarter) is based on IWD (UI) data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.5c

AVERAGE QUARTERLY FIP PARTICIPATION RATE,
BY COUNTY OF RESIDENCE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
Year Since Random Assignment	Urban County	Rural County	Urban County	Rural County	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	86.0	85.9	1.1	1.3	No
Year 2	63.0	64.1	1.3	3.2	No
Year 3	47.3	49.0	-0.1	3.5	No
Year 4[†]	37.0	39.0	-1.1	2.5	No
Year 5[†]	29.2	28.6	0.1	-3.4	No
Years 1 – 5	52.5	53.3	0.3	1.4	No
(Sample Size)			(6,044)	(1,374)	
Applicant FIP Cases, Cohort 1					
Year 1	47.1	48.6	3.1*	4.9	No
Year 2	29.1	31.6	2.1	4.3	No
Year 3[†]	20.4	22.6	1.6	-0.7	No
Year 4[†]	16.0	16.4	0.7	0.5	No
Years 1 – 4	28.1	29.8	1.9	2.2	No
(Sample Size)			(3,869)	(657)	
Applicant FIP Cases, Cohort 2					
Year 1	45.7	46.3	3.1**	4.2	No
Year 2[†]	26.2	28.1	-1.2	2.0	No
Year 3[†]	18.6	20.5	-2.6**	0.3	No
Years 1 – 3	30.2	31.6	-0.2	2.2	No
(Sample Size)			(3,416)	(705)	
Applicant FIP Cases, Cohort 3					
Year 1	41.1	45.4	5.1*	12.3**	No
Year 2[†]	25.9	28.3	4.9*	10.3**	No
Years 1 – 2	33.5	36.8	5.0**	11.3**	No
(Sample Size)			(1,051)	(229)	

SOURCE: The outcome measure (FIP participation at any time during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

EXHIBIT B.5d

AVERAGE QUARTERLY FIP BENEFIT AMOUNT,
BY COUNTY OF RESIDENCE AT RANDOM ASSIGNMENT
(Dollars)

	Treatment Outcome		Impact		
Year Since Random Assignment	Urban County	Rural County	Urban County	Rural County	Significant Difference?[a]
Ongoing FIP Cases					
Year 1	897	889	3	-16	No
Year 2	603	603	-24*	-13	No
Year 3	430	431	-35***	-13	No
Year 4[†]	321	324	-39***	-21	No
Year 5[†]	248	227	-13	-61***	**Yes**
Years 1 – 5	500	495	-22**	-25	No
(Sample Size)			(6,044)	(1,374)	
Applicant FIP Cases, Cohort 1					
Year 1	406	399	19	6	No
Year 2	249	244	10	-2	No
Year 3[†]	174	172	9	-33	No
Year 4[†]	135	123	2	-19	No
Years 1 – 4	241	235	10	-12	No
(Sample Size)			(3,869)	(657)	
Applicant FIP Cases, Cohort 2					
Year 1	362	389	-6	44	No
Year 2[†]	203	228	-39***	6	No
Year 3[†]	146	160	-27**	1	No
Years 1 – 3	237	259	-24**	17	No
(Sample Size)			(3,416)	(705)	
Applicant FIP Cases, Cohort 3					
Year 1	327	354	46*	61	No
Year 2[†]	204	230	46*	97**	No
Years 1 – 2	266	292	46*	79*	No
(Sample Size)			(1,051)	(229)	

SOURCE: The outcome measure (total FIP benefits during the quarter) is based on IABC data for 10/93 - 9/98.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications from 10/1/93 through 3/31/96, and they were either accepted or denied.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference in impacts between subgroups is statistically significant at the .10 level.

[†]Denotes years in which reform policies were applied to control cases. Impact estimates may be biased.

APPENDIX C

WEIGHTING OF THE IOWA CORE SURVEY DATA

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WEIGHTING OF THE IOWA CORE SURVEY DATA

Weights for the Iowa core survey were computed in two stages. In the first stage, sample weights were computed for the 4,111 cases in the core survey sample according to the inverse of their probability of having been selected into that sample. In the second stage, the sample weights were adjusted upward as necessary to compensate for survey nonparticipation, thereby resulting in survey participant weights for the 2,951 cases that completed the interview. To obtain the participant weights, multiplicative adjustment factors were computed and applied to the sample weights separately for each of 54 cells defined by the following three characteristics:

1. Treatment group versus control group--two strata
2. Ongoing cases versus early applicant cases (cases that applied for FIP benefits during October 1993 through September 1994) versus later applicant cases (cases that applied during October 1994 through March 1996)--three strata
3. County of residence at random assignment (nine research counties)--nine strata

When weighted, survey participants that were ongoing FIP cases at the time of random assignment and subject to treatment policies are representative of the population of ongoing FIP cases in the nine research counties at the outset of welfare reform. Likewise, when weighted, survey participants that were ongoing FIP cases at the time of random assignment and initially subject to control policies are representative of this same population. Similarly, weighted survey participants in the applicant group, both those subject to treatment policies and those initially subject to control policies, are representative of the population of cases that applied for FIP benefits in the nine research counties during the first two and one-half years of welfare reform. While the weighted survey participants are fully representative of the populations of ongoing and applicant cases with respect to the characteristics that were used to define the 54 cells underlying the second-stage weighting scheme, they are unlikely to be fully representative of those populations with respect to other characteristics. Sampling error and survey nonparticipation undoubtedly resulted in some loss of representativeness with respect to those other characteristics. However, that loss was reduced through use of the participant weights.

With a minor transformation, the weights for the survey participants can be used to weight those cases up, not to the populations of ongoing and applicant cases, but rather to the evaluation's four samples: (1) ongoing treatment cases, (2) ongoing control cases, (3) applicant treatment cases, and (4) applicant control cases. When weighted in this manner, the cases that participated in the survey can be compared with the cases in the corresponding evaluation sample on the basis of measures obtained from Iowa administrative data files. Sampling error and interview nonresponse can cause the mean characteristics and outcomes of weighted survey participants to deviate from the mean characteristics and outcomes of the corresponding evaluation sample. If those deviations are substantial, then the weighted survey participants should not be regarded as a random subsample of the corresponding evaluation sample, at least with respect to the particular measures considered.

Ongoing FIP Cases, Treatment and Control. Findings from a comparison between weighted survey participants and cases in the corresponding evaluation sample are presented in Exhibits C.1 and C.2. For ongoing FIP cases, there is a high degree of consistency between weighted survey participants and the cases in the corresponding evaluation sample (see Exhibit C.1). This is true for characteristics at random assignment and for administrative outcomes during the year following random assignment. With few exceptions, the characteristics of and outcomes for the weighted survey participants, whether in the treatment group or in the control group, are sufficiently similar to those of the members of the corresponding evaluation sample that the weighted participants can be viewed as a random subsample of the evaluation sample.[1] One way in which ongoing cases that participated in the survey differ significantly from the evaluation samples of ongoing cases (treatment or control) is in the proportion of quarters of FIP participation during the year after random assignment. This proportion is significantly higher for survey participants than for cases in the evaluation sample for both the treatment and control groups. The difference can to some degree be attributed to the fact that it was easier to locate and interview cases that were receiving assistance during the survey field period because the contact information in DHS files was most accurate for those cases.

Applicant FIP Cases, Treatment and Control. Among applicant cases, weighted survey participants differ in more ways from their counterparts in the corresponding evaluation sample than among ongoing cases. As shown in Exhibit C.2, applicant FIP cases that participated in the survey differ significantly from the evaluation samples of applicant cases in the proportion of quarters of FIP participation (treatment cases only) and in the gender and race/ethnicity of the case head. The gender and race/ethnicity differences almost certainly arise from the dynamics of survey nonparticipation; that is, men and members of racial or ethnic minority groups are frequently more difficult to locate and interview than are women and nonminorities. While the participant weights may mute these differences, they clearly do not eliminate them for applicant cases. The statistically significant differences in marital status and age between the weighted survey participants and cases in the corresponding evaluation sample are less traditionally associated with nonparticipation. Nevertheless, it is likely that survey nonparticipation is partially responsible for these differences.

While there are statistically significant differences between survey participants and their counterparts in the full evaluation sample, these differences are small. Furthermore, as described in Chapter IV, the methodology that we used to estimate the impacts of welfare reform controlled for the characteristics of survey participants at random assignment. Consequently, there is little reason to believe that differences between survey participants and all cases in the evaluation have substantially distorted our estimates of impacts on survey-based outcomes.

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[1]These assessments are based on hypothesis tests of whether the weighted mean for survey participants equals the unweighted mean for the entire evaluation sample from which survey participants were selected (to be core survey sample members) and self-selected (to be survey participants). These tests treat the evaluation sample as a fixed and finite population because for this exercise, we are interested in whether survey participants are representative of the evaluation sample, not of the entire population from which the evaluation sample was randomly selected. The hypothesis of no difference between survey participants and the evaluation sample is rejected when the evaluation sample mean falls outside the 90 percent confidence interval for the mean among survey participants. The computation of this confidence interval accounts for survey stratification and the finite population from which survey participants were selected and self-selected.

EXHIBIT C.1

REPRESENTATIVENESS OF SURVEY PARTICIPANTS: ONGOING FIP CASES

	Treatment Cases		Control Cases	
	Evaluation Sample	Survey Participants[a]	Evaluation Sample	Survey Participants[a]
Characteristics of the Case Head				
Gender (%)				
Female	91.1	91.8	90.2	89.2
Male	8.9	8.2	9.8	10.8
Race/ethnicity (%)				
White	79.9	80.2	79.1	80.5
Black	16.6	16.5	17.1	16.8
Hispanic or other	3.5	3.3	3.8	2.7
Marital status (%)				
Never married	57.2	59.0	57.1	59.0
Divorced, separated, or widowed	24.0	24.7	22.9	21.0
Married	18.8	16.3**	20.0	20.0
Age				
Less than 18 years (%)	7.0	7.4	8.0	6.6
Average age (years)	28.7	28.7	28.6	27.9
Characteristics of the Case				
County at random assignment (%)				
Urban	81.5	81.5	81.4	81.4
Rural	18.5	18.5	18.6	18.6
Demographic composition				
Number of persons	3.8	3.7	3.7	3.6**
Age of youngest person (years)	5.0	4.9	5.2	5.0
Earnings in year prior to quarter of random assignment ($)	$1,775	$1,796	$1,639	$1,714
Year 1 Outcomes (Quarterly Rate)				
Labor market				
Case employment rate (%)	41.4	42.4	38.0	40.0
Case earnings ($)	$745	$730	$637	$629
Cash assistance				
Case FIP participation rate (%)	85.8	89.2***	84.6	87.4**
Case FIP benefit ($)	$896	$937***	$884	$888
Sample Size	4,952	945	2,466	468

NOTES: Due to missing data, the effective sample sizes for certain variables are reduced for the evaluation sample and for survey participants. Effective sample sizes for survey participants are as follows: (1) treatment cases: gender, age, age of youngest child 941; race/ethnicity 936; marital status 936; number of persons 945; earnings 908; (2) control cases: gender, age, age of youngest child 465; race/ethnicity 461; marital status 463; number of persons 468; earnings 447.

*/**/*** Difference between survey participants and the full sample of cases is statistically significant at the .10/.05/.01 level.

[a]Ongoing treatment cases that participated in the survey are a subsample of all ongoing treatment cases in the evaluation. In this table, ongoing treatment cases that participated in the survey are weighted to be representative of all ongoing treatment cases in the evaluation; similarly for ongoing control cases.

Percentages may not sum to 100 due to rounding.

EXHIBIT C.2

REPRESENTATIVENESS OF SURVEY PARTICIPANTS, APPLICANT FIP CASES

	Treatment Cases		Control Cases	
	Evaluation Sample	Survey Participants[a]	Evaluation Sample	Survey Participants[a]
Characteristics of the Case Head				
Gender (%)				
Female	83.3	86.0**	83.7	86.5*
Male	16.7	14.0**	16.3	13.5*
Race/ethnicity (%)				
White	80.1	83.1**	80.5	85.8***
Black	11.6	10.9	11.2	9.9
Hispanic or other	8.3	6.0***	8.3	4.2***
Marital status (%)				
Never married	54.4	57.8**	54.9	58.0
Divorced, separated, or widowed	17.2	16.8	16.9	14.3
Married	28.5	25.4**	28.2	27.6
Age				
Less than 18 years (%)	11.8	13.8**	10.5	13.7**
Average age (years)	27.3	26.7*	27.9	26.6***
Characteristics of the Case				
County at random assignment (%)				
Urban	84.3	84.3	83.3	83.3
Rural	15.7	15.7	16.7	16.7
Demographic composition				
Number of persons	3.1	3.0	3.0	3.0
Age of youngest person (years)	4.1	4.1	4.3	4.1
Earnings in year prior to quarter of random assignment ($)	$6,120	$6,432	$6,208	$6,498
Year 1 Outcomes (Quarterly Rate)				
Labor market				
Case employment rate (%)	54.1	55.8	53.0	54.2
Case earnings ($)	$1,532	$1,494	$1,535	$1,631
Cash assistance				
Case FIP participation rate (%)	46.0	48.2*	41.3	44.2
Case FIP benefit ($)	$376	$395	$354	$372
Sample Size	6,615	1,039	3,312	499

NOTES: Due to missing data, the effective sample sizes for certain variables are reduced for the evaluation sample and for survey participants. Effective sample sizes for survey participants are as follows: (1) treatment cases: gender, age, age of youngest child 1,009; race/ethnicity 951; marital status 963; number of persons 1,038; earnings 952; (2) control cases: gender, age, age of youngest child 488; race/ethnicity 453; marital status 456; number of persons 499; earnings 468.

*/**/*** Difference between survey participants and the full sample of cases is statistically significant at the .10/.05/.01 level.

[a]Applicant treatment cases that participated in the survey are a subsample of all applicant treatment cases in the evaluation. In this table, applicant treatment cases that participated in the survey are weighted to be representative of all applicant treatment cases in the evaluation; similarly for applicant control cases.

Percentages may not sum to 100 due to rounding.

APPENDIX D

IMPACTS ON SUBGROUPS OF ADULTS AND FAMILIES: FINDINGS BASED ON CORE SURVEY DATA

APPENDIX D

IMPACTS ON SUBGROUPS OF ADULTS AND FAMILIES: FINDINGS BASED ON CORE SURVEY DATA

An analysis of impacts on subgroups of the population served by a program, such as Iowa's welfare reform program as embodied in FIP, may reveal whether elements of the program that are directed to those subgroups are effective and whether they are important in generating the program's overall impacts. Even if there are no programmatic reasons to expect differential impacts on specific subgroups, a subgroup analysis may be warranted if the subgroups are of particular concern to policymakers or if past research has shown that programs similar to the one being studied often have differential impacts on those subgroups. For these reasons, we used the Iowa core survey data to conduct an analysis of the differential impacts of welfare reform on pairs of subgroups defined by the following eight criteria:

1. ***Age of the youngest child at random assignment*** (under three years old; at least three years old)
2. ***Number of persons on the case at random assignment*** (fewer than three persons; three or more persons)
3. ***Earnings of case members in the year before the quarter of random assignment*** (had no earnings; had earnings)
4. ***Race and ethnicity of the case head*** (minority: black or Hispanic; nonminority: white, non-Hispanic)
5. ***County of residence at random assignment*** (urban; rural)
6. ***Marital status of the case head at random assignment*** (single female; member of a married couple)[1]
7. ***Number of children*** o***n the case at random assignment*** (fewer than three children; three or more children)
8. ***FIP application cohort*** (cohort 1: cases that applied for assistance in 10/93 through 9/94; cohorts 2 and 3: cases that applied for assistance in 10/94 through 3/96)

The first five of these criteria were also used in the subgroup analysis of administrative data, as reported in Appendix A. The next two criteria are being used for the first time in this subgroup analysis of survey data. T he final criterion--application cohort--was used throughout the administrative data analysis. There were enough applicant cases in the evaluation, 9,927, to support the reliable estimation of impacts on all administrative outcomes separately for each of three cohorts of applicants. Given the much smaller number of applicant cases that participated in the core survey (1,538 cases), we were reluctant to generate estimates of impacts on all survey-based outcomes

[1]In the analysis of impacts on subgroups defined by the marital status of the case head at random assignment, we restricted the cases to those in which the head was an adult. That is, we eliminated child-only cases from the analysis. We classified a case head as an adult if she (or possibly "he" if the head was married) was at least 18 years old, or if he/she was 16 or 17 years old and the case included a child who was less than 5 years old.

separately for each of the three applicant cohorts. We were especially concerned that estimates for the third cohort, which included just 188 survey participants, would lack the statistical precision that would make them useful to policymakers. Accordingly, for the subgroup analysis of the FIP application cohort, we consolidated applicants into two cohorts: one that applied for assistance in the first year following the implementation of welfare reform (818 survey participants) and one that applied anytime from 12 to 30 months following implementation (720 survey participants).

There are programmatic reasons to expect the impacts of welfare reform to have varied across the subgroups defined by two of these criteria—age of the youngest child at random assignment and earnings of case members in the year before the quarter of random assignment. First, under welfare reform, the parents of children who are at least three months old but younger than three years are required to participate in the PROMISE JOBS program, whereas they were exempt from participation under pre-reform policies. We used the age of the youngest child in a case to distinguish between a subgroup that was more likely to be affected by the lifting of this exemption (youngest child under three years old) and a subgroup that was less likely to be affected by it (youngest child age at least three years old). A second element of welfare reform, the work transition period, or WTP (a four-month period of initial employment during which the FIP cash benefit was not reduced as a consequence of earnings), was available only to individual FIP recipients who had no substantial earnings in the previous year.[2] We used case-level earnings prior to random assignment to distinguish between a subgroup that was more likely to have qualified for the WTP (cases that had no earnings in the year before the quarter of random assignment) and a subgroup that was less likely to have qualified for this element of welfare reform (cases that had earnings in the year before the quarter of random assignment).

1. Estimation Method

We used each of the above eight criteria to define a pair of subgroups for ongoing cases and a pair for applicant cases. Rather than apply the basic regression model separately to each subgroup in a pair, we applied a variant of the model to the pair combined. That variant included the following three variables:

1. The same treatment/control dummy variable that was in the basic regression model (0 if control and 1 if treatment)
2. A dummy variable that indicated which of the two selected subgroups a case was in (e.g., for the two subgroups based on county of residence at random assignment, the dummy variable equaled 0 if the county was rural and 1 if it was urban)
3. An interaction term that was defined as the product of the treatment/control variable and the subgroup indicator variable.

Aside from the subgroup indicator and the interaction term, all other aspects of the regression model for the subgroup analysis were identical to the basic regression model. By considering both the estimate of the regression coefficient on the treatment/control variable and the estimate of the

[2]The WTP was eliminated in 1997 by legislative action.

coefficient on the interaction term, we obtained separate estimates of the impacts of welfare reform on each subgroup in a pair.[3]

2. Selected Estimation Results

Estimates of the impacts of welfare reform on selected survey-based outcomes are presented in Exhibits D.1a – D.8b for the eight pairs of subgroups. In general, the estimated impacts on the two subgroups in a pair are not significantly different from each other. This may be for either of two reasons: (1) the impact estimates may be of similar sign and magnitude for both subgroups in a pair, or (2) the estimates may vary sharply across the subgroups in a pair, but the differences are not statistically significant because of the small number of cases in one of the subgroups. Findings for two of the eight pairs of subgroups--those defined by the age of the youngest child at random assignment and by the earnings of case members in the year before the quarter of random assignment--are discussed in detail in Chapter VI. We believe that those findings are related to specific policy provisions that were directed more to one subgroup in each pair than to the other. The following discussion focuses on two additional pairs of subgroups for which the analytic findings provide some insight into how welfare reform generated its overall impacts.

Impacts by Marital Status at Random Assignment. Among applicant cases only, the impacts of welfare reform on a diverse set of outcomes were very different for cases in which the head at the time of random assignment was a single female as opposed to a member of a married couple. Several of the differences in impacts between these two subgroups were mentioned in Section C of Chapter IV in order to enhance the reader's understanding of key overall impact estimates. Those differences involve impacts on the respondent's marital status and on the earnings of all household members at the time of the core survey. For an applicant case in which the head was a single female at random assignment, Exhibit D.6b shows that welfare reform reduced by eight percentage points the likelihood that the survey respondent would be married three to six years later (when the survey was conducted). In contrast, the corresponding impact estimate for an applicant case in which the head was a member of a married couple at random assignment is not significantly different from zero. Furthermore, Exhibit D.6a shows that welfare reform reduced household earnings by $301 per month for single-female applicants but had essentially no impact on the household earnings of married-couple applicants. These subgroup estimates suggest that welfare reform reduced the household earnings of applicant cases that had been headed by single females at random assignment by reducing the percentage of survey respondents in those cases who were married when we interviewed them.

The findings for applicant cases headed by a single female as opposed to a married couple also diverge in terms of employment and participation in PROMISE JOBS. Welfare reform reduced by 10 percentage points the proportion of survey respondents among married-couple cases who were not employed at the time of the interview and increased by 5 percentage points the proportion who were

[3]We also estimated a second version of the regression model for the subgroup analysis. This version was algebraically equivalent to the model described in the text. By considering the estimated coefficients and their associated t-statistics from both versions of the model, we were able to (1) estimate the impact of welfare reform on each subgroup in a pair and determine whether these estimates were significantly different from zero and (2) estimate the difference between the impacts on the subgroups and determine whether that difference was significantly different from zero.

employed 20 to 29 hours per week (see Exhibit D.6a). In contrast, we found no significant impacts on the employment of respondents in single-female cases. In terms of PROMISE JOBS, the reforms increased program participation by survey respondents among single-female headed cases but not among married-couple cases (see Exhibit D.6b).

A final noteworthy difference between single-female headed cases and married-couple cases pertains to continuity in health insurance coverage for children. Welfare reform reduced the percentage of cases headed by a single female in which children were continuously covered by health insurance following random assignment, but it did not negatively affect the continuity of health insurance coverage for children in married-couple cases.

Impacts by FIP Application Cohort. The impacts of welfare reform on economic outcomes were very similar for cohort 1 applicants and for combined cohort 2 and 3 applicants, as documented in Exhibit D.8a. This is not true for impacts on noneconomic outcomes. For cohort 1 applicants relative to cohort 2 and 3 applicants, welfare reform had significantly larger negative impacts on the continuity of health insurance coverage since random assignment, on the percentage of survey respondents who had given birth to (or fathered) a child following random assignment, and on the percentages of respondents who were married and had a driver's license at the time of the core survey (see Exhibit D.8b).

Why might the impacts of welfare reform have differed for cases that applied for assistance in the first year of welfare reform relative to later applicants? It is possible that later applicants faced somewhat different versions of the treatment program (i.e., reform program) and/or the control program (i.e., pre-reform program) than did early applicants. These policy differences may have been mandated, as with the elimination of the reform's WTP in 1997, or they may have been the result of changes over time following the inception of welfare reform in how the treatment and control programs were implemented. For example, we found evidence, albeit weak, that the positive impact of welfare reform on the percentage of survey respondents who reported that they had been informed by PROMISE JOBS counselors of their possible post-FIP eligibility for Medicaid was greater among later applicants than among early applicants.[4] This finding suggests a change over time in how the treatment and control programs were implemented--a change that could help to explain the differences in the impacts of welfare reform by cohort on the continuity of health insurance coverage.

In principle, changes over time in the demographic characteristics of FIP applicants could also have contributed to differences in the impacts of welfare reform by cohort. However, we examined the characteristics of applicant cases at random assignment and found no striking differences across applicant cohorts. Compared with cases in cohort 1, cases in cohorts 2 and 3 had somewhat fewer members, somewhat younger children and case heads, and a somewhat lower marriage rate for case

[4]The subgroup analysis by applicant cohort produced estimated impacts of +3.2 percentage points and +9.7 percentage points, respectively, on the proportion of cohort 1 applicants and cohort 2 and 3 applicants for which the survey respondent reported having been informed by PROMISE JOBS of their potential post-FIP eligibility for Medicaid. The former estimate is not significantly different from zero, while the latter is different from zero at the .05 level of significance. The difference between the two estimates, 6.5 percentage points, has a P-value of .26. These findings are not reported in the Appendix D exhibits.

heads.[5] These differences are small, and it is not clear whether or why they might have contributed to the cohort differences in the impacts of welfare reform on noneconomic outcomes. But the possibility remains that later applicants differed at random assignment from early applicants in characteristics that were not captured in state administrative files and that might have influenced the impacts of welfare reform.

[5]These findings are based on our analysis of data from state administrative files, which provide only limited information on the demographic characteristics of FIP cases.

EXHIBIT D.1a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	Youngest Child < 3	Youngest Child ≥ 3	Youngest Child < 3	Youngest Child ≥ 3	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	39.3	40.2	-3.7	-2.3	No
Employed part-time					
1 to 19 hours	2.8	2.6	1.4	0.9	No
20 to 29 hours	5.7	5.2	-3.0	0.1	No
Employed full-time					
30 to 34 hours	7.2	8.3	-0.8	0.4	No
35 to 44 hours	34.4	35.4	2.5	0.0	No
45 or more hours	10.5	7.8	3.6	1.0	No
Hourly Wage on Primary Job (%)					
Not employed	39.3	40.2	-3.7	-2.3	No
Employed					
Wage less than $5	2.2	3.0	-3.5**	0.6	**Yes**
Wage $5 to $6.99	19.1	16.4	4.9	-1.5	No
Wage $7 to $8.99	23.0	20.9	2.1	5.1	No
Wage $9 or more	15.3	18.2	0.3	-2.0	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$843	$814	$116*	-$7	No
All household members	$1,090	$1,071	$19	$55	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,509	$1,429	$70	$29	No
Income is below poverty (%)	52.4	53.0	-0.7	3.8	No
Sample Size			668	738	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.1b

SELECTED NONECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	Youngest Child < 3	Youngest Child ≥ 3	Youngest Child < 3	Youngest Child ≥ 3	Significant Differ?[a]
Current Marital Status					
Never married	43.3	24.2	1.1	-6.6**	**Yes**
Married and living with spouse	25.7	24.3	-4.0	-1.7	No
Separated or divorced	30.1	47.4	3.3	5.4	No
Widowed	0.9	4.0	-0.4	2.9***	**Yes**
Family Stability					
Birth of child following RA	38.1	16.3	-4.7	3.8	**Yes**
Minor child is in foster care	2.8	1.7	-2.7	-0.8	No
Access to Transportation					
Neighborhood served by local bus	69.8	72.2	-1.9	4.4	No
Possesses driver's license	76.0	78.1	0.9	3.6	No
Owns/has access to a working car	84.7	83.9	1.2	5.2*	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	59.9	51.8	4.3	5.5	No
Signed FIA or employability plan	49.9	34.7	11.4***	8.8**	No
Assigned to LBP	19.8	13.7	2.1	8.5***	No
Family's Current Health Insurance					
Medicaid	52.9	48.5	1.5	1.4	No
Private	35.9	42.4	-6.7*	4.0	**Yes**
Any (Medicaid or private)	79.9	80.5	-3.7	4.2	**Yes**
Health Insurance Coverage Since RA					
Survey resp. continuously covered	42.2	44.3	-2.7	-3.4	No
Survey resp's children cont. covered	55.5	57.3	1.3	-1.3	No
Sample Size			668	738	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.1c

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	Youngest Child < 3	Youngest Child ≥ 3	Youngest Child < 3	Youngest Child ≥ 3	Significant Differ ?[a]
Hours per Week on Primary Job (%)					
Not employed	34.4	33.0	2.2	-2.1	No
Employed part-time					
1 to 19 hours	4.1	2.3	-2.8	0.0	No
20 to 29 hours	8.3	7.3	-0.6	3.6**	No
Employed full-time					
30 to 34 hours	6.0	6.3	-0.1	0.5	No
35 to 44 hours	36.9	38.1	-0.6	-2.3	No
45 or more hours	10.3	12.8	2.3	0.3	No
Hourly Wage on Primary Job (%)					
Not employed	34.4	33.0	2.2	-2.1	No
Employed					
Wage less than $5	4.7	4.2	2.7**	0.2	No
Wage $5 to $6.99	17.1	13.8	-2.9	2.1	No
Wage $7 to $8.99	23.1	22.6	1.0	2.9	No
Wage $9 or more	19.8	24.9	-3.2	-3.6	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$936	$1,023	-$10	-$191*	No
All household members	$1,495	$1,456	-$114	-$360***	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,782	$1,799	-$102	-$386***	No
Income is below poverty (%)	39.0	38.6	-0.4	5.4	No
Sample Size			857	640	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.1d

SELECTED NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	Youngest Child < 3	Youngest Child ≥ 3	Youngest Child < 3	Youngest Child ≥ 3	Significant Differ?[a]
Current Marital Status					
Never married	37.2	20.7	5.0	9.4***	No
Married and living with spouse	35.5	35.1	-2.9	-5.9	No
Separated or divorced	25.6	41.0	-2.9	-3.3	No
Widowed	1.7	3.2	0.8	-0.2	No
Family Stability					
Birth of child following RA	47.5	21.2	1.6	-0.5	No
Minor child is in foster care	1.8	4.0	0.8	3.5***	No
Access to Transportation					
Neighborhood served by local bus	65.6	61.3	-3.5	-7.5*	No
Possesses driver's license	80.3	79.2	-1.8	-6.6**	No
Owns/has access to a working car	90.7	87.9	1.1	-3.2	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	41.4	35.2	6.0	8.2**	No
Signed FIA or employability plan	31.4	20.7	9.3**	8.2**	No
Assigned to LBP	12.7	6.9	7.7***	1.6	**Yes**
Family's Current Health Insurance					
Medicaid	45.9	36.9	4.4	8.2*	No
Private	50.6	52.8	-7.9*	-8.7**	No
Any (Medicaid or private)	83.7	79.5	-3.1	-1.3	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	38.6	37.9	-8.7**	-3.5	No
Survey resp's children cont. covered	52.4	50.9	-7.3	0.0	No
Sample Size			857	640	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.2a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY NUMBER OF PERSONS ON CASE AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	< 3 Persons	≥ 3 Persons	< 3 Persons	≥ 3 Persons	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	38.1	40.5	1.5	-5.1	No
Employed part-time:					
1 to 19 hours	2.4	2.8	1.0	1.2	No
20 to 29 hours	4.6	5.7	-0.7	-1.5	No
Employed full-time:					
30 to 34 hours	6.6	8.3	-2.8	0.9	No
35 to 44 hours	33.6	35.3	-5.7	3.9	No
45 or more hours	14.6	7.1	7.1**	0.4	**Yes**
Hourly Wage on Primary Job (%)					
Not employed	38.1	40.5	1.5	-5.1	No
Employed:					
Wage less than $5	1.8	3.1	-3.3	-0.4	No
Wage $5 to $6.99	16.9	17.8	-4.0	3.7	No
Wage $7 to $8.99	19.7	22.8	7.9	2.3	No
Wage $9 or more	22.0	14.7	-2.8	-0.3	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$907	$796	$54	$53	No
All household members	$1,223	$1,020	$4	$56	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,527	$1,445	-$3	$75	No
Income is below poverty (%)	42.1	56.6	6.7	-0.7	No
Sample Size			386	1,027	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.2b

SELECTED NONECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY NUMBER OF PERSONS ON CASE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	< 3 Persons	≥ 3 Persons	< 3 Persons	≥ 3 Persons	Significant Differ?[a]
Current Marital Status					
Never married	43.9	29.1	-5.2	-2.0	No
Married and living with spouse	23.5	25.7	-4.0	-1.7	No
Separated or divorced	30.3	42.6	2.1	4.8	No
Widowed	2.3	2.6	1.4	1.3	No
Family Stability					
Birth of child following RA	36.1	22.7	2.6	-1.0	No
Minor child is in foster care	1.5	2.4	-0.7	-2.1	No
Access to Transportation					
Neighborhood served by local bus	70.8	71.2	-4.6	3.7	No
Possesses driver's license	78.1	76.4	-1.4	4.0	No
Owns/has access to a working car	85.9	83.4	1.8	4.0	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	54.7	56.0	8.3	4.0	No
Signed FIA or employability plan	39.5	42.7	11.2**	9.9***	No
Assigned to LBP	16.2	16.8	7.4**	5.0**	No
Family's Current Health Insurance					
Medicaid	43.3	53.7	3.4	0.7	No
Private	49.4	35.5	0.4	-1.2	No
Any (Medicaid or private)	82.3	79.5	1.7	0.1	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	40.7	44.5	-0.1	-4.2	No
Survey resp's children cont. covered	58.7	55.4	0.6	2.3	No
Sample Size			386	1,027	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.2c

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY NUMBER OF PERSONS ON CASE AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	< 3 Persons	≥ 3 Persons	< 3 Persons	≥ 3 Persons	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	34.0	34.4	3.0	-1.3	No
Employed part-time					
1 to 19 hours	4.1	2.7	-4.7	0.4	No
20 to 29 hours	8.9	6.9	2.3	0.5	No
Employed full-time					
30 to 34 hours	7.5	5.4	0.2	0.6	No
35 to 44 hours	34.6	39.1	-0.6	-1.5	No
45 or more hours	10.7	11.5	0.0	1.7	No
Hourly Wage on Primary Job (%)					
Not employed	34.0	34.4	3.0	-1.3	No
Employed					
Wage less than $5	5.2	3.6	2.7	0.7	No
Wage $5 to $6.99	17.0	15.0	-2.1	0.8	No
Wage $7 to $8.99	22.8	22.6	1.6	0.9	No
Wage $9 or more	19.8	23.3	-5.1	-1.6	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$907	$1,017	-$163*	-$23	No
All household members	$1,361	$1,554	-$434***	-$23	**Yes**
Household Income and Poverty					
Income, including Food Stamps ($)	$1,657	$1,866	-$432	-$42	**Yes**
Income is below poverty (%)	39.9	38.2	7.9	-3.7	**Yes**
Sample Size			614	923	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.2d

SELECTED NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY NUMBER OF PERSONS ON CASE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	< 3 Persons	≥ 3 Persons	< 3 Persons	≥ 3 Persons	Significant Differ?[a]
Current Marital Status					
Never married	43.7	19.8	11.4***	2.5	**Yes**
Married and living with spouse	25.5	41.7	-11.6**	0.4	**Yes**
Separated or divorced	26.6	37.0	-0.4	-3.3	No
Widowed	3.8	1.5	0.2	0.5	No
Family Stability					
Birth of child following RA	35.5	35.5	-3.8	2.5	No
Minor child is in foster care	1.8	3.3	0.9	2.7**	No
Access to Transportation					
Neighborhood served by local bus	63.7	65.0	-9.7**	-2.0	No
Possesses driver's license	80.5	78.7	-2.5	-5.7**	No
Owns/has access to a working car	89.1	89.2	1.8	-3.1	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	41.2	37.5	7.0	7.4**	No
Signed FIA or employability plan	29.8	24.2	9.0**	7.8***	No
Assigned to LBP	12.5	9.3	9.7***	2.2	**Yes**
Family's Current Health Insurance					
Medicaid	43.5	40.4	10.1**	2.4	No
Private	50.8	51.0	-4.6	-10.7***	No
Any (Medicaid or private)	81.0	81.1	-0.9	-3.8	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	38.6	37.7	-10.0**	-4.0	No
Survey resp's children cont. covered	52.0	50.1	-12.4**	2.1	**Yes**
Sample Size			614	923	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.3a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	46.6	35.0	0.7	-4.3	No
Employed part-time					
1 to 19 hours	4.1	1.7	2.2	0.9	No
20 to 29 hours	5.6	5.2	-2.2	-1.2	No
Employed full-time					
30 to 34 hours	7.1	8.7	-0.3	-0.4	No
35 to 44 hours	28.1	39.4	-4.5	4.5	No
45 or more hours	8.2	9.7	4.0**	0.3	No
Hourly Wage on Primary Job (%)					
Not employed	46.6	35.0	0.7	-4.3	No
Employed					
Wage less than $5	2.0	2.9	-1.4	-1.9	No
Wage $5 to $6.99	18.1	17.9	2.3	1.2	No
Wage $7 to $8.99	17.7	25.2	-0.6	6.4*	No
Wage $9 or more	14.4	17.8	-0.9	-1.6	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$714	$895	$12	$39	No
All household members	$1,025	$1,121	$108	-$19	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,460	$1,467	$151**	-$27	No
Income is below poverty (%)	53.9	53.4	-1.9	6.4	No
Sample Size			618	737	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.3b

SELECTED NONECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Current Marital Status					
Never married	36.3	31.3	-1.4	-3.8	No
Married and living with spouse	24.6	24.9	-0.3	-3.8	No
Separated or divorced	36.9	41.5	0.6	5.9	No
Widowed	2.2	2.3	1.0	1.7**	No
Family Stability					
Birth of child following RA	27.9	26.5	0.2	1.5	No
Minor child is in foster care	3.3	1.4	-1.6	-1.7	No
Access to Transportation					
Neighborhood served by local bus	69.3	72.7	-0.4	4.2	No
Possesses driver's license	74.9	79.0	5.5	-1.5	No
Owns/has access to a working car	85.5	82.9	4.0	2.3	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	58.8	56.1	4.9	4.7	No
Signed FIA or employability plan	44.1	42.2	9.3**	11.6***	No
Assigned to LBP	17.6	16.3	5.9*	5.0*	No
Family's Current Health Insurance					
Medicaid	54.7	46.7	5.6	-2.0	No
Private	35.8	40.2	-1.3	-0.6	No
Any (Medicaid or private)	81.7	78.5	4.8	-2.5	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	47.0	39.2	3.9	-7.9*	**Yes**
Survey resp's children cont. covered	55.2	54.7	-0.4	-0.1	No
Sample Size			618	737	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.3c

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	43.2	29.4	-1.6	2.4	No
Employed part-time					
1 to 19 hours	3.1	3.4	1.4	-4.2	No
20 to 29 hours	7.6	8.2	0.2	1.7	No
Employed full-time					
30 to 34 hours	6.4	6.0	2.4	-1.1	**Yes**
35 to 44 hours	32.8	39.7	1.8	-2.6	No
45 or more hours	6.8	13.1	-4.0	4.2*	**Yes**
Hourly Wage on Primary Job (%)					
Not employed	43.2	29.4	-1.6	2.4	No
Employed					
Wage less than $5	4.3	3.9	2.4	0.7	No
Wage $5 to $6.99	14.9	16.5	1.6	-3.1	No
Wage $7 to $8.99	19.3	24.2	-2.6	3.0	No
Wage $9 or more	17.5	24.6	0.0	-3.3	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$787	$1,056	-$45	-$76	No
All household members	$1,194	$1,583	-$180	-$214*	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,560	$1,865	$145	-$248**	No
Income is below poverty (%)	51.0	33.9	1.3	3.3	No
Sample Size			462	958	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.3d

SELECTED NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Current Marital Status					
Never married	33.0	29.0	6.7*	6.7**	No
Married and living with spouse	31.0	35.6	-4.5	-5.3	No
Separated or divorced	33.3	33.4	-2.5	-1.6	No
Widowed	2.7	2.1	0.4	0.2	No
Family Stability					
Birth of child following RA	38.3	36.5	0.5	0.2	No
Minor child is in foster care	1.7	2.4	0.7	1.7**	No
Access to Transportation					
Neighborhood served by local bus	65.8	62.7	0.6	-9.3***	**Yes**
Possesses driver's license	69.4	84.8	-5.7	-3.8	No
Owns/has access to a working car	81.7	93.4	-3.9	0.9	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	44.7	37.6	9.6*	6.1	No
Signed FIA or employability plan	28.4	27.9	10.1**	7.9**	No
Assigned to LBP	12.6	9.8	7.2**	5.4***	No
Family's Current Health Insurance					
Medicaid	47.2	39.2	3.7	8.1**	No
Private	42.7	54.5	-2.7	-10.8***	No
Any (Medicaid or private)	79.4	82.6	-0.9	-2.8	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	41.4	35.4	-6.0	-6.8*	No
Survey resp's children cont. covered	52.8	49.8	-7.1	-3.8	No
Sample Size			462	958	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.4a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY RACE AND ETHNICITY OF CASE HEAD

	Treatment Outcome		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	38.2	44.8	-1.4	-8.9	No
Employed part-time					
1 to 19 hours	2.6	3.0	0.9	2.0	No
20 to 29 hours	5.8	4.2	-0.5	-4.5	No
Employed full-time					
30 to 34 hours	8.1	6.6	-0.8	2.1	No
35 to 44 hours	34.9	36.3	-0.4	8.0	No
45 or more hours	10.1	4.5	2.1	1.5	No
Hourly Wage on Primary Job (%)					
Not employed	38.2	44.8	-1.4	-8.9	No
Employed					
Wage less than $5	2.7	2.8	-1.8	0.6	No
Wage $5 to $6.99	18.6	14.6	1.2	3.2	No
Wage $7 to $8.99	23.5	16.9	4.7*	0.4	No
Wage $9 or more	14.4	17.8	-0.9	-1.6	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$846	$759	$24	$128	No
All household members	$1,156	$805	$40	$57	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,535	$1,222	$45	$78	No
Income is below poverty (%)	49.8	63.8	0.8	4.1	No
Sample Size			1,103	294	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.4b

SELECTED NONECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY RACE AND ETHNICITY OF CASE HEAD
(Percentages)

	Treatment Outcome		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Current Marital Status					
Never married	28.4	50.1	-3.4	-2.1	No
Married and living with spouse	27.5	15.6	-1.9	-4.6	No
Separated or divorced	41.8	30.8	3.5	7.3	No
Widowed	2.3	3.6	1.8***	-0.5	No
Family Stability					
Birth of child following RA	26.4	27.3	-0.3	0.7	No
Minor child is in foster care	2.3	2.0	-1.8	-1.1	No
Access to Transportation					
Neighborhood served by local bus	66.8	86.6	1.4	2.6	No
Possesses driver's license	79.2	69.1	0.7	8.4	No
Owns/has access to a working car	87.0	74.7	2.7	7.4	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	55.8	55.5	3.9	9.2	No
Signed FIA or employability plan	42.6	39.5	10.3***	9.1	No
Assigned to LBP	16.2	17.9	5.4**	5.5	No
Family's Current Health Insurance					
Medicaid	49.2	56.5	1.8	0.9	No
Private	40.4	35.3	-2.0	3.0	No
Any (Medicaid or private)	79.8	82.0	-0.6	5.0	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	40.1	56.1	-4.4	1.6	No
Survey resp's children cont. covered	52.5	71.6	-2.8	12.0***	**Yes**
Sample Size			1,103	294	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.4c

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY RACE AND ETHNICITY OF CASE HEAD

	Treatment Outcome		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	33.5	39.8	-1.0	10.6	No
Employed part-time					
1 to 19 hours	3.3	1.5	-1.9	-0.8	No
20 to 29 hours	7.9	7.0	1.4	3.2	No
Employed full-time					
30 to 34 hours	5.6	8.2	-0.9	5.7*	**Yes**
35 to 44 hours	37.1	38.6	0.2	-10.9	No
45 or more hours	12.6	4.4	2.6	-8.3*	**Yes**
Hourly Wage on Primary Job (%)					
Not employed	33.5	39.8	-1.0	10.6	No
Employed					
Wage less than $5	4.5	2.6	1.6	2.5*	No
Wage $5 to $6.99	15.9	14.1	-1.8	-1.3	No
Wage $7 to $8.99	24.0	23.6	4.4*	-11.4*	**Yes**
Wage $9 or more	20.1	18.9	-3.7	-0.4	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$969	$882	-$37	-397**	**Yes**
All household members	$1,479	$1,321	-$206**	-$209	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,796	$1,659	-$212**	-$141	No
Income is below poverty (%)	36.7	54.3	2.1	-5.0	No
Sample Size			1,173	231	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.4d

SELECTED NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY RACE AND ETHNICITY OF CASE HEAD
(Percentages)

	Treatment Outcome		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Current Marital Status					
Never married	26.8	48.5	5.0*	10.6*	No
Married and living with spouse	36.3	25.3	-2.9	-8.7	No
Separated or divorced	34.1	25.3	-3.1	-2.7	No
Widowed	2.7	0.9	0.8	0.8	No
Family Stability					
Birth of child following RA	35.8	38.9	-1.7	8.2	No
Minor child is in foster care	2.9	2.1	2.2**	1.9	No
Access to Transportation					
Neighborhood served by local bus	59.8	82.5	-7.4	3.7	No
Possesses driver's license	82.5	62.7	-1.8	-15.6**	**Yes**
Owns/has access to a working car	92.6	72.3	1.2	-13.4**	**Yes**
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	38.5	43.1	5.3	12.1*	No
Signed FIA or employability plan	27.2	30.3	7.0**	14.6**	No
Assigned to LBP	10.7	9.5	5.3***	2.7	No
Family's Current Health Insurance					
Medicaid	42.4	46.4	6.1*	1.9	No
Private	53.7	38.7	-6.5*	-12.2*	No
Any (Medicaid or private)	83.3	77.6	-2.1	-0.4	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	37.8	42.0	-5.1	-8.4	No
Survey resp's children cont. covered	52.0	53.1	-4.9	-3.2	No
Sample Size			1,173	231	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.5a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY COUNTY OF RESIDENCE AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	Urban County	Rural County	Urban County	Rural County	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	40.7	34.0	-2.2	-10.2	No
Employed part-time					
1 to 19 hours	2.5	3.9	0.9	2.5	No
20 to 29 hours	5.1	7.1	-1.9	2.0	No
Employed full-time					
30 to 34 hours	7.3	11.0	-0.4	1.9	No
35 to 44 hours	34.9	34.3	1.1	1.8	No
45 or more hours	9.2	9.2	2.3	2.1	No
Hourly Wage on Primary Job (%)					
Not employed	40.7	34.0	-2.2	-10.2	No
Employed					
Wage less than $5	2.9	1.4	-0.6	-5.0*	No
Wage $5 to $6.99	15.6	30.8	0.2	10.0	No
Wage $7 to $8.99	22.3	19.3	3.7	4.8	No
Wage $9 or more	17.2	13.8	-1.2	0.9	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$825	$837	$35	$166	No
All household members	$1,060	$1,183	$0	$306**	**Yes**
Household Income and Poverty					
Income, including Food Stamps ($)	$1,463	$1,495	$25	$243**	No
Income is below poverty (%)	52.5	53.3	3.0	-10.0	No
Sample Size			1,191	222	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.5b

SELECTED NONECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY COUNTY OF RESIDENCE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	Urban County	Rural County	Urban County	Rural County	Significant Differ?[a]
Current Marital Status					
Never married	34.0	28.0	-3.7	2.4	No
Married and living with spouse	23.4	35.6	-3.5	4.5	No
Separated or divorced	40.0	34.4	6.1**	-8.7	**Yes**
Widowed	2.6	2.0	1.2	1.8	No
Family Stability					
Birth of child following RA	26.5	25.9	1.4	-8.9	No
Minor child is in foster care	2.2	2.0	-1.4	-3.1	No
Access to Transportation					
Neighborhood served by local bus	72.9	60.2	3.6	-12.3**	**Yes**
Possesses driver's license	76.4	80.3	3.1	-1.4	No
Owns/has access to a working car	83.6	87.1	3.5	2.8	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	55.3	57.7	7.0**	-6.3	**Yes**
Signed FIA or employability plan	41.1	46.3	10.2***	10.2	No
Assigned to LBP	16.4	18.6	5.3**	8.5*	No
Family's Current Health Insurance					
Medicaid	51.8	44.8	3.8	-13.9**	**Yes**
Private	38.3	45.7	-1.8	5.7	No
Any (Medicaid or private)	79.7	83.8	0.4	1.1	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	43.6	42.0	-3.4	-0.8	No
Survey resp's children cont. covered	56.9	51.9	1.3	-7.8	No
Sample Size			1,191	222	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.5c

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY COUNTY OF RESIDENCE AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	Urban County	Rural County	Urban County	Rural County	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	34.7	31.1	0.1	3.4	No
Employed part-time					
1 to 19 hours	3.2	4.0	-2.2	1.2	No
20 to 29 hours	7.7	8.1	1.5	-0.5	No
Employed full-time					
30 to 34 hours	6.0	8.5	0.9	-2.5	No
35 to 44 hours	37.4	35.1	-0.9	-4.0	No
45 or more hours	10.9	13.1	0.6	3.2	No
Hourly Wage on Primary Job (%)					
Not employed	34.7	31.1	0.1	3.4	No
Employed:					
Wage less than $5	4.1	5.3	1.7	0.3	No
Wage $5 to $6.99	13.7	29.5	-1.5	6.6	No
Wage $7 to $8.99	23.5	17.6	2.5	-7.4	No
Wage $9 or more	22.7	15.3	-3.0	-4.0	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$982	$889	-$83	-$92	No
All household members	$1,472	$1,446	-$224**	-$61	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,781	$1,741	-$225**	-$133	No
Income is below poverty (%)	38.5	41.6	0.9	5.8	No
Sample Size			1,299	239	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.5d

SELECTED NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY COUNTY OF RESIDENCE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	Urban County	Rural County	Urban County	Rural County	Significant Differ?[a]
Current Marital Status					
Never married	31.0	25.7	6.6**	5.4	No
Married and living with spouse	34.7	34.5	-5.0	-3.6	No
Separated or divorced	31.5	38.0	-2.4	-0.9	No
Widowed	2.6	1.9	0.6	-0.9	No
Family Stability					
Birth of child following RA	35.9	32.3	-1.3	5.9	No
Minor child is in foster care	2.5	3.6	1.6**	3.6**	No
Access to Transportation					
Neighborhood served by local bus	66.5	51.8	-4.2	-12.1*	No
Possesses driver's license	79.1	81.5	-4.7*	-1.9	No
Owns/has access to a working car	88.9	90.3	-1.2	-0.1	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	39.1	39.8	6.6**	12.4*	No
Signed FIA or employability plan	26.3	29.6	7.9***	12.6**	No
Assigned to LBP	10.8	10.1	4.8***	8.8***	No
Family's Current Health Insurance					
Medicaid	40.4	49.9	4.5	12.8*	No
Private	50.8	50.8	-8.4***	-7.5	No
Any (Medicaid or private)	79.8	88.9	-3.8	5.3	**Yes**
Health Insurance Coverage Since RA					
Survey resp. continuously covered	38.5	34.9	-8.3	3.3	No
Survey resp's children cont. covered	49.5	60.8	-6.4*	12.7*	**Yes**
Sample Size			1,299	239	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.6a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	39.9	39.5	-2.0	-6.0	No
Employed part-time					
1 to 19 hours	2.5	3.6	1.2	1.1	No
20 to 29 hours	5.6	6.5	-3.2*	5.2**	**Yes**
Employed full-time					
30 to 34 hours	9.1	4.1	0.4	-1.9	No
35 to 44 hours	33.6	38.4	0.4	3.7	No
45 or more hours	9.0	7.9	2.8	-1.7	No
Hourly Wage on Primary Job (%)					
Not employed	39.9	39.5	-2.0	-6.0	No
Employed					
Wage less than $5	2.9	1.5	-1.0	-2.4	No
Wage $5 to $6.99	17.8	19.8	0.8	6.9	No
Wage $7 to $8.99	22.3	22.6	3.7	0.9	No
Wage $9 or more	16.1	15.2	-1.6	1.2	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$811	$806	$36	$46	No
All household members	$1,053	$1,160	$44	$6	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,431	$1,610	$49	$69	No
Income is below poverty (%)	54.7	50.6	5.4	-5.1	No
Sample Size			1,042	234	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.6b

SELECTED NONECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Current Marital Status					
Never married	41.3	3.8	-2.7	0.1	No
Married and living with spouse	20.4	42.1	-3.8	0.1	No
Separated or divorced	36.5	49.8	5.9**	-4.5	No
Widowed	1.8	4.2	0.5	4.3**	**Yes**
Family Stability					
Birth of child following RA	29.4	20.4	0.3	1.2	No
Minor child is in foster care	2.0	2.4	-2.4*	-0.2	No
Access to Transportation					
Neighborhood served by local bus	73.0	65.2	2.5	3.7	No
Possesses driver's license	77.1	76.0	3.5	-2.7	No
Owns/has access to a working car	83.7	88.0	2.0	12.3**	**Yes**
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	61.0	45.8	5.9*	0.0	No
Signed FIA or employability plan	45.6	34.5	11.3***	4.2	No
Assigned to LBP	17.6	16.8	4.7**	8.6*	No
Family's Current Health Insurance					
Medicaid	52.2	49.3	2.3	2.2	No
Private	36.1	41.3	-2.1	1.9	No
Any (Medicaid or private)	79.9	80.7	1.4	0.7	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	42.7	39.2	-4.1	-1.9	No
Survey resp's children cont. covered	54.0	56.3	-1.7	3.9	No
Sample Size			1,042	234	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.6c

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	32.7	34.7	4.9	-9.7*	**Yes**
Employed part-time					
1 to 19 hours	3.6	2.4	-2.2	-1.5	No
20 to 29 hours	8.6	7.7	-0.2	5.0**	**Yes**
Employed full-time					
30 to 34 hours	6.5	5.5	-0.4	-0.1	No
35 to 44 hours	39.2	37.3	-1.4	4.4	No
45 or more hours	9.3	12.3	-0.6	2.5	No
Hourly Wage on Primary Job (%)					
Not employed	32.7	34.7	4.9	-9.7*	**Yes**
Employed					
Wage less than $5	4.4	3.1	0.4	2.5*	No
Wage $5 to $6.99	17.8	14.0	-4.2	0.4	No
Wage $7 to $8.99	25.4	24.8	2.1	7.1	No
Wage $9 or more	18.3	22.8	-3.9	0.1	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$896	$1,043	-$105	$114	No
All household members	$1,330	$1,617	-$301***	$39	**Yes**
Household Income and Poverty					
Income, including Food Stamps ($)	$1,654	$1,941	-246**	$32	No
Income is below poverty (%)	40.9	35.4	3.3	-5.9	No
Sample Size			844	394	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.6d

SELECTED NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Current Marital Status					
Never married	42.0	3.8	7.7**	3.2*	No
Married and living with spouse	24.2	57.6	-8.4**	2.7	**Yes**
Separated or divorced	31.3	36.8	-0.5	-5.3	No
Widowed	2.4	1.8	1.3	-0.6	No
Family Stability					
Birth of child following RA	41.4	31.1	-0.2	-1.4	No
Minor child is in foster care	2.0	1.4	0.9	1.4**	No
Access to Transportation					
Neighborhood served by local bus	65.3	59.7	-6.4*	-7.4	No
Possesses driver's license	79.2	82.1	-2.4	-7.8**	No
Owns/has access to a working car	88.4	93.9	-1.8	1.6	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	44.9	31.4	8.3**	-0.1	No
Signed FIA or employability plan	32.4	22.5	10.9***	3.4	No
Assigned to LBP	12.5	6.1	7.4***	-1.1	**Yes**
Family's Current Health Insurance					
Medicaid	44.5	39.5	7.1*	5.4	No
Private	48.8	59.2	-9.8**	-1.9	No
Any (Medicaid or private)	82.1	86.6	-2.1	1.7	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	35.6	36.2	-9.5**	-2.8	No
Survey resp's children cont. covered	52.0	50.1	-9.3**	9.1	**Yes**
Sample Size			844	394	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.7a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY NUMBER OF CHILDREN ON CASE AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	< 3 Children	≥ 3 Children	< 3 Children	≥ 3 Children	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	38.5	43.4	-4.3	-0.6	No
Employed part-time					
1 to 19 hours	2.6	2.8	1.2	0.9	No
20 to 29 hours	5.3	5.6	-1.7	-0.5	No
Employed full-time					
30 to 34 hours	7.5	8.8	-0.5	0.9	No
35 to 44 hours	35.8	32.2	1.3	1.1	No
45 or more hours	10.0	7.0	3.6**	-1.3	No
Hourly Wage on Primary Job (%)					
Not employed	38.5	43.4	-4.3	-0.6	No
Employed					
Wage less than $5	2.9	2.4	-1.3	-0.8	No
Wage $5 to $6.99	17.4	18.4	0.9	3.5	No
Wage $7 to $8.99	22.2	21.0	5.8*	-1.7	No
Wage $9 or more	17.8	13.7	-1.5	0.4	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$849	$761	$63	$23	No
All household members	$1,087	$1,056	$21	$120	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,438	$1,567	$37	$134	No
Income is below poverty (%)	49.6	59.6	3.1	-4.3	No
Sample Size			1,040	373	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.7b

SELECTED NONECONOMIC OUTCOMES FOR ONGOING FIP CASES, BY NUMBER OF CHILDREN ON CASE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	< 3 Children	≥ 3 Children	< 3 Children	≥ 3 Children	Significant Differ?[a]
Current Marital Status					
Never married	34.7	28.8	-4.1	0.1	No
Married and living with spouse	24.4	27.1	-1.2	-5.5	No
Separated or divorced	38.1	42.2	3.6	5.1	No
Widowed	2.8	1.9	1.7*	0.2	No
Family Stability					
Birth of child following RA	29.3	18.3	1.7	-4.7	No
Minor child is in foster care	1.6	3.9	-2.2*	-0.2	No
Access to Transportation					
Neighborhood served by local bus	70.4	73.5	2.1	-0.1	No
Possesses driver's license	78.8	71.4	2.4	2.9	No
Owns/has access to a working car	84.6	82.4	1.7	7.9	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	54.6	58.0	5.0	5.3	No
Signed FIA or employability plan	40.9	44.3	11.8***	5.8	No
Assigned to LBP	15.7	19.4	3.9*	10.7***	No
Family's Current Health Insurance					
Medicaid	49.1	55.4	1.5	0.3	No
Private health insurance	41.0	34.8	-2.2	3.6	No
Any (Medicaid or private)	81.0	78.1	0.6	-0.1	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	40.9	50.7	-4.3	0.9	No
Survey resp's children cont. covered	55.6	58.1	-0.5	1.5	No
Sample Size			1,040	373	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.7c

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY NUMBER OF CHILDREN ON CASE AT RANDOM ASSIGNMENT

	Treatment Outcome		Impact		
	< 3 Children	≥ 3 Children	< 3 Children	≥ 3 Children	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	32.8	39.6	0.6	0.8	No
Employed part-time					
1 to 19 hours	3.5	2.9	-2.7	1.7	No
20 to 29 hours	7.8	7.3	0.3	4.8**	No
Employed full-time					
30 to 34 hours	7.5	2.1	1.7	-4.3*	**Yes**
35 to 44 hours	37.4	35.8	0.2	-6.6	No
45 or more hours	10.9	12.1	0.3	3.5	No
Hourly Wage on Primary Job (%)					
Not employed	32.8	39.6	0.6	0.8	No
Employed					
Wage less than $5	4.9	1.8	1.9	0.1	No
Wage $5 to $6.99	15.8	16.0	-2.5	7.5*	**Yes**
Wage $7 to $8.99	24.0	17.9	3.8	-8.8*	**Yes**
Wage $9 or more	21.5	22.4	-3.9	-0.3	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$981	$915	-$81	-$105	No
All household members	$1,478	$1,436	-214	-154	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,749	$1,882	-$246***	-$69	No
Income is below poverty (%)	37.3	45.1	1.1	3.2	No
Sample Size			1,197	341	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.7d

SELECTED NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES, BY NUMBER OF CHILDREN ON CASE AT RANDOM ASSIGNMENT
(Percentages)

	Treatment Outcome		Impact		
	< 3 Children	≥ 3 Children	< 3 Children	≥ 3 Children	Significant Differ?[a]
Current Marital Status					
Never married	34.2	15.4	7.4***	2.6	No
Married and living with spouse	34.4	35.7	-3.0	-11.8**	No
Separated or divorced	28.2	48.4	-5.2*	9.7*	**Yes**
Widowed	3.0	0.5	0.6	-0.4	No
Family Stability					
Birth of child following RA	38.5	23.3	-2.3	6.4	No
Minor child is in foster care	2.6	3.0	1.6*	2.9**	No
Access to Transportation					
Neighborhood served by local bus	64.1	65.9	-5.1	-5.9	No
Possesses driver's license	80.6	74.9	-4.1	-5.6	No
Owns/has access to a working car	89.7	87.0	-0.1	-4.5	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	39.1	39.7	7.3**	7.5	No
Signed FIA or employability plan	26.8	27.1	8.4***	9.7*	No
Assigned to LBP	11.8	5.9	7.1***	-1.6	**Yes**
Family's Current Health Insurance					
Medicaid	40.1	48.2	5.1	8.5	No
Private	50.8	50.9	-8.2**	-8.1	No
Any (Medicaid or private)	80.0	85.3	-3.0	-0.3	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	37.2	41.4	-7.1**	-4.8	No
Survey resp's children cont. covered	50.1	53.9	-8.2**	11.8*	**Yes**
Sample Size			1,197	341	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.8a

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES, BY APPLICATION COHORT

	Treatment Outcome		Impact		
	Cohort 1	Cohorts 2 and 3	Cohort 1	Cohorts 2 and 3	Significant Differ?[a]
Hours per Week on Primary Job (%)					
Not employed	35.1	32.8	0.7	0.4	No
Employed part-time					
1 to 19 hours	4.0	2.5	-2.8	-0.5	No
20 to 29 hours	7.0	8.7	0.4	2.3	No
Employed full-time					
30 to 34 hours	5.4	7.6	0.8	0.2	No
35 to 44 hours	36.6	37.7	-1.6	-0.9	No
45 or more hours	11.8	10.5	3.2	-1.7	No
Hourly Wage on Primary Job (%)					
Not employed	35.1	32.8	0.7	0.4	No
Employed					
Wage less than $5	3.6	5.2	1.9	1.1	No
Wage $5 to $6.99	14.5	17.5	-2.9	2.7	No
Wage $7 to $8.99	22.5	22.9	1.2	1.2	No
Wage $9 or more	22.9	20.2	-1.2	-5.7*	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$991	$941	-$32	-$151*	No
All household members	$1,518	$1,407	-$194	-$214*	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,816	$1,723	-$226*	-$196*	No
Income is below poverty (%)	38.9	39.0	4.7	-2.6	No
Sample Size			818	720	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT D.8b

SELECTED NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY APPLICATION COHORT
(Percentages)

	Treatment Outcome		Impact		
	Cohort 1	Cohorts 2 and 3	Cohort 1	Cohorts 2 and 3	Significant Differ?[a]
Current Marital Status					
Never married	30.8	29.7	8.7***	3.7	No
Married and living with spouse	34.5	34.8	-10.5**	2.0	**Yes**
Separated or divorced	31.9	33.0	0.4	-5.2	No
Widowed	2.8	2.2	1.5	-0.9	No
Family Stability					
Birth of child following RA	37.9	32.2	-6.4*	7.0*	**Yes**
Minor child is in foster care	2.8	2.5	2.5***	1.2	No
Access to Transportation					
Neighborhood served by local bus	62.0	67.6	-6.9*	-3.3	No
Possesses driver's license	77.2	82.1	-7.8**	-0.1	**Yes**
Owns/has access to a working car	88.8	89.5	-1.5	-0.4	No
Participation in PROMISE JOBS Since Random Assignment					
Participated in a PJ activity	38.7	39.8	3.3	12.2***	No
Signed FIA or employability plan	26.1	27.7	6.1	11.6***	No
Assigned to LBP	9.8	11.8	5.1**	5.7**	No
Family's Current Health Insurance					
Medicaid	40.6	43.1	5.9	5.5	No
Private	51.4	50.9	-6.9	-9.9**	No
Any (Medicaid or private)	80.6	81.7	-2.5	-2.5	No
Health Insurance Coverage Since RA					
Survey resp. continuously covered	33.0	44.3	-12.0***	0.0	**Yes**
Survey resp's children cont. covered	47.0	55.7	-8.5**	1.7	**Yes**
Sample Size			818	720	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

APPENDIX E

SELECTION AND CONSTRUCTION OF MEASURES USED IN THE IOWA CHILD IMPACT STUDY

APPENDIX E

SELECTION AND CONSTRUCTION OF MEASURES IN THE IOWA CHILD IMPACT STUDY

In the Iowa Child Impact Study, we sought to measure the impacts of Iowa's welfare reform program on the well-being of families and children. Outcome measures for the study were selected on the basis of (1) how we expected key provisions of the program to affect families and children and (2) important research questions that Iowa's Department of Human Services (DHS) wanted answered. Mathematica Policy Research (MPR) worked closely with Iowa DHS to select the measures.

Though part of the full evaluation of welfare reform in Iowa, the Child Impact Study is also part of the Project on State-Level Child Outcomes, which includes five studies, funded by the Administration for Children and Families (ACF), of the impacts of state welfare reform waiver programs on the well-being of families and children.[1] To derive the greatest value from these studies, ACF and the Assistant Secretary for Planning and Evaluation (ASPE) supported joint work by the three research firms conducting the five child impact studies: MPR, Manpower Demonstration Research Corporation, and Abt Associates. This work was coordinated by Child Trends. All four firms collaborated throughout the full life of the project to ensure that samples of children and families, domains of measurement and the measures themselves, questionnaires, and construction of outcome measures shared significant elements such that comparative analyses could be supported.

A. SELECTION OF MEASURES

Our approach to selecting measures of child and family outcomes was based on several guiding principles:

- ***Interest to State Welfare Policymakers.*** Early planning work for the study involved 12 states and focused on identifying the major child and family outcomes that state welfare officials believed would be affected by welfare reform policies.
- ***Relevance to Key Hypotheses.*** The measures reflect key areas of family and child well-being, representing hypotheses about the direct effects of or pathways by which welfare reform could affect child and family well-being.
- ***Appropriateness to Children's Age and Developmental Level.*** Measures are appropriate across the full "middle childhood" age range (ages 5 to 12).
- ***Appropriateness for the Iowa FIP Population.*** Many of the families in the sample have both low income and education levels. We therefore chose measures that are

[1]Reports based on the Florida and Minnesota studies are available in Bloom et al. (2000) and Knox et al. (2000).

appropriate to the expected reading and comprehension levels of parents and that had been used before in studies of low-income families.

- ***Adequate Psychometric Properties.*** The measures have an adequately demonstrated reliability and validity for children from low-income families. (In general, the measures have a demonstrated internal consistency reliability, or coefficient alpha of .70 or higher, a level generally accepted as an adequate demonstration of reliability).
- ***Prior Use in Large-Scale Surveys and Intervention Evaluations.*** To maximize the comparability of child impact study findings with findings from other national evaluations of welfare demonstrations, we chose many measures that were used in other studies and that had demonstrated ease of administration and adequate psychometric properties. In particular, we used several measures from the National Longitudinal Survey of Youth (NLSY) and the National Survey of America's Families (NSAF).
- ***Low Cost and Burden.*** We chose measures that posed minimal burden on the parents and children and that could be obtained in a one-hour home visit.

The measures and the variables constructed from them are briefly described in Chapter V of this report. Data on nearly all measures of family and child well-being were obtained by parental report using an in-home survey.

B. PSYCHOMETRIC PROPERTIES OF CONSTRUCTS USED IN THE ANALYSIS OF IMPACTS

To be included in the impact analyses, constructed variables had to meet the following criteria:

- ***Sufficient Data at the Item Level.*** If 25 percent or more of the items that went into a constructed variable were missing for a particular individual, we did not construct the variable for that individual. If the individual was missing fewer than 25 percent of the items needed for a constructed variable, we imputed values based on the mean of the nonmissing items. The proportion of scores that required imputation was fairly low—if a parent began the items for a given a measure, they generally completed all of the items.
- ***Adequate Distribution of Scores.*** For our constructed variables, we checked the mean, standard deviation, skewness, and kurtosis to determine whether the variables had a normal distribution and seemed to have a similar distribution to that found in other studies using the same measure. In general, we found that our distributions met the criteria for normality, with skewness and kurtosis levels within appropriate ranges. The distributions were similar to those in other studies of low-income families.

- ***Adequate Internal Consistency Reliability.*** We included in the impact analysis only those measures with internal consistency reliability of .60 and above.[2]

To prepare our data for analysis and to ensure comparability between our measures and those used in other states in the Project of State-Level Child Outcomes, we constructed subscales and measures using methods developed in collaboration with other researchers participating in the Project on State-Level Child Outcomes. In some instances, these methods failed to produce a measure with adequate internal consistency reliability in the Iowa FIP sample. At other times, because of slight state-to-state differences in child impact survey questionnaires, this procedure for constructing a common measure failed to produce a measure that made full use of the items we had available for the scale. Therefore, we also consulted the literature and scored responses to multiple-item measures as they had been scored by the author of the measure or in studies using that measure.

For factor analyses, we used exploratory factor analysis techniques with Varimax rotation to create variables from multi-item questionnaire and observational measures. All factor analyses were conducted by using only nonmissing child- and parent-level data. We used the following criteria to judge the adequacy of our factor analysis results:

- Items within factors made sense conceptually
- The solution yielded internal consistency reliability (coefficient alpha) of .65 or greater within each factor
- The solution minimized the number of items with appreciable loadings (.35 and greater) on multiple factors
- The solution minimized the number of items that did not load appreciably on any factor

Exhibit E.1 provides key psychometric data for the main constructed variables in our analysis. The exhibit is organized by measurement domain. We included the sample size, the possible range for each variable, the actual range we found in our sample, the mean, standard deviation, and the internal consistency reliability (coefficient alpha). The psychometric data are presented for the ongoing and applicant, treatment and control groups combined. We did analyze the data separately for each of these groups, but found little or no difference between these samples on the psychometrics.

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[2]The modified Home Observation for Measurement of the Environment (HOME) short form does not meet this standard, but its developer, Robert Bradley, has said that it should be used as a risk index, and therefore, the items are not expected to intercorrelate as they would in a scale.

EXHIBIT E.1

DESCRIPTIVE INFORMATION FOR COMPOSITE VARIABLES
CONSTRUCTED FOR THE CHILD IMPACT STUDY

		Possible Range		Actual Range				
Measure	Sample Size	Minimum	Maximum	Minimum	Maximum	Mean	Standard Deviation	Internal Consistency Reliability
Family Economic Well-Being								
Financial strain	1,471	1	4	1	4	2.5	0.75	0.72
Material hardship	1,472	0	7	0	7	1.1	1.4	0.66
Food security	1,467	1	3	1	3	1.4	0.68	NA
Percentage food insecure with hunger	1,467	0	1	0	1	0.11	0.32	NA
Received help from food pantry in the past year	1,472	0	1	0	1	0.22	0.41	NA
Visited a thrift shop in the past year	1,473	0	1	0	1	0.31	0.46	NA
Family Structure and Stability								
Child lives in a married-couple family with one or two biological parent(s)	1,475	0	1	0	1	0.31	0.46	NA
Child lives with one unmarried biological parent	1,475	0	1	0	1	0.59	0.49	NA
Biological father lives in the household	1,438	0	1	0	1	0.24	0.43	NA
Child spent time four days per week or more with biological or social father in the past year (includes residential and nonresidential)	1,473	0	1	0	1	0.66	0.47	NA
Child had contact with the biological father in past year (includes residential and nonresidential)	1,430	0	1	0	1	0.69	0.46	NA
Number of different types of household change, past two years	1,474	0	10	0	9	2.0	1.8	NA
Family moved in the past two years	1,474	0	1	0	1	0.53	0.50	NA
Family moved in with another household in the past two years	1,474	0	1	0	1	0.19	0.39	NA
Family set up own household in the past two years	1,474	0	1	0	1	0.31	0.46	NA
Child changes schools two or more times in the past two years	1,442	0	1	0	1	0.08	0.27	NA

EXHIBIT E.1 *(continued)*

Measure	Sample Size	Possible Range Minimum	Possible Range Maximum	Actual Range Minimum	Actual Range Maximum	Mean	Standard Deviation	Internal Consistency Reliability
Mental Health and Supportive Relationships								
Center for Epidemiological Studies Depression scale (CES-D) – total score	1,461	0	60	0	53	11.2	10.5	.92
High risk of clinical depression (CES-D score 23 or more)	1,461	0	1	0	1	0.15	0.35	NA
Friend or family member discouraged employment since random assignment	1,462	0	1	0	1	0.35	0.48	NA
Partner discouraged employment since random assignment	1,459	0	1	0	1	0.19	0.39	NA
Any domestic abuse since random assignment	1,462	0	1	0	1	0.49	0.50	NA
Domestic abuse by partner since random assignment	1,462	0	1	0	1	0.39	0.49	NA
Received a place to stay from family or friends last month	1,475	0	1	0	1	0.10	0.30	NA
Received food/meals from family or friends last month	1,475	0	1	0	1	0.11	0.31	NA
Received financial support from family or friends last month	1,475	0	1	0	1	0.13	0.34	NA
Parenting Behavior and Practices								
Warm behavior toward child	1,462	0	1	0	1	0.94	0.24	NA
Harsh behavior toward child	1,465	0	1	0	1	0.28	0.45	NA
Parenting stress/aggravation	1,469	1	4	1	4	1.6	0.48	.75
Family routines	1,468	1	4	1.29	4	3.4	0.47	.64
Parental monitoring	1,456	1	5	1	5	4.6	0.53	.81
Modified Home Observation for Measurement of the Environment (HOME) short form – total score	1,472	0	21	6	21	15.4	2.7	.55
Modified HOME short form – cognitive stimulation	1,474	0	8	0	8	5.4	1.7	.58
Parent expects children to finish college or graduate school	1,474	0	1	0	1	0.80	0.40	NA

EXHIBIT E.1 *(continued)*

Measure	Sample Size	Possible Range Minimum	Possible Range Maximum	Actual Range Minimum	Actual Range Maximum	Mean	Standard Deviation	Internal Consistency Reliability
Use of Child Care								
Child is in a regular child care arrangement	1,469	0	1	0	1	0.51	0.50	NA
Primary child care provider is a relative	1,461	0	1	0	1	0.29	0.45	NA
Primary child care provider is nonrelative home-based care	1,461	0	1	0	1	0.12	0.32	NA
Primary child care provider is center-based care	1,461	0	1	0	1	0.09	0.28	NA
Child currently uses formal child care	1,473	0	1	0	1	0.14	0.35	NA
Child used formal child care in the past two years	1,475	0	1	0	1	0.43	0.50	NA
Hours of child care per week	1,468	0	168	0	99	11.7	18.4	NA
Hours of child care are 20 or more per wk.	1,468	0	1	0	1	0.24	0.43	NA
Child used more than one care arrangement past week	1,474	0	1	0	1	0.24	0.43	NA
Child used five or more arrangements in the past two years	1,472	0	1	0	1	0.13	0.34	NA
Accident or injury in child care requiring emergency room visit since RA	1,437	0	1	0	1	0.09	0.29	NA
Child cared for self in the past week	1,465	0	1	0	1	0.17	0.37	NA
Child cared for self on a regular basis in the past two years	1,475	0	1	0	1	0.12	0.33	NA
Children's Well-Being: Educational Outcomes								
School engagement	1,389	4	12	4	12	10.2	1.9	.73
School performance is very good	1,419	0	1	0	1	0.49	0.50	NA
School performance is below average	1,419	0	1	0	1	0.07	0.26	NA
Ever repeated a grade	1,468	0	1	0	1	0.06	0.23	NA
Ever received special education	1,472	0	1	0	1	0.22	0.41	NA
Absent three or more days past month	1,427	0	1	0	1	0.12	0.33	NA
Tardy three or more days past month	1,420	0	1	0	1	0.06	0.24	NA
Child participates in any extra activities	1,473	0	1	0	1	0.47	0.50	NA
Child participates in after-school lessons	1,473	0	1	0	1	0.15	0.36	NA
Child participates in after-school clubs or organizations	1,472	0	1	0	1	0.33	0.47	NA
Child participates in team sports	1,473	0	1	0	1	0.26	0.44	NA

EXHIBIT E.1 *(continued)*

Measure	Sample Size	Possible Range Minimum	Possible Range Maximum	Actual Range Minimum	Actual Range Maximum	Mean	Standard Deviation	Internal Consistency Reliability
Children's Well-Being: Behavioral Outcomes								
Positive child behavior	1,461	0	70	3	70	58.5	11.2	.91
Behavior Problems Index (BPI) – total score	1,460	0	84	0	54	11.6	9.2	.92
BPI – externalizing	1,460	0	33	0	22	5.6	4.4	.88
BPI – internalizing	1,461	0	15	0	10	1.3	1.7	.74
Ever suspended or expelled from school	1,466	0	1	0	1	0.06	0.25	NA
Children's Well-Being: Health and Access to Health Care								
Child's health status	1,474	1	5	1	5	4.3	0.86	NA
Child's health status is fair or poor	1,474	0	1	0	1	0.04	0.20	NA
Child ever had an accident or injury requiring visit to emergency room or clinic	1,468	0	1	0	1	0.32	0.47	NA
Child covered by Medicaid	1,465	0	1	0	1	0.48	0.50	NA
Child covered by other health insurance	1,457	0	1	0	1	0.47	0.50	NA
Child not covered by health insurance	1,451	0	1	0	1	0.14	0.34	NA
Child has no place for routine or sick child care or uses emergency room	1,473	0	1	0	1	0.09	0.29	NA
Child had a routine doctor visit in the past year	1,472	0	1	0	1	0.85	0.36	NA
Child had a routine dental check-up in the past year	1,470	0	1	0	1	0.74	0.44	NA

SOURCE: Iowa Child Impact Survey conducted in 1998-99, approximately 4 to 6 years after random assignment for most cases.

NA Not applicable

APPENDIX F

IMPACTS ON SUBGROUPS OF FAMILIES AND CHILDREN: FINDINGS BASED ON CHILD IMPACT SURVEY DATA

APPENDIX F

IMPACTS ON SUBGROUPS OF FAMILIES AND CHILDREN: FINDINGS BASED ON CHILD IMPACT SURVEY DATA

We conducted an analysis of the differential impacts of Iowa's welfare reform program on subgroups of families and children in order to address two issues specifically pertinent to the relationship between Iowa's welfare reform program and subgroups of the general population. First, specific components of Iowa's welfare reform policies were targeted toward particular subgroups of families. Therefore, we might expect to find larger impacts for targeted subgroups than for untargeted subgroups. Second, particular subgroups are of special interest to policymakers because they have historically been disadvantaged in the labor market or because their children have a higher risk of educational disadvantage. Subgroup analyses can help to determine whether welfare reform policies tended to add to or reduce these disadvantages

Estimates of the impacts of welfare reform on family and child well-being are presented in this appendix for six pairs of subgroups defined by the following criteria:

1. ***Age of the youngest child at random assignment*** (under three years old; at least three years old)
2. ***Earnings of case members in the year before the quarter of random assignment*** (had no earnings; had earnings)
3. ***Marital status of the case head at random assignment*** (single female; member of a married couple) [1]
4. ***Education level of the case head at random assignment*** (less than high school; high school diploma or GED or more)
5. ***Race and ethnicity of the case head*** (minority: black or Hispanic; nonminority: white, non-Hispanic)
6. ***FIP application cohort*** (cohort 1: cases that applied for assistance in 10/93 through 9/94; cohorts 2 and 3: cases that applied for assistance in 10/94 through 3/96)

As noted elsewhere in this report, the first two criteria define groups for which the impact of Iowa's welfare reform may vary for programmatic reasons. Under welfare reform, parents of children age three months to three years are required to participate in the PROMISE JOBS program, but these parents were exempt from participation under pre-reform policies. Parents whose youngest child is three years old or more were required to participate in PROMISE JOBS under both reform and pre-reform policies. Therefore, we would expect to see the greatest impacts of welfare reform policies on parents with a child under age three. An important

[1] In the analysis of impacts on subgroups defined by the marital status of the case head at random assignment, we restricted the cases to those in which the head was an adult. That is, we eliminated child-only cases from the analysis. We classified a case head as an adult if she (or possibly "he" if the head was married) was at least 18 years old, or if he/she was 16 or 17 years old and the case included a child who was less than 5 years old.

additional component of welfare reform, the work transition period, or WTP (a four-month period of initial employment during which the FIP cash benefit was not reduced as a consequence of earnings) was available only to FIP recipients who had no substantial earnings in the previous year.[2] Therefore, our measure of case-level earnings in the year before random assignment is used to distinguish cases that were more likely to have qualified for the WTP (because they had no earnings in the year before random assignment) from those that were less likely to have qualified for the WTP. Findings based on these two criteria are discussed at length in Chapter VI; only the tabulated results are presented in this appendix.

The third and fourth criteria pertain to adult demographic characteristics that are associated with children's well-being. The third criterion, marital status of the case head at random assignment, was also used in the analysis of core survey data, presented in Chapter IV. This criterion distinguishes single females, the exclusive focus of many other welfare reform impact analyses, from married couples, a group for which welfare reform liberalized eligibility criteria.[3] The fourth criterion was not used in either the administrative data analysis or the analysis of the core survey, but it is included here because the parent's education level has been closely associated with children's development.

The fifth and sixth criteria involve demographic or case characteristics used in the subgroup analyses of administrative and core survey data presented in Chapters III and IV. As in the analyses of the core survey data, we have consolidated applicants into two cohorts: one that applied for assistance in the first year following the implementation of welfare reform and one that applied 12 to 30 months following implementation.

Our approach to estimating the subgroup impacts of welfare reform that are presented in this appendix was the same as that described in Appendix D for the subgroup analysis of data from the core survey. We generated the estimates based on cases that participated in the child impact survey, using data from that survey supplemented with data from the core survey. Our findings are presented in this appendix for the six pairs of subgroups of families with a child age 5 to 12. In general, the estimated impacts on the two subgroups in the pair were often not significantly different from one another. This may have occurred for one of two reasons: (1) the impact estimates may be similar in direction and magnitude for both subgroups in the pair or (2) the estimates may be very different in direction, but the difference between the estimates was not statistically significant because of the small number of cases in one or both subgroups. Below we discuss three pairs of subgroups for which the findings provide some insight into the overall impacts of welfare reform on family and child well-being. Refer to Chapter VI for findings based on subgroups defined by the age of the youngest child at random assignment and by earnings in the year before random assignment.

Impacts by Marital Status at Random Assignment. Single-parent families may be at greater risk for welfare dependence and poverty, and children in these families are at great risk of adverse outcomes, compared with families headed by a married couple. Married-couple families are the focus of Iowa's welfare reform provisions that loosen eligibility requirements.

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[2]The WTP was eliminated in 1997 by legislative action.

[3]Iowa's welfare reform program liberalized eligibility rules for two-parent families, which includes both married couples and single parents living with a cohabiting adult.

Among ongoing cases with children age 5 to 12, we found little evidence of a differential impact of welfare reform on cases in which the head at the time of random assignment was a single female rather than a member of a married couple (Exhibits D.2.a through D.2.c). Among ongoing cases headed by a single female, welfare reform increased the proportion who participated in a PROMISE JOBS activity by 10 percentage points but had no impact on such activity for married-couple families. Among ongoing cases headed by a married couple, welfare reform increased the extent and frequency with which parents monitored their children and the frequency and types of children's externalizing behavioral problems but had no impact on these outcomes for cases headed by a single female.

Among applicant cases with children age 5 to 12, we again found little differential impact of welfare reform on cases in which the head at the time of random assignment was a single female rather than a member of a married couple (see Exhibits D.2.d through D.2.f). As in the ongoing sample, welfare reform increased the proportion of cases headed by a single female at random assignment who participated in a PROMISE JOBS activity, but welfare reform also led to an increase in the proportion of single mothers receiving FIP benefits at the time of the survey. There were no impacts on these outcomes among applicant married-couple families. Welfare reform increased household instability among applicants who were single mothers at random assignment, with increases in both the number of different types of change and the proportion of families doubling up with another household in the two years prior to the survey. However, some of the instability was favorable, as the proportion of families headed by a single female who set up their own household in the two years prior to the survey also increased. We detected no impacts of welfare reform on household stability among applicant married-couple families. However, welfare reform increased the proportion of focal children in married-couple families who were in unsupervised child care arrangements in the two years prior to the survey, while it had no such impact on children in households headed by a single female.

Impacts by Parent's Education Status at Random Assignment. Higher levels of education are associated with higher wages and more favorable labor market outcomes. Attainment of a high school diploma or GED is likely to bring more skilled work opportunities and higher wages than would be possible without a diploma or GED. Children of more-educated parents tend to have more favorable outcomes as well. Nevertheless, the impact of welfare reform could vary by the education level of adults. For instance, the early childhood intervention literature and the labor market intervention literature contain examples of programs that have greater impacts for educationally disadvantaged adults (Currie 2000; Michalopoulos and Schwartz 2001). Therefore, we examined whether Iowa's welfare reform program had stronger impacts on adults with less than a high school education (or GED) at random assignment compared with those who had a high school diploma or GED.

Among ongoing families with a child age 5 to 12, the impacts of welfare reform on economic outcomes and family well-being outcomes were not significantly different for families by education level at random assignment (Exhibit D.3.a and D.3.b). However, welfare reform had less favorable impacts on parenting, child care, and child outcomes among families in which the parent did not have a high school education, compared with families in which the parent had a high school diploma or GED (Exhibit D.3.c). Welfare reform had a negative impact on HOME scale scores and on scores measuring cognitive stimulation in the home, indicating that, among families in which the parent did not have a high school education, welfare reform was associated with a decline in the stimulation and support available to the child in the home. Welfare reform

was also associated with a decline in the use of a regular child care arrangement at the time of the survey, although we detected no impact on employment at the time of the survey or on other child care outcomes. Finally, welfare reform was also associated with an increase in externalizing behavioral problems among focal children whose parent did not have a high school education.

Among applicant families, welfare reform had some differential impacts on economic outcomes and family well-being by education level, but we found virtually no evidence of differential impacts of welfare reform on parenting, child care, or child well-being by parents' education level at random assignment (see Exhibits D.3.d through D.3.f). Among applicant cases in which the parent had a high school diploma or GED, welfare reform had a substantial negative impact on total household earnings and income in the month before the survey but no impact on these outcomes among the less-educated group. Welfare reform also led to higher levels of reported discouragement of employment and domestic abuse and to more household instability, including doubling up of households, among applicant families in which the parent had a high school diploma or GED. Welfare reform also had some unfavorable impacts on family well-being among applicant households in which the parent did not have a high school diploma or GED at random assignment. Parents with less education were more likely to remain unmarried at the time of the follow-up survey, but on a more favorable note, they were also less likely to be separated or divorced as a result of welfare reform. Welfare reform led to an increase in the proportion of applicant families headed by a parent with less than a high school education who was at high risk of clinical depression.

Impacts by FIP Applicant Cohort. Welfare reform had less favorable impacts on the combined cohort 2 and 3 applicants than on cohort 1 applicants, as shown in Exhibits D.6.a through D.6.c. Parents with a child age 5 to 12 in the later applicant cohorts were significantly less likely to have been employed in the two years prior to the survey as a result of welfare reform, while there was no impact on employment among parents in the first cohort of applicants. Reforms made it more likely that families in cohorts 2 and 3, compared with those in cohort 1, would be covered by Medicaid and less likely that they would be covered by other health insurance.

Impacts on family well-being outcomes were virtually the same for cohort 1 applicants as for cohorts 2 and 3 combined. However, welfare reform had a large unfavorable impact on children's positive behavior and on the extent and frequency of behavioral problems among focal children in cohorts 2 and 3, while there were no impacts on these outcomes for cohort 1 children. Among cohort 1 parents, however, parenting stress was significantly lower as a result of welfare reform, while the impact on cohorts 2 and 3 was not significant. This set of findings is consistent with the finding reported earlier that welfare reform increased the proportion of families in cohort 3 that received child welfare services (foster care, family-centered, and family-preservation services). It is also consistent with the findings reported in Chapter III that welfare reform led to a decline in earnings and employment among cohort 3 applicant cases, which could increase family stress and therefore the likelihood of unfavorable impacts on children.

EXHIBIT F.1a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Youngest Child <3	Youngest Child ≥ 3	Youngest Child <3	Youngest Child ≥ 3	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	55.9	48.3	12.1**	11.9**	No
Participated in a PROMISE JOBS activity	63.8	64.4	5.7	10.5*	No
Assigned to LBP (voluntary or involuntary)	20.8	17.8	1.0	11.2***	**Yes**
Employment and Earnings					
Employed in the past two years (%)	83.6	84.4	-1.7	3.4	No
Total weekly earnings from current jobs ($)	$185	$181	$12	-$3	No
Household Income					
Total earnings of all household members in previous month ($)	$1,067	$1,071	-$33	$114	No
Received FIP in previous month (%)	31.5	27.9	2.0	-1.2	No
Household income, including Food Stamps, in previous month ($)	$1,539	$1,520	$54	$108	No
Sufficiency of Resources					
Financial Strain scale	2.6	2.6	0.1	-0.1	No
Material Hardship scale	1.1	1.0	0.0	-0.2	No
Food Security scale	1.4	1.5	0.0	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month	17.4	10.5	8.1**	-0.1	No
Family's Health Insurance Coverage (%)					
Medicaid	57.3	59.2	5.6	12.6**	No
Other health insurance	38.5	41.1	-4.6	3.4	No
No health insurance	15.3	14.7	-0.6	-10.1**	No
Sample Size			479	331	

Source: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

Sample: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

Methods: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

Note: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F1.b

SELECTED FAMILY WELL-BEING OUTCOMES FOR ONGOING FIP CASES, BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Youngest Child <3	Youngest Child ≥ 3	Youngest Child <3	Youngest Child ≥ 3	Significant Differ?[a]
Current Marital Status (%)					
Never married	46.2	27.4	4.7	-5.9	**Yes**
Married and living with spouse	24.1	27.2	-4.6	6.6	**Yes**
Separated or divorced	28.4	44.0	-1.2	-1.3	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	11.6	15.9	-3.8	4.6	No
Father Involvement (%)					
Biological father lives in household	17.2	14.1	-5.5	-1.0	No
Child spends time with biological father or social father four times per week	62.0	62.4	-8.2*	5.0	**Yes**
Received formal child support last month	24.7	24.0	3.3	1.9	No
Mental Health (%)					
At high risk of clinical depression	17.7	16.6	1.1	-10.6**	**Yes**
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	24.1	17.5	0.5	2.2	No
Domestic Abuse (%)					
Domestic abuse since random assignment	54.9	50.0	9.7*	-6.1	**Yes**
Domestic abuse by partner since RA	46.4	37.4	9.4*	-6.8	**Yes**
Household Stability (Past Two Years)					
Number of different types of household change	2.0	1.8	-0.2	-0.3	No
Doubled up with another household (%)	23.0	15.2	-2.9	-2.6	No
Set up own household (%)	31.2	28.3	-5.9	-7.8	No
Sample Size			479	331	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.1c

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR ONGOING FIP CASES, BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Youngest Child <3	Youngest Child ≥ 3	Youngest Child <3	Youngest Child ≥ 3	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.6	1.6	0.0	0.0	No
Family Routines scale	3.4	3.3	-0.1	0.0	No
Parental Monitoring scale	4.7	4.4	0.0	0.0	No
HOME modified short form scale					
Total score	15.1	15.5	-0.3	0.3	No
Score on cognitive stimulation component	5.2	5.6	-0.1	-0.2	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	55.1	42.8	-8.7*	0.0	No
Child cared for self in the past week	5.9	29.5	-0.5	1.4	No
Child is in child care for 20 hours or more per wk.	29.7	14.7	4.6	-8.2*	**Yes**
Child Care History (%)					
Child used formal care in the past two years	47.6	26.1	2.9	-6.2	No
Child cared for self regularly in the past two yrs.	2.8	20.6	-1.0	-2.6	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	13.4	4.8	-0.2	-7.5**	No
Academic Functioning					
School Engagement scale	10.3	9.9	0.0	0.0	No
School performance					
Very good (%)	47.0	49.8	-1.2	9.9*	No
Below average (%)	5.2	11.1	-0.7	0.9	No
Ever repeated a grade (%)	5.1	10.8	-0.8	-1.5	No
Child's Behavior					
Positive Child Behavior scale	58.4	57.7	0.2	0.2	No
Behavior Problems Index	11.5	12.2	-0.2	0.0	No
Externalizing behavior problems	5.6	5.9	-0.1	0.3	No
Internalizing behavior problems	1.3	1.5	0.2	0.0	No
Sample Size			479	331	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.1d

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES, BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Youngest Child <3	Youngest Child ≥ 3	Youngest Child <3	Youngest Child ≥ 3	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	31.2	32.0	12.8**	16.0***	No
Participated in a PROMISE JOBS activity	38.4	42.5	5.8	12.3*	No
Assigned to LBP (voluntary or involuntary)	12.6	9.4	8.9**	-2.2	**Yes**
Employment and Earnings					
Employed in the past two years (%)	88.9	89.7	-3.7	7.3	**Yes**
Total weekly earnings from current jobs ($)	$229	$255	$7	-$39	No
Household Income					
Total earnings of all household members in previous month ($)	$1,536	$1,500	-$132	-$532**	No
Received FIP in previous month (%)	18.8	13.6	4.2	3.6	No
Household income, including Food Stamps, in previous month ($)	$1,869	$1,846	-$85	-$486**	No
Sufficiency of Resources					
Financial Strain scale	2.5	2.5	0.2*	0.1	No
Material Hardship scale	1.2	1.2	0.4**	0.0	No
Food Security scale	1.3	1.4	0.0	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month	10.5	13.0	-6.6	3.6	**Yes**
Family's Health Insurance Coverage (%)					
Medicaid	40.9	34.6	4.1	9.7	No
Other health insurance	52.5	57.2	-8.4	-6.1	No
No health insurance	16.7	17.4	4.1	-1.5	No
Sample Size			365	287	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.1e

SELECTED FAMILY WELL-BEING OUTCOMES FOR APPLICANT FIP CASES, BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Youngest Child <3	Youngest Child ≥ 3	Youngest Child <3	Youngest Child ≥ 3	Significant Differ?[a]
Current Marital Status (%)					
Never married	22.8	15.3	1.2	2.7	No
Married and living with spouse	39.7	35.7	-1.2	-7.6	No
Separated or divorced	35.6	45.7	-1.2	2.3	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	11.5	8.5	2.6	-7.3	**Yes**
Father Involvement (%)					
Biological father lives in household	37.1	24.1	3.8	-8.4	No
Child spends time with biological father or social father four times per week	75.1	68.0	6.3	-3.9	No
Received formal child support last month	22.9	27.7	6.4	-6.2	**Yes**
Mental Health (%)					
At high risk of clinical depression	7.6	17.9	-3.9	8.5*	**Yes**
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	18.2	20.3	6.8	1.3	No
Domestic Abuse (%)					
Domestic abuse since random assignment	46.2	53.3	8.2	4.7	No
Domestic abuse by partner since RA	39.7	39.3	10.5*	2.5	No
Household Stability (Past Two Years)					
Number of different types of household change	2.3	1.9	0.6***	0.2	No
Doubled up with another household (%)	27.1	15.0	14.4***	2.1	**Yes**
Set up own household (%)	35.0	33.7	1.9	12.5**	No
Sample Size			365	287	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.1f

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR APPLICANT FIP CASES, BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Youngest Child <3	Youngest Child ≥ 3	Youngest Child <3	Youngest Child ≥ 3	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.5	1.6	-0.1	0.0	No
Family Routines scale	3.4	3.3	-0.1	0.0	No
Parental Monitoring scale	4.7	4.5	0.0	0.0	No
HOME modified short form scale					
Total score	15.3	15.8	-0.2	-0.2	No
Score on cognitive stimulation component	5.2	5.7	0.0	-0.2	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	54.8	38.4	-4.4	-8.6	No
Child cared for self in the past week	6.9	29.1	-0.1	-3.4	No
Child is in child care for 20 hours or more per wk.	30.1	15.7	2.9	-5.7	No
Child Care History (%)					
Child used formal care in the past two years	53.3	38.8	-1.7	6.8	No
Child cared for self regularly in the past two yrs.	6.7	23.7	2.0	4.1	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	11.3	9.0	5.7*	4.0	No
Academic Functioning					
School Engagement scale	10.5	9.9	-0.3	-0.5*	No
School performance					
Very good (%)	57.7	47.2	10.1	0.0	No
Below average (%)	4.0	9.3	0.8	-1.2	No
Ever repeated a grade (%)	2.2	4.8	-1.9	-4.1	No
Child's Behavior					
Positive Child Behavior scale	60.1	56.9	0.6	-1.5	No
Behavior Problems Index	10.6	12.1	0.1	0.7	No
Externalizing behavior problems	5.2	5.9	0.1	0.3	No
Internalizing behavior problems	1.1	1.5	0.0	0.2	No
Sample Size			365	287	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.2a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	55.1	42.7	12.4***	7.2	No
Participated in a PROMISE JOBS activity	67.0	49.6	10.3**	-6.7	**Yes**
Assigned to LBP (voluntary or involuntary)	19.6	18.3	4.2	7.3	No
Employment and Earnings					
Employed in the past two years (%)	84.8	79.4	1.7	-5.4	No
Total weekly earnings from current jobs ($)	$176	$183	$10	-$44	No
Household Income					
Total earnings of all household members in previous month ($)	$1,028	$1,149	$31	-$129	No
Received FIP in previous month (%)	32.7	23.5	1.5	1.3	No
Household income, including Food Stamps, in previous month ($)	$1,486	$1,704	$66	$5	No
Sufficiency of Resources					
Financial Strain scale	2.6	2.7	-0.1	0.1	No
Material Hardship scale	1.0	1.2	-0.1	-0.1	No
Food Security scale	1.4	1.5	0.0	0.1	No
Social Support (%)					
Received financial support from family or friends in the past month	16.3	10.6	4.9*	7.5	No
Family's Health Insurance Coverage (%)					
Medicaid	60.1	54.5	8.6**	14.6	No
Other health insurance	37.9	43.7	-4.1	3.9*	No
No health insurance	15.3	13.2	-2.3	-12.9*	No
Sample Size			622	133	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.2b

SELECTED FAMILY WELL-BEING OUTCOMES FOR ONGOING FIP CASES, BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Current Marital Status (%)					
Never married	47.5	3.9	3.0	0.7	No
Married and living with spouse	21.0	42.8	-3.2	8.9	No
Separated or divorced	30.1	52.4	-0.6	-10.3	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	14.7	6.1	1.0	-2.5	No
Father Involvement (%)					
Biological father lives in household	11.5	24.5	-2.1	-12.1	No
Child spends time with biological father or social father four times per week	59.6	67.3	-6.4	9.7	No
Received formal child support last month	25.8	19.9	1.7	4.7	No
Mental Health (%)					
At high risk of clinical depression	16.8	23.6	-3.3	-1.1	No
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	20.4	24.4	2.0	-6.4	No
Domestic Abuse (%)					
Domestic abuse since random assignment	53.7	52.8	2.7	5.6	No
Domestic abuse by partner since RA	42.8	41.8	1.8	1.1	No
Household Stability (Past Two Years)					
Number of different types of household change	1.9	1.8	-0.2	-0.4	No
Doubled up with another household (%)	19.5	19.6	-2.0	-6.8	No
Set up own household (%)	31.1	27.9	-5.4	-6.8	No
Sample Size			622	133	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.2c

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR ONGOING FIP CASES, BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.6	1.7	0.0	0.1	No
Family Routines scale	3.4	3.4	-0.1	0.1	No
Parental Monitoring scale	4.6	4.6	0.0	0.2**	**Yes**
HOME modified short form					
Total score	15.3	14.9	0.0	-0.4	No
Score on cognitive stimulation component	5.4	5.4	-0.1	-0.4	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	52.0	39.7	-4.6	-8.8	No
Child cared for self in the past week	14.9	18.4	1.5	-0.4	No
Child is in child care for 20 hours or more per wk.	25.4	14.4	-0.5	-5.7	No
Child Care History (%)					
Child used formal care in the past two years	40.3	29.2	-2.2	-5.3	No
Child cared for self regularly in the past two years	10.4	9.3	-0.5	-4.8	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	9.1	11.2	-5.0*	-1.1	No
Academic Functioning					
School Engagement scale	10.2	10.0	0.0	-0.1	No
School performance					
Very good (%)	49.0	43.8	2.5	5.0	No
Below average (%)	6.8	10.8	-0.4	-0.4	No
Ever repeated a grade (%)	7.5	8.4	-0.2	-1.1	No
Child's Behavior					
Positive Child Behavior scale	58.4	57.0	0.7	-1.5	No
Behavior Problems Index	11.3	13.7	-0.9	2.7	**Yes**
Externalizing behavior problems	5.5	6.8	-0.4	1.8**	**Yes**
Internalizing behavior problems	1.3	1.6	0.1	0.3	No
Sample Size			622	133	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.2d

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	38.6	25.7	18.5***	9.9*	No
Participated in a PROMISE JOBS activity	52.2	26.5	16.0***	-2.9	**Yes**
Assigned to LBP (voluntary or involuntary)	13.8	7.1	6.8*	-1.9	No
Employment and Earnings					
Employed in the past two years (%)	91.1	84.4	0.7	0.8	No
Total weekly earnings from current jobs ($)	$219	$238	-$20	$6	No
Household Income					
Total earnings of all household members in previous month ($)	$1,308	$1,686	-$491**	-$107	No
Received FIP in previous month (%)	23.4	9.8	9.5**	-2.5	**Yes**
Household income, including Food Stamps, in previous month ($)	$1,675	$2,010	-$393**	-$103	No
Sufficiency of Resources					
Financial Strain scale	2.6	2.5	0.1	0.2**	No
Material Hardship scale	1.2	1.2	0.3*	0.0	No
Food Security scale	1.4	1.4	0.0	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month (%)	13.3	9.7	-1.8	-2.9	No
Family's Health Insurance Coverage (%)					
Medicaid	43.5	34.4	8.0	4.6	No
Other Health Insurance	47.9	62.3	-11.1*	-2.0	No
No Health Insurance	17.1	13.5	0.2	-0.4	No
Sample Size			355	211	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.2e

SELECTED FAMILY WELL-BEING OUTCOMES FOR APPLICANT FIP CASES, BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Current Marital Status (%)					
Never married	31.3	1.8	1.9	0.6	No
Married and living with spouse	25.8	54.3	-6.0	-3.3	No
Separated or divorced	41.3	39.7	3.3	-0.7	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	13.4	8.1	-2.1	2.8	No
Father Involvement (%)					
Biological father lives in household	15.3	47.7	-1.2	-6.4	No
Child spends time with biological father or social father four times per week	63.4	80.8	-0.3	1.4	No
Received formal child support last month	27.5	19.2	-0.6	3.2	No
Mental Health (%)					
At high risk of clinical depression	11.7	15.4	1.0	4.4	No
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	21.0	19.7	6.5	6.0	No
Domestic Abuse (%)					
Domestic abuse since random assignment	50.7	53.3	3.7	15.3**	No
Domestic abuse by partner since RA	42.8	39.0	7.9	9.9	No
Household Stability (Past Two Years)					
Number of different types of household change	2.4	1.6	0.8***	-0.1	**Yes**
Doubled up with another household (%)	27.3	14.5	18.6***	-5.1	**Yes**
Set up own household (%)	39.4	25.5	12.0**	-5.8	**Yes**
Sample Size			355	211	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.2f

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR APPLICANT FIP CASES, BY MARITAL STATUS OF CASE HEAD AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Single Female	Married Couple	Single Female	Married Couple	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.6	1.5	0.0	0.0	No
Family Routines scale	3.4	3.4	0.0	-0.1	No
Parental Monitoring scale	4.6	4.6	0.0	0.0	No
HOME modified short form					
Total score	15.3	15.9	-0.1	-0.2	No
Score on cognitive stimulation component	5.4	5.5	0.1	-0.2	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	54.3	36.2	-6.0	-7.3	No
Child cared for self in the past week	12.5	21.2	-3.7	1.2	No
Child is in child care for 20 hours or more per wk.	27.4	16.3	-4.0	0.4	No
Child Care History (%)					
Child used formal care in the past two years	51.5	39.3	7.0	-4.0	No
Child cared for self regularly in the past two years	10.9	18.2	-4.7	11.2**	**Yes**
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	12.0	8.0	8.5***	0.0	No
Academic Functioning					
School Engagement scale	10.2	10.3	-0.3	-0.3	No
School performance					
Very good (%)	50.0	55.4	6.1	2.4	No
Below average (%)	4.9	7.2	-4.0	2.9	No
Ever repeated a grade (%)	4.4	2.0	-1.1	-6.2*	No
Child's Behavior					
Positive Child Behavior scale	59.2	58.3	1.2	-1.8	No
Behavior Problems Index	11.5	11.6	0.1	0.8	No
Externalizing behavior problems	5.5	5.7	0.1	0.2	No
Internalizing behavior problems	1.3	1.3	0.1	0.3	No
Sample Size			355	211	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.3a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY HIGH SCHOOL DIPLOMA/GED PRIOR TO RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	No Dip. or GED	Diploma or GED	No Dip. or GED	Diploma or GED	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	59.8	50.0	14.2**	11.8**	No
Participated in a PROMISE JOBS activity	67.2	62.3	4.6	8.6*	No
Assigned to LBP (voluntary or involuntary)	24.8	17.3	6.3	4.8	No
Employment and Earnings					
Employed in the past two years (%)	76.8	88.7	1.0	2.0	No
Total weekly earnings from current jobs ($)	$126	$203	$14	-$6	No
Household Income					
Total earnings of all household members in previous month ($)	$771	$1,201	$75	$8	No
Received FIP in previous month (%)	43.1	24.6	4.9	-1.7	No
Household income, including Food Stamps, in previous month ($)	$1,329	$1,624	$220**	$9	No
Sufficiency of Resources					
Financial Strain scale	2.7	2.5	0.0	0.0	No
Material Hardship scale	1.0	1.1	-0.3	0.0	No
Food Security scale	1.4	1.4	-0.1	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month	15.5	14.7	2.7	6.4**	No
Family's Health Insurance Coverage (%)					
Medicaid	68.6	53.4	13.4*	5.4	No
Other health insurance	27.3	44.3	1.1	-5.0	No
No health insurance	16.7	14.7	-8.2	-0.3	No
Sample Size			261	527	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.3b

SELECTED FAMILY WELL-BEING OUTCOMES FOR ONGOING FIP CASES, BY HIGH SCHOOL DIPLOMA/GED PRIOR TO RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	No Dip. or GED	Diploma or GED	No Dip. or GED	Diploma or GED	Significant Differ?[a]
Current Marital Status (%)					
Never married	40.8	37.7	-1.2	1.0	No
Married and living with spouse	22.9	26.4	-1.9	1.8	No
Separated or divorced	34.7	34.8	1.8	-3.3	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	15.8	12.3	1.0	-1.3	No
Father Involvement (%)					
Biological father lives in household	17.0	15.0	-3.9	-3.6	No
Child spends time with biological father or social father four times per week	63.3	61.0	-0.2	-3.4	No
Received formal child support last month	17.0	28.5	0.7	4.2	No
Mental Health (%)					
At high risk of clinical depression	22.9	15.3	-5.1	-2.6	No
Employment Barriers or Discouragement					
Respondent's partner discouraged employment or made it difficult to work since RA (%)	17.9	22.0	2.3	0.0	No
Domestic Abuse (%)					
Domestic abuse since random assignment	51.6	53.5	1.9	3.5	No
Domestic abuse by partner since RA	41.6	43.1	0.8	3.5	No
Household Stability (Past Two Years)					
Number of different types of household change	2.2	1.8	-0.4	-0.2	No
Doubled up with another household (%)	26.3	16.3	-8.0	-1.3	No
Set up own household (%)	37.2	26.0	-11.9*	-5.3	No
Sample Size			261	526	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.3c

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR ONGOING FIP CASES, BY HIGH SCHOOL DIPLOMA/GED AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	No Dip. or GED	Diploma or GED	No Dip. or GED	Diploma or GED	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.7	1.6	0.0	0.0	No
Family Routines scale	3.4	3.4	0.0	0.0	No
Parental Monitoring scale	4.5	4.6	-0.1	0.1	No
HOME modified short form					
Total score	14.2	15.7	-0.9**	0.3	**Yes**
Score on cognitive stimulation component	4.7	5.7	-0.6***	0.1	**Yes**
Current Child Care Use (%)					
Child is in a regular child care arrangement	41.6	54.1	-15.3**	0.0	**Yes**
Child cared for self in the past week	12.3	17.5	-2.2	1.8	No
Child is in child care for 20 hours or more per wk.	21.1	24.7	-3.2	0.4	No
Child Care History (%)					
Child used formal care in the past two years	27.3	43.5	-2.4	-0.7	No
Child cared regularly for self in the past two years	7.2	11.4	-5.6	0.4	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	10.9	8.8	0.4	-5.7*	No
Academic Functioning					
School Engagement scale	9.9	10.3	-0.4	0.2	**Yes**
School performance					
Very good (%)	46.5	48.4	6.0	2.6	No
Below average (%)	13.5	5.6	6.5	-2.1	**Yes**
Ever repeated a grade (%)	8.9	6.0	-4.5	-0.7	No
Child's Behavior					
Positive Child Behavior scale	56.9	58.7	-1.8	1.3	No
Behavior Problems Index	14.0	10.8	2.0	-1.2	**Yes**
Externalizing behavior problems	6.7	5.3	1.3*	-0.4	**Yes**
Internalizing behavior problems	1.5	1.3	0.3	0.0	No
Sample Size			261	527	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.3d

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES, BY HIGH SCHOOL/GED PRIOR TO RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	No Dip. or GED	Diploma or GED	No Dip. or GED	Diploma or GED	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	37.8	28.5	8.1	15.0***	No
Participated in a PROMISE JOBS activity	41.7	39.0	0.9	10.2**	No
Assigned to LBP (voluntary or involuntary)	20.2	8.1	5.7	3.6	No
Employment and Earnings					
Employed in the past two years (%)	84.0	90.6	-0.9	1.7	No
Total weekly earnings from current jobs ($)	$159	$261	-$50	$3	No
Household Income					
Total earnings of all household members in previous month ($)	$1,314	$1,589	$45	-$396**	No
Received FIP in previous month (%)	20.3	15.6	0.2	5.6	No
Household income, including Food Stamps, in previous month ($)	$1,594	$1,938	$13	-$337**	No
Sufficiency of Resources					
Financial Strain scale	2.6	2.5	0.0	0.2**	No
Material Hardship scale	1.3	1.1	0.2	0.2	No
Food Security scale	1.4	1.4	0.0	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month	12.8	11.1	3.3	-4.3	No
Family's Health Insurance Coverage (%)					
Medicaid	50.5	34.6	7.5	6.3	No
Other health insurance	37.6	59.7	-9.5	-6.0	No
No health insurance	21.6	15.8	0.0	2.2	No
Sample Size			169	480	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.3e

SELECTED FAMILY WELL-BEING OUTCOMES FOR APPLICANT FIP CASES, BY HIGH SCHOOL DIPLOMA/GED PRIOR TO RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	No Dip. or GED	Diploma or GED	No Dip. or GED	Diploma or GED	Significant Differ?[a]
Current Marital Status (%)					
Never married	29.9	16.1	10.6*	-1.3	**Yes**
Married and living with spouse	38.7	38.2	0.8	-3.9	No
Separated or divorced	27.5	43.8	-15.4*	4.4	**Yes**
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	15.5	8.8	9.2*	-5.0	**Yes**
Father Involvement (%)					
Biological father lives in household	32.7	31.2	-3.1	-1.1	No
Child spends time with biological father or social father four times per week	74.1	72.3	10.4	0.9	No
Received formal child support last month	12.6	28.8	2.5	0.9	No
Mental Health (%)					
At high risk of clinical depression	23.8	8.6	17.9***	-3.6	**Yes**
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	21.5	18.9	-0.9	6.8*	No
Domestic Abuse (%)					
Domestic abuse since random assignment	41.5	51.8	-5.3	10.3*	No
Domestic abuse by partner since RA	28.1	42.7	-10.7	11.5**	**Yes**
Household Stability (Past Two Years)					
Number of different types of household change	2.3	2.0	0.0	0.5***	No
Doubled up with another household (%)	25.2	20.0	-2.2	11.7***	No
Set up own household (%)	37.1	32.6	-0.3	7.5	No
Sample Size			169	480	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.3f

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR APPLICANT FIP CASES, BY HIGH SCHOOL DIPLOMA/GED AT RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	No Dip. or GED	Diploma or GED	No Dip. or GED	Diploma or GED	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.6	1.5	0.0	-0.1	No
Family Routines scale	3.3	3.4	-0.2**	0.0	No
Parental Monitoring scale	4.6	4.6	0.1	0.0	No
HOME modified short form					
Total score	14.6	15.9	-0.3	-0.1	No
Score on cognitive stimulation component	4.8	5.6	0.0	-0.1	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	34.1	52.3	-18.8**	-1.6	No
Child cared for self in the past week	7.5	18.7	-0.4	-0.8	No
Child is in child care for 20 hours or more per wk.	13.7	26.2	-14.6*	2.3	**Yes**
Child Care History (%)					
Child used formal care in the past two years	41.7	48.9	-0.5	2.8	No
Child cared for self regularly in the past two years	8.0	15.6	3.2	3.0	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	10.0	10.1	-1.4	6.4**	No
Academic Functioning					
School Engagement scale	9.9	10.3	-0.3	-0.5***	No
School performance					
Very good (%)	46.8	53.9	0.9	6.1	No
Below average (%)	9.6	5.3	0.5	-0.4	No
Ever repeated a grade (%)	4.6	2.9	-1.3	-3.5	No
Child's Behavior					
Positive Child Behavior scale	56.4	59.3	0.3	-0.8	No
Behavior Problems Index	13.5	10.7	-1.2	0.9	No
Externalizing behavior problems	6.3	5.3	-0.8	0.6	No
Internalizing behavior problems	1.6	1.1	0.1	0.1	No
Sample Size			169	480	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.4a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	50.3	55.4	6.8	18.0***	No
Participated in a PROMISE JOB activity	63.6	64.3	6.1	9.0	No
Assigned to LBP (voluntary or involuntary)	19.1	20.0	6.6	4.3	No
Employment and Earnings					
Employed in the past two years (%)	81.5	86.6	0.7	1.1	No
Total weekly earnings from current jobs ($)	$165	$199	$1	$9	No
Household Income					
Total earnings of all household members in previous month ($)	$988	$1,140	$79	-$27	No
Received FIP in previous month (%)	31.7	29.1	3.3	-0.9	No
Household income, including Food Stamps, in previous month ($)	$1,490	$1,577	$146	$15	No
Sufficiency of Resources					
Financial Strain scale	2.6	2.6	-0.1	0.0	No
Material Hardship scale	0.9	1.2	-0.2	0.0	No
Food Security scale	1.4	1.5	-0.1	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month	11.5	17.8	2.0	7.9**	No
Family's Health Insurance Coverage (%)					
Medicaid	61.4	55.2	10.8*	6.9	No
Other health insurance	37.1	41.6	1.1	-3.9	No
No health insurance	14.6	15.4	-7.4*	-2.0	No
Sample Size			376	412	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.4b

SELECTED FAMILY WELL-BEING OUTCOMES FOR ONGOING FIP CASES,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Current Marital Status (%)					
Never married	39.0	37.9	1.7	-1.1	No
Married and living with spouse	26.0	24.1	4.1	-4.9	No
Separated or divorced	33.3	36.9	-7.5	5.8	**Yes**
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	13.6	13.2	-2.6	2.5	No
Father Involvement (%)					
Biological father lives in household	13.5	17.8	-0.9	-7.0*	No
Child spends time with biological father or social father four times per week	59.6	64.2	-3.1	-2.5	No
Received formal child support last month	23.4	25.2	-1.5	6.5	No
Mental Health (%)					
At high risk of clinical depression	22.0	13.2	-3.0	-4.1	No
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	22.7	20.0	7.7*	-5.4	**Yes**
Domestic Abuse (%)					
Domestic abuse since random assignment	53.9	52.5	7.4	-0.3	No
Domestic abuse by partner since RA	42.8	42.6	5.2	-0.2	No
Household Stability (Past Two Years)					
Number of different types of household change	1.8	2.1	-0.4*	-0.1	No
Doubled up with another household (%)	20.4	19.0	-3.1	-2.7	No
Set up own household (%)	26.0	33.7	-7.8	-5.7	No
Sample Size			376	412	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.4c

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR ONGOING FIP CASES, BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Had Earnings	Had No Earnings	Had Earnings	Had No Earnings	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.6	1.6	0.0	0.0	No
Family Routines scale	3.4	3.3	0.0	0.0	No
Parental Monitoring scale	4.6	4.6	0.1	0.0	No
HOME modified short form					
Total score	15.2	15.4	0.0	-0.1	No
Score on cognitive stimulation component	5.4	5.3	0.0	-0.3	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	46.7	52.7	-3.9	-6.5	No
Child cared for self in the past week	16.5	15.4	4.3	-3.3	No
Child is in child care for 20 hours or more per wk.	22.2	24.9	2.9	-4.3	No
Child Care History (%)					
Child used formal care in the past two years	33.6	42.5	-5.8	2.2	No
Child cared for self regularly in the past two years	11.0	10.1	0.7	-3.4	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	7.0	11.7	-11.1***	3.1	**Yes**
Academic Functioning					
School Engagement scale	10.0	10.3	-0.1	0.1	No
School performance					
Very good (%)	50.2	46.5	4.6	3.2	No
Below average (%)	8.4	6.9	-1.9	1.6	No
Ever repeated a grade (%)	8.1	7.0	-1.7	-0.3	No
Child's Behavior					
Positive Child Behavior scale	58.4	58.1	1.2	-0.4	No
Behavior Problems Index	11.8	11.7	-0.7	0.3	No
Externalizing behavior problems	5.7	5.7	-0.2	0.3	No
Internalizing behavior problems	1.3	1.3	-0.1	0.3	No
Sample Size			376	412	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.4d

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	30.0	31.8	4.8	18.1 ***	No
Participated in any PROMISE JOBS activity	47.8	37.0	5.7	10.0 *	No
Assigned to LBP (voluntary or involuntary)	13.4	10.4	3.1	4.6	No
Employment and Earnings					
Employed in the past two years (%)	84.1	91.6	-0.6	2.0	No
Total weekly earnings from current jobs ($)	$225	$246	$41	-$38	**Yes**
Household Income					
Total earnings of all household members in previous month ($)	$1,212	$1,645	-$484**	-$216	No
Received FIP in previous month (%)	19.9	14.7	6.5	2.6	No
Household income, including Food Stamps, in previous month ($)	$1,627	$1,970	-$374**	-$183	No
Sufficiency of Resources					
Financial Strain scale	2.6	2.5	0.1	0.2 *	No
Material Hardship scale	1.4	1.1	0.3	0.1	No
Food Security scale	1.4	1.3	0.1	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month	9.1	12.3	-2.8	-2.2	No
Family's Health Insurance Coverage (%)					
Medicaid	41.7	36.0	0.2	9.2 *	No
Other health insurance	43.3	60.0	-9.3	-6.3	No
No health insurance	23.3	14.2	6.9	-0.7	No
Sample Size			182	440	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.4e

SELECTED FAMILY WELL-BEING OUTCOMES FOR APPLICANT FIP CASES, BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Current Marital Status (%)					
Never married	20.5	18.2	4.7	-0.1	No
Married and living with spouse	32.8	40.4	-7.9	-2.2	No
Separated or divorced	44.1	38.9	0.7	0.8	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	10.3	9.6	-2.1	-1.1	No
Father Involvement (%)					
Biological father lives in household	30.0	32.6	0.0	-1.7	No
Child spends time with biological father or social father four times per week	74.0	71.0	0.7	2.2	No
Received formal child support last month	19.3	27.8	-0.1	1.8	No
Mental Health (%)					
At high risk of clinical depression	17.5	10.2	3.3	1.2	No
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	20.6	18.4	2.2	5.5	No
Domestic Abuse (%)					
Domestic abuse since random assignment	47.3	50.4	0.3	9.6*	No
Domestic abuse by partner since RA	36.5	40.7	-0.4	10.3*	No
Household Stability (Past Two Years)					
Number of different types of household change	2.4	2.0	0.5*	0.4**	No
Doubled up with another household (%)	32.3	17.9	17.3***	5.6	No
Set up own household (%)	34.1	33.6	4.9	6.0	No
Sample Size			182	440	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.4f

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR APPLICANT FIP CASES, BY EARNINGS OF CASE MEMBERS IN YEAR BEFORE QUARTER OF RANDOM ASSIGNMENT

	Treatment Cases		Impact		
	Had No Earnings	Had Earnings	Had No Earnings	Had Earnings	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.5	1.6	-0.1	0.0	No
Family Routines scale	3.4	3.4	0.0	-0.1	No
Parental Monitoring scale	4.7	4.6	0.0	0.0	No
HOME modified short form					
Total score	15.7	15.6	0.2	-0.3	No
Score on cognitive stimulation component	5.6	5.4	0.3	-0.2	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	49.5	47.1	2.7	-10.3**	No
Child cared for self in the past week	15.5	17.2	4.4	-4.4	No
Child is in child care for 20 hours or more per wk.	25.8	22.9	3.6	-2.5	No
Child Care History (%)					
Child used formal care in the past two years	48.4	46.2	-10.6	8.0	**Yes**
Child cared for self regularly in the past two years	11.3	14.8	-4.2	5.8*	**Yes**
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	13.0	9.2	5.1	5.4**	No
Academic Functioning					
School Engagement scale	10.1	10.3	-0.2	-0.5**	No
School performance					
Very good (%)	53.8	53.1	7.3	4.6	No
Below average (%)	3.3	7.0	-3.1	0.7	No
Ever repeated a grade (%)	4.2	2.5	-7.4	-1.0	No
Child's Behavior					
Positive Child Behavior scale	58.6	58.7	-0.5	-0.2	No
Behavior Problems Index	11.6	11.0	-0.2	0.5	No
Externalizing behavior problems	5.6	5.4	0.2	0.2	No
Internalizing behavior problems	1.2	1.2	-0.1	0.2	No
Sample Size			182	440	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.5a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY RACE AND ETHNICITY OF CASE HEAD

	Treatment Cases		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	52.0	55.9	12.8***	7.5	No
Participated in any PROMISE JOBS activity	63.2	66.4	5.8	13.2	No
Assigned to LBP (voluntary or involuntary)	18.2	24.3	4.8	6.1	No
Employment and Earnings					
Employed in the past two years (%)	83.9	86.4	1.2	2.4	No
Total weekly earnings from current jobs ($)	$187	$162	-$3	$42	No
Household Income					
Total earnings of all household members in previous month ($)	$1,144	$737	$58	-$129	No
Received FIP in previous month (%)	27.8	39.8	-1.5	10.1	No
Household income, including Food Stamps, in previous month ($)	$1,597	$1,251	$92	-$19	No
Sufficiency of Resources					
Financial Strain scale	2.6	2.7	0.0	-0.1	No
Material Hardship scale	1.1	1.1	-0.1	-0.3	No
Food Security scale	1.4	1.3	0.0	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month	14.0	17.7	5.4**	4.4	No
Family's Health Insurance Coverage (%)					
Medicaid	57.3	63.5	10.1**	7.1	No
Other health insurance	42.3	26.8	1.5	-15.1*	**Yes**
No health insurance	13.8	21.1	-6.4**	2.8	No
Sample Size			645	160	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.5b

SELECTED FAMILY WELL-BEING OUTCOMES FOR ONGOING FIP CASES, BY RACE AND ETHNICITY OF CASE HEAD

	Treatment Cases		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Current Marital Status (%)					
Never married	32.8	62.0	0.7	0.0	No
Married and living with spouse	29.2	7.2	1.9	-11.9*	**Yes**
Separated or divorced	37.2	27.2	-3.0	8.6	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	13.4	13.6	-1.4	5.3	No
Father Involvement (%)					
Biological father lives in household	17.0	11.3	-4.0	-3.3	No
Child spends time with biological father or social father four times per week	64.4	52.6	-3.8	2.8	No
Received formal child support last month	26.3	15.6	2.9	0.6	No
Mental Health (%)					
At high risk of clinical depression	18.8	11.2	-2.6	-9.4	No
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	23.0	13.4	2.2	-6.0	No
Domestic Abuse (%)					
Domestic abuse since random assignment	51.8	58.3	4.1	-0.6	No
Domestic abuse by partner since RA	42.6	42.5	4.5	-7.2	No
Household Stability (Past Two Years)					
Number of different types of household change	1.9	2.2	-0.3**	0.3	No
Doubled up with another household (%)	19.6	19.7	-3.2	-0.7	No
Set up own household (%)	27.8	38.6	-8.1**	1.0	No
Sample Size			645	160	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.5c

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR ONGOING FIP CASES, BY RACE AND ETHNICITY OF CASE HEAD

	Treatment Cases		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.6	1.7	0.0	0.0	No
Family Routines scale	3.4	3.3	0.0	-0.1	No
Parental Monitoring scale	4.6	4.6	0.1	0.0	No
HOME modified short form					
Total score	15.3	15.1	0.0	-0.2	No
Score on cognitive stimulation component	5.4	5.4	-0.1	-0.2	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	49.4	53.2	-6.1	1.5	No
Child cared for self in the past week	17.2	11.2	2.0	-6.7	No
Child is in child care for 20 hours or more per wk.	23.0	26.2	-1.9	3.8	No
Child Care History (%)					
Child used formal care in the past two years	37.4	41.2	-0.5	-5.3	No
Child cared for self regularly in the past two years	10.7	10.0	-2.3	2.7	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	10.8	4.9	-3.8	-4.0	No
Academic Functioning					
School Engagement scale	10.1	10.5	0.0	0.2	No
School performance					
Very good (%)	46.9	53.8	2.8	7.6	No
Below average (%)	9.0	2.5	0.7	-3.0	No
Ever repeated a grade (%)	7.7	5.9	-0.6	-4.1	No
Child's Behavior					
Positive Child Behavior scale	57.8	60.5	0.7	-1.6	No
Behavior Problems Index	12.1	10.1	-0.2	-0.2	No
Externalizing behavior problems	5.9	4.6	0.1	-0.1	No
Internalizing behavior problems	1.4	1.1	0.1	0.3	No
Sample Size			645	160	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.5d

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY RACE AND ETHNICITY OF CASE HEAD

	Treatment Cases		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	31.4	33.5	12.8***	9.7	No
Participated in a PROMISE JOBS activity	40.8	39.1	8.9*	-0.4	No
Assigned to LBP (voluntary or involuntary)	11.4	7.5	4.2	-5.5	No
Employment and Earnings					
Employed in the past two years (%)	89.8	83.2	3.5	-14.5**	**Yes**
Total weekly earnings from current jobs ($)	$243	$171	$9	-$122***	**Yes**
Household Income in Past Month					
Total earnings of all household members in previous month ($)	$1,523	$1,208	-$328**	-$291	No
Received FIP in previous month (%)	16.0	27.9	3.4	11.4	No
Household income, including Food Stamps, in previous month ($)	$1,869	$1,470	-$281*	-$190	No
Sufficiency of Resources					
Financial Strain scale	2.5	2.7	0.1	0.3	No
Material Hardship scale	1.2	1.4	0.1	0.5	No
Food Security scale	1.4	1.5	0.0	0.0	No
Social Support (%)					
Received financial support from family or friends in the past month	9.7	21.7	-4.6	7.5	No
Family's Health Insurance Coverage (%)					
Medicaid	35.3	58.6	4.7	14.4	No
Other health insurance	56.1	35.0	-3.8	-32.1***	**Yes**
No health insurance	17.4	15.2	1.7	-6.1	No
Sample Size			521	91	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.5e

SELECTED FAMILY WELL-BEING OUTCOMES FOR APPLICANT FIP CASES, BY RACE AND ETHNICITY OF CASE HEAD

	Treatment Cases		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Current Marital Status (%)					
Never married	15.7	42.7	0.3	9.4	No
Married and living with spouse	40.0	22.4	-1.8	-13.8	No
Separated or divorced	41.7	31.1	-0.1	0.2	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	9.6	16.5	-3.8	12.1*	**Yes**
Father Involvement (%)					
Biological father lives in household	32.7	21.2	-1.2	-15.8	No
Child spends time with biological father or social father four times per week	74.6	55.3	3.7	-10.3	No
Received formal child support last month	25.9	6.9	0.8	-0.4	No
Mental Health (%)					
At high risk of clinical depression	12.4	14.6	-0.2	12.0*	**Yes**
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	20.5	15.9	4.5	6.1	No
Domestic Abuse (%)					
Domestic abuse since random assignment	52.1	38.2	7.5	7.4	No
Domestic abuse by partner since RA	40.4	36.5	6.8	14.1	No
Household Stability (Past Two Years)					
Number of different types of household change	2.1	2.5	0.4***	0.3	No
Doubled up with another household (%)	20.6	38.4	6.6*	28.9***	**Yes**
Set up own household (%)	33.7	39.3	4.7	16.4	No
Sample Size			521	91	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.5f

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR APPLICANT FIP CASES, BY RACE AND ETHNICITY OF CASE HEAD

	Treatment Cases		Impact		
	Non-Minority	Minority	Non-Minority	Minority	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.6	1.6	-0.1	0.0	No
Family Routines scale	3.4	3.3	0.0	-0.2	No
Parental Monitoring scale	4.6	4.7	0.0	-0.1	No
HOME modified short form					
Total score	15.7	14.4	0.0	-1.2	No
Score on cognitive stimulation component	5.5	4.8	0.0	-0.6	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	47.0	47.1	-7.6	-10.1	No
Child cared for self in the past week	15.0	21.2	-0.9	-5.0	No
Child is in child care for 20 hours or more per wk.	23.2	27.7	-1.6	-0.8	No
Child Care History (%)					
Child used formal care in the past two years	46.0	53.2	1.2	-5.4	No
Child cared for self regularly in the past two years	13.3	13.7	2.4	-3.4	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	10.5	8.6	3.9	11.4***	No
Academic Functioning					
School Engagement scale	10.3	9.8	-0.3	-0.8*	No
School performance					
Very good (%)	54.2	37.3	8.7	-25.3*	**Yes**
Below average (%)	5.5	6.4	-2.1	3.8	No
Ever repeated a grade (%)	3.3	2.3	-2.2	-1.4	No
Child's Behavior					
Positive Child Behavior scale	58.5	60.1	-0.2	-0.1	No
Behavior Problems Index	11.4	11.4	-0.2	3.3	No
Externalizing behavior problems	5.6	5.1	0.0	0.9	No
Internalizing behavior problems	1.3	1.3	0.1	0.6	No
Sample Size			521	91	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random aassignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.6a

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES, BY APPLICATION COHORT

	Treatment Cases		Impact		
	Cohort 1	Cohorts 2 and 3	Cohort 1	Cohorts 2 and 3	Significant Differ?[a]
Participation in PROMISE JOBS (%)					
Signed FIA or employability plan	32.7	29.6	15.5***	11.7*	No
Participated in PROMISE JOBS activity	41.5	38.3	6.9	11.5*	No
Assigned to LBP (voluntary or involuntary)	12.3	9.4	4.5	3.3	No
Employment and Earnings					
Employed in the past two years (%)	92.3	84.4	6.2	-7.4*	**Yes**
Total weekly earnings from current jobs ($)	$244	$227	-$4	-$26	No
Household Income					
Total earnings of all household members in previous month ($)	$1,552	$1,467	-$209	-$460**	No
Received FIP in previous month (%)	17.0	15.5	3.4	4.4	No
Household income, including Food Stamps, in previous month ($)	$1,881	$1,819	-$218	-340*	No
Sufficiency of Resources					
Financial Strain scale	2.5	2.5	0.1	0.2**	No
Material Hardship scale	1.2	1.2	0.1	0.3*	No
Food Security scale	1.3	1.4	0.0	0.1	No
Social Support (%)					
Received financial support from family or friends in past month	13.0	9.6	-5.3	3.2	No
Family's Health Insurance Coverage (%)					
Medicaid	35.9	41.4	0.2	16.2***	**Yes**
Other health insurance	56.0	52.6	1.4	-21.2***	**Yes**
No health insurance	17.1	16.6	0.3	3.7	No
Sample Size			376	286	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.6b

SELECTED FAMILY WELL-BEING OUTCOMES FOR APPLICANT FIP CASES, BY APPLICATION COHORT

	Treatment Cases		Impact		
	Cohort 1	Cohorts 2 and 3	Cohort 1	Cohorts 2 and 3	Significant Differ?[a]
Current Marital Status (%)					
Never married	24.1	11.7	1.4	1.8	No
Married and living with spouse	37.9	37.9	-5.0	-2.3	No
Separated or divorced	36.1	46.7	2.9	-.3.2	No
Long-Term Cohabitation (%)					
Has lived unmarried with current partner one or more years	10.5	9.5	-1.5	-2.3	No
Father Involvement (%)					
Biological father lives in household	30.1	33.4	3.7	-10.1*	**Yes**
Child spends time with biological father or social father four times per week	74.1	68.5	5.0	-3.2	No
Received formal child support last month	25.2	24.7	-1.1	4.8	No
Mental Health (%)					
At high risk of clinical depression	11.6	13.0	0.0	4.1	No
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	17.1	22.3	3.5	5.9	No
Domestic Abuse (%)					
Domestic abuse since random assignment	47.8	52.0	4.0	12.0*	No
Domestic abuse by partner since RA	38.0	42.2	3.4	13.8**	No
Household Stability (Past Two Years)					
Number of different types of household change	2.1	2.2	0.4**	0.4	No
Doubled up with another household (%)	22.9	20.0	12.0***	3.8	No
Set up own household (%)	31.7	39.2	2.2	14.1**	No
Sample Size			376	286	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT F.6c

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR APPLICANT FIP CASES, BY APPLICATION COHORT

	Treatment Cases		Impact		
	Cohort 1	Cohorts 2 and 3	Cohort 1	Cohorts 2 and 3	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.5	1.6	-0.1*	0.1	**Yes**
Family Routines scale	3.4	3.4	0.0	-0.1	No
Parental Monitoring scale	4.6	4.6	0.0	0.0	No
HOME modified short form					
Total score	15.5	15.7	-0.1	-0.3	No
Score on cognitive stimulation component	5.3	5.5	-0.1	-0.1	No
Current Child Care Use (%)					
Child is in a regular child care arrangement	47.8	47.6	-2.7	-12.2*	No
Child cared for self in the past week	15.0	18.5	-5.4	4.8	**Yes**
Child is in child care for 20 hours or more per wk.	26.8	18.9	0.2	-2.8	No
Child Care History (%)					
Child used formal care in the past two years	45.4	49.7	3.7	-1.1	No
Child cared regularly for self in the past two years	14.1	13.9	2.4	3.6	No
Child had accident/injury/poisoning in child care requiring visit to emergency room since RA	11.0	9.2	3.1	8.0***	No
Academic Functioning					
School Engagement scale	10.3	10.1	-0.2	-0.7***	No
School performance					
Very good (%)	56.4	47.5	7.8	2.0	No
Below average (%)	5.7	7.4	-0.3	0.1	No
Ever repeated a grade (%)	3.6	2.6	-3.9	-1.3	No
Child's Behavior					
Positive Child Behavior scale	58.3	59.3	1.3	-2.9**	**Yes**
Behavior Problems Index	10.9	11.8	-1.3	3.0**	**Yes**
Externalizing behavior problems	5.5	5.6	-0.6	1.6***	**Yes**
Internalizing behavior problems	1.1	1.5	-0.2	0.7***	**Yes**
Sample Size			376	286	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes research cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

NOTE: Outcomes for children are based on a randomly selected "focal child" in each household.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

APPENDIX G

FINDINGS FOR SUBGROUPS DEFINED BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN

APPENDIX G

FINDINGS FOR SUBGROUPS DEFINED BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN

Under Iowa's Family Investment Program, clients can be assigned to the Limited Benefit Plan if they fail to develop, sign, and fulfill a contract with DHS called the Family Investment Agreement, or FIA. The FIA specifies the work activities in which the recipient will participate, the support services that the state will provide, and the intended date of exit from FIP. Clients can also choose to enter the LBP rather than following the FIA process. As originally implemented in April 1994, the LBP provided three months of full benefits, three months of reduced benefits (eliminating the adult portion of the grant), and six months of no benefits for the entire family. Family well-being visits were to be conducted in months 5 and 7 of this one-year period. In 1996, the LBP was revised to cover a nine-month period, with three months of reduced benefits followed by six months of no benefits. Well-being visits were to be conducted in months 2 and 4. If a family entered the LBP for a second time, benefits would be eliminated immediately for a six-month period and well-being visits would be conducted in month 4 of that period. These remain the current terms of the LBP.

We conducted an analysis of the differential impacts of Iowa's welfare reform program on subgroups of families and children who were more likely to be assigned to the LBP. Our approach to investigating the influence of the Limited Benefit Plan entailed the estimation of the characteristics of treatment cases at random assignment that best predicted subsequent assignment to the LBP.[1] We used the results of this estimation to assign to each treatment case, based on its characteristics at random assignment, a probability that it would be subsequently assigned to the LBP. In a similar fashion, we also used the results of this estimation to assign to each case in the control group a probability that it would have been subsequently assigned to the LBP if it had been in the treatment group. The characteristics used to predict the probability of assignment to the LBP include the age, race or ethnicity, marital status, and education level of the case head, the size of the assistance unit, the age of the youngest child, earnings in the year prior to random assignment, and the county of residence. We assigned probabilities separately for the ongoing and applicant samples of participants in the Iowa core survey. Then, within each of the samples (treatment and control cases combined), we formed two subgroups: one consisted of the cases in the highest quintile of probability of assignment to the LBP; the other consisted of the remaining 80 percent of the cases.

Tables G.1 and G.2 present the demographic characteristics of ongoing and applicant cases with higher and lower estimated probabilities of assignment to the LBP. The likelihood of assignment to the LBP for ongoing FIP cases ranged from nearly zero to 48 percent. For this analysis, cases in the higher-probability group had an average likelihood of 31 percent and the remaining cases had an average likelihood of 13 percent. The heads of cases that were more likely to be assigned to the LBP had lower education levels and a higher proportion never-married at random assignment. The likelihood of assignment to the Limited Benefit Plan in the

[1]Assignment to the LBP was determined on the basis of self-reports by case heads who participated in the Iowa core survey, which was conducted three to six years after random assignment. The survey participants were asked to report LBP assignments during the intervening period.

applicant sample ranged from nearly zero to 68 percent; for this analysis, our higher-probability group (20 percent of the sample) had an average likelihood of 31 percent, and the remaining families had an average likelihood of 6 percent. Applicant families who were more likely to be assigned to the Limited Benefit Plan were younger (many were teenage parents), were less likely to have completed high school, and had younger children (infants and toddlers) at random assignment compared to the group with a lower probability of assignment to the Limited Benefit Plan.[2]

Our approach to estimating the subgroup impacts of welfare reform that are presented in this appendix was the same as that described in Appendix D for the subgroup analysis of data from the core survey. We generated the estimates based on cases that participated in the child impact survey, using data from that survey supplemented with data from the core survey. Our findings are presented in this appendix for the six pairs of subgroups of families with a child age 5 to 12. In general, the estimated impacts on the two subgroups in the pair were often not significantly different from one another. This may have occurred for one of two reasons: (1) the impact estimates may be similar in direction and magnitude for both subgroups in the pair or (2) the estimates may be very different in direction, but the difference between the estimates was not statistically significant because of the small number of cases in one or both subgroups.

Tables G.3a and G.3b present selected economic and noneconomic outcomes for ongoing and applicant cases that participated in the core survey. Exhibits G.4a-c present selected outcomes for ongoing cases that participated in the child impact survey. Exhibits G.4d-f present the same outcomes for applicant cases that participated in the child impact survey. The reader is referred to Chapter VI for a discussion of the findings.

[2]The fact that many families in the higher-LBP group were headed by a teenage parent means that special provisions of FIP that apply to teenage parents might also be responsible for any differential impacts of welfare reform between the two groups. In particular, teenage parents age 19 or younger (who constitute 59 percent of the applicant higher-LBP group) were required to attend parenting classes, which could have an effect on children's well-being beyond any effects of income, family stress, or parenting.

EXHIBIT G.1

CHARACTERISTICS AT RANDOM ASSIGNMENT OF ONGOING FIP CASES
WITH LOW AND HIGH PROBABILITIES OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN

	Core Survey Participants		Child Impact Survey Participants	
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability
Characteristics of the Case Head				
Age				
Less than 18 years (%)	6.2	7.9	1.7	4.6
Less than 20 years (%)	14.6	14.8	11.4	13.1
Average age (years)	25.2	28.9	25.8	27.2
Race/ethnicity (%)				
White	68.6	79.9	71.5	82.4
Black	26.9	15.6	24.7	13.3
Hispanic or other	1.1	3.7	1.4	3.6
Marital status (%)				
Never married	75.5	54.6	73.5	58.6
Divorced/separated/widowed	5.2	27.5	6.3	24.5
Married	15.5	17.5	17.4	16.3
Single and female (%)	78.7	71.4	77.1	76.2
Education (%)				
Less than high school	68.7	22.9	63.9	19.3
High school degree or GED	29.7	66.4	34.7	71.0
Some college	0.0	6.1	0.0	5.8
Characteristics of the Case				
Age of youngest child				
Less than 1 year old (%)	18.9	20.7	16.9	26.4
Less than 3 years old (%)	56.4	44.8	55.9	59.1
Average age (years)	3.0	5.4	3.1	3.1
Eligible for child impact survey (%)	80.7	50.6	100.0	100.0
Probability of assignment to LBP (%)	31.0	13.3	31.0	15.9
Sample Size	279	1,109	220	568

SOURCE: The Iowa automated benefit calculation (IABC) system as of random assignment.

SAMPLE: Ongoing cases were active in FIP on 9/17/93. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the surveys.

METHODS: The data were weighted to be representative of all ongoing FIP cases in the nine research counties.

NOTE: Participants in the core survey were divided into groups with high or low probabilities of LBP assignment based on characteristics at random assignment that predicted later experience. Probabilities were imputed on the basis of a multivariate analysis of LBP assignment as reported by treatment cases in the survey. The high probability group comprises cases in the highest quintile of the probability distribution. The low probability group comprises the remaining cases. These designations were retained for participants in the child impact survey. The sample sizes are slightly smaller those shown in Exhibits IV.1 and V.1 due to missing data on characteristics at random assignment

EXHIBIT G.2

CHARACTERISTICS AT RANDOM ASASIGNMENT OF APPLICANT FIP CASES
WITH LOW AND HIGH PROBABILITIES OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN

	Core Survey Participants		Child Impact Survey Participants	
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability
Characteristics of the Case Head				
Age				
Less than 18 years (%)	43.9	9.8	17.8	5.3
Less than 20 years (%)	59.1	16.8	33.3	8.8
Average age (years)	18.2	27.8	19.7	28.0
Race/ethnicity (%)				
White	73.9	75.4	70.8	79.4
Black	10.7	9.7	7.4	8.2
Hispanic or other	0.5	5.9	0.0	5.3
Marital status (%)				
Never married	64.8	50.2	40.5	43.0
Divorced/separated/widowed	10.3	15.0	15.9	15.8
Married	9.9	27.5	21.8	36.1
Single and female (%)	64.5	51.8	53.7	49.1
Education (%)				
Less than high school	67.5	21.1	54.8	17.6
High school degree or GED	29.0	66.5	43.5	73.3
Some college	1.4	8.8	0.6	7.3
Characteristics of the Case				
Age of youngest child				
Less than 1 year old (%)	67.7	31.5	57.2	19.1
Less than 3 years old (%)	83.4	53.0	82.8	51.1
Average age (years)	2.2	4.4	1.3	3.5
Eligible for child impact survey (%)	43.8	38.9	100.0	100.0
Probability of assignment to LBP (%)	30.7	6.4	28.3	6.7
Application cohort (%)				
Cohort 1	55.8	55.1	60.7	59.9
Cohort 2	29.4	32.5	30.3	31.0
Cohort 3	14.7	12.4	9.0	9.1
Sample Size	270	1,242	106	533

SOURCE: The Iowa automated benefit calculation (IABC) system as of random assignment.

SAMPLE: Applicant cases submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the surveys.

METHODS: The data were weighted to be representative of all ongoing FIP cases in the nine research counties.

NOTE: Participants in the core survey were divided into groups with high or low probabilities of LBP assignment based on characteristics at random assignment that predicted later experience. Probabilities were imputed on the basis of a multivariate analysis of LBP assignment as reported by treatment cases in the survey. The high probability group comprises cases in the highest quintile of the probability distribution. The low probability group comprises the remaining cases. These designations were retained for participants in the child impact survey. The sample sizes are slightly smaller those shown in Exhibits IV.1 and V.1 due to missing data on characteristics at random assignment.

EXHIBIT G.3a

SELECTED ECONOMIC AND NONECONOMIC OUTCOMES FOR ONGOING FIP CASES, BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN
(Sample: Ongoing FIP Cases that Participated in the Core Survey)

	Treatment Outcome		Impact		
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability	Significant Differ?[a]
Participation in PROMISE JOBS Since Random Assignment (%)					
Participated in a PJ activity	69.0	52.5	2.8	6.7**	No
Assigned to LBP	32.9	12.9	18.5***	3.1	**Yes**
Received high school degree or GED	16.8	6.4	-0.4	2.6*	No
Employment (%)					
Employed full-time (30 hrs./wk. or more)	45.2	52.6	2.2	1.7	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$664	$849	-$33	$34	No
All household members	$851	$1,112	$107	-$27	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,392	$1,480	$193*	-$17	**Yes**
Income is below poverty (%)	57.7	51.5	-9.4	6.0*	**Yes**
Current Marital Status (%)					
Never married	50.2	29.0	-2.3	-3.1	No
Married and living with spouse	23.1	25.2	5.4	-5.3*	**Yes**
Sample Size			279	1,109	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: Ongoing cases were active in FIP on 9/17/93. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all ongoing FIP cases in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. See the note to Exhibit G.1 for an explanation of the low and high probability groups.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT G.3b

SELECTED ECONOMIC AND NONECONOMIC OUTCOMES FOR APPLICANT FIP CASES, BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN:
(Sample: Applicant FIP Cases that Participated in the Core Survey)

	Treatment Outcome		Impact		
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability	Significant Differ?[a]
Participation in PROMISE JOBS Since Random Assignment (%)					
Participated in a PROMISE JOBS activity	53.6	35.5	5.9	6.8**	No
Assigned to LBP	31.0	5.7	18.5***	2.2*	**Yes**
Received high school degree or GED	29.7	4.1	7.9	0.8	No
Employment (%)					
Employed full-time (30 hrs./wk. or more)	50.0	55.6	10.7	-2.2	No
Monthly Earnings from All Jobs ($)					
Survey respondent	$751	$1,018	$145	-$132*	**Yes**
All household members	$1,233	$1,511	-$81	-$265***	No
Household Income and Poverty					
Income, including Food Stamps ($)	$1,563	$1,822	-$81	-$268***	No
Income is below poverty (%)	50.2	36.2	-0.6	3.2	No
Current Marital Status (%)					
Never married	51.0	25.3	16.1**	4.1	No
Married and living with spouse	22.7	37.2	-17.9*	-2.7	No
Sample Size			270	1,242	

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: Applicant cases submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. S urvey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all applicant FIP cases in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. See the note to Exhibit G.1 for an explanation of the low and high probability groups.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a] Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT G.4a

SELECTED ECONOMIC OUTCOMES FOR ONGOING FIP CASES,
BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN
(Sample: Ongoing FIP Cases that Participated in the Child Impact Survey)

	Treatment Cases		Impact		
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability	Significant Differ?[a]
Participation in PROMISE JOBS Since Random Assignment (%)					
Participated in a PROMISE JOBS activity	71.5	58.3	5.4	7.8*	No
Assigned to LBP	33.5	14.4	19.1***	2.0	**Yes**
Received high school degree or GED	14.9	5.4	0.5	2.5	No
Employment and Earnings					
Works full-time (%)	42.3	51.5	-2.1	-2.8	No
Total monthly earnings from current jobs ($)	$665	$843	-$69	-6	No
Household Income					
Total earnings of all household members in previous month ($)	$864	$1,116	$92	-26	No
Household income, including Food Stamps, in previous month ($)	$1,410	$1,564	$171	31	No
Household income is below poverty line (%)	59.6	50.6	-6.9	2.0	No
Sufficiency of Resources					
Financial Strain scale	2.7	2.6	-0.1	0.0	No
Material Hardship scale	1.1	1.1	-0.3	0.0	No
Sample Size			220	568	

SOURCE: The outcome measures are from the 1998-99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: Ongoing FIP cases were active in FIP on 9/17/93. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all ongoing FIP cases with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. See the note to Exhibit G.1 for an explanation of the low and high probability groups.

NOTE: Outcomes for children are based on a randomly selected "focal child."

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT G.4b

SELECTED FAMILY WELL-BEING OUTCOMES FOR ONGOING FIP CASES, BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN
(Sample: Ongoing FIP Cases that Participated in the Child Impact Survey)

	Treatment Cases		Impact		
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability	Significant Differ?[a]
Current Marital Status (%)					
Never married	47.7	36.4	-1.3	3.5	No
Married and living with spouse	23.2	25.6	5.5	-2.5	No
Mental Health					
CES-Depression scale	14.4	11.9	-0.0	0.3	No
At risk of clinical depression (%)	36.3	30.6	-2.3	1.7	No
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment or made it difficult to work since RA	17.6	22.2	-2.8	3.5	No
Domestic Abuse (%)					
Domestic abuse since random assignment	59.5	50.1	9.8	0.9	No
Domestic abuse by partner since RA	48.0	40.6	8.5	1.1	No
Household Stability (Past Two Years)					
Number of different types of household change	2.1	1.8	-0.3	-0.2	No
Moved (%)	54.0	51.1	-12.1*	4.4	**Yes**
Doubled up with another household (%)	28.5	15.5	-3.0	-5.4	No
Set up own household (%)	34.3	27.2	-7.0	-8.1*	No
Child went to live elsewhere (%)	8.5	8.8	-2.0	-3.5	No
Sample Size			220	568	

SOURCE: The outcome measures are from the 1998-99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: Ongoing FIP cases were active in FIP on 9/17/93. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all ongoing FIP cases with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. See the note to Exhibit G.1 for an explanation of the low and high probability groups.

NOTE: Outcomes for children are based on a randomly selected "focal child."

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT G.4c

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR ONGOING FIP CASES, BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN
(Sample: Ongoing FIP Cases that Participated in the Child Impact Survey)

	Treatment Cases		Impact		
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.7	1.6	-0.0	-0.0	No
Family Routines scale	3.4	3.4	-0.0	-0.1	No
Parental Monitoring scale	4.5	4.6	-0.1	0.1*	**Yes**
HOME modified short form scale					
Total score	12.0	12.6	0.0	-0.2	No
Score on cognitive stimulation	7.7	8.1	0.2	0.1	No
Child Care History (Past Two Years) (%)					
Child used formal care	47.2	50.2	3.0	1.3	No
Child used informal care	65.3	63.2	-3.1	-2.2	No
Child cared for self regularly	10.2	9.0	1.0	-4.6	No
Academic Functioning					
School Engagement scale	9.8	10.2	-0.3	9.7	No
School performance is "very good" (%)	40.2	51.5	-2.4	6.5	No
Child's Behavior					
Positive Child Behavior scale	57.1	58.2	-1.7	0.8	No
Behavior Problems Index	10.8	9.7	1.0	-0.1	No
Externalizing behavior problems	6.4	5.6	0.8	-0.0	No
Internalizing behavior problems	1.4	1.3	0.2	0.1	No
Sample Size			220	568	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: Ongoing FIP cases were active in FIP on 9/17/93. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all ongoing FIP cases with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. See the note to Exhibit G.1 for an explanation of the low and high probability groups.

NOTE: Outcomes for children are based on a randomly selected "focal child."

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT G.4d

SELECTED ECONOMIC OUTCOMES FOR APPLICANT FIP CASES,
BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN
(Sample: Applicant FIP Cases that Participated in the Child Impact Survey)

	Treatment Cases		Impact		
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability	Significant Differ?[a]
Participation in PROMISE JOBS Since Random Assignment (%)					
Participated in a PROMISE JOBS activity	50.3	37.2	10.1	6.4	No
Assigned to LBP (voluntary or involuntary)	26.5	7.0	7.5	1.6	No
Received high school degree or GED	21.7	3.6	0.7	1.2	No
Employment and Earnings					
Works full-time (%)	42.6	61.3	-18.1	4.1	**Yes**
Total monthly earnings from current jobs ($)	$663	$1,117	-$165	-$7	No
Household Income					
Total earnings of all household members in previous month ($)	$1,199	$1,581	-$44	-$348**	No
Household income, including Food Stamps, in previous month ($)	$1,646	$1,926	$95	-$294**	No
Household income is below poverty line (%)	52.8	30.1	3.7	2.4	No
Sufficiency of Resources					
Financial Strain scale	2.5	2.5	0.1	0.1	No
Material Hardship scale	1.3	1.1	0.3	0.1	No
Sample Size			106	533	

SOURCE: The outcome measures are from the 1998-99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: Applicant cases submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all applicant FIP cases with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. See the note to Exhibit G.2 for an explanation of the low and high probability groups.

NOTE: Outcomes for children are based on a randomly selected "focal child."

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT G.4e

SELECTED FAMILY WELL-BEING OUTCOMES FOR APPLICANT FIP CASES, BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN
(Sample: Applicant FIP Cases that Participated in the Child Impact Survey)

	Treatment Cases		Impact		
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability	Significant Differ?[a]
Current Marital Status (%)					
Never married	37.4	17.8	-17.0*	1.8	No
Married and living with spouse	20.2	41.4	-18.6*	-4.3	No
Mental Health					
CES-Depression scale	11.1	9.7	-0.0	1.0	No
At risk of clinical depression (%)	23.7	20.1	1.5	3.4	No
Employment Barriers or Discouragement (%)					
Respondent's partner discouraged employment	19.3	17.2	2.0	3.1	No
Domestic Abuse (%)					
Domestic abuse since random assignment	50.5	46.1	-4.3	4.2	No
Domestic abuse by partner since RA	38.4	36.3	-10.3	6.4	No
Household Stability (Past Two Years)					
Number of different types of household change	2.2	2.0	0.0	0.4**	No
Moved (%)	64.6	54.2	1.5	5.8	No
Doubled up with another household (%)	24.7	19.1	4.8	7.2**	No
Set up own household (%)	34.4	33.2	-9.8	8.1*	No
Child went to live elsewhere (%)	4.9	7.6	-0.2	-2.5	No
Sample Size			106	533	

SOURCE: The outcome measures are from the 1998-99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: Applicant cases submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all applicant FIP cases with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. See the note to Exhibit G.2 for an explanation of the low and high probability groups.

NOTE: Outcomes for children are based on a randomly selected "focal child."

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

RA Random assignment

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

EXHIBIT G.4f

SELECTED PARENTING, CHILD CARE, AND CHILD OUTCOMES FOR APPLICANT FIP CASES, BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN
(Sample: Applicant FIP Cases that Participated in the Child Impact Survey)

	Treatment Cases		Impact		
	High LBP Probability	Low LBP Probability	High LBP Probability	Low LBP Probability	Significant Differ?[a]
Parenting					
Aggravation in parenting scale	1.5	1.5	-0.1	0.0	No
Family Routines scale	3.4	3.4	0.0	0.0	No
Parental Monitoring scale	4.8	4.7	0.0	0.0	No
HOME modified short form scale					
Total score	12.5	12.7	0.1	-0.3	No
Score on cognitive stimulation subscale	8.0	8.1	0.2	-0.3	No
Child Care History (Past Two Years) (%)					
Child used formal care	56.9	55.2	-28.0***	3.2	**Yes**
Child used informal care	64.7	58.6	-10.4	-5.3	No
Child cared for self regularly	5.2	16.7	-3.1	4.5	No
Academic Functioning					
School Engagement scale	10.4	10.2	-0.3	-0.4**	No
School performance is "very good" (%)	53.0	49.9	2.3	0.3	No
Child's Behavior					
Positive Child Behavior scale	59.2	58.3	5.0	-1.4	**Yes**
Behavior Problems Index	8.2	9.8	-2.3	1.1	**Yes**
Externalizing behavior problems	5.0	5.6	-2.0	0.7	**Yes**
Internalizing behavior problems	0.8	1.3	-0.1	0.2	**Yes**
Sample Size			106	533	

SOURCE: The outcome measures are from the 1998-99 child impact survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: Applicant cases submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the survey. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all applicant FIP cases with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test. See the note to Exhibit G.2 for an explanation of the low and high probability groups.

NOTE: Outcomes for children are based on a randomly selected "focal child."

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]Difference between impact estimates for subgroups is statistically significant at the .10 level.

APPENDIX H

ESTIMATES OF IMPACTS ON ADULTS AND FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP

APPENDIX H

ESTIMATES OF IMPACTS ON ADULTS AND FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP

This appendix provides estimates of the impact of welfare reform on adults and families with a child age 5 to 12 living in the household at the time of the core and child impact surveys. The outcomes include education and training, family structure and stability, housing, neighborhood, and access to transportation, health insurance coverage, private support networks, job characteristics and earnings, and income and poverty. Estimates of the impacts of welfare reform on these outcomes for all ongoing and applicant FIP cases were presented in Chapter IV. We have estimated impacts using the child impact sample in order to provide a clearer link between the impacts for all adults reported in Chapter IV and the impacts on families and children reported in Chapter V, which pertain to the subsample of families with a child age 5 to 12 living in the household at the time of the follow-up surveys.

Overall, the findings reported for the full sample of ongoing and applicant FIP cases hold for the subsample of cases with a child 5 to 12 years old. We begin by describing the similarities and differences in characteristics at random assignment between the core and child impact samples. Differences between the samples at random assignment could lead to differences in outcomes. For example, if families with a child age 5 to 12 had higher education levels at random assignment, we would expect later earnings levels to be higher. Differences in initial characteristics could also lead to differences in the impacts of welfare reform. For example, if the child impact sample had younger children at random assignment, and we have found in Chapter III that welfare reform increased the employment and earnings of families with younger children in the first few years after random assignment, we would expect to see some differences in the impacts of welfare reform on the subsample of cases with a child age 5 to 12 at follow-up.

A. DIFFERENCES IN CHARACTERISTICS OF THE CORE AND CHILD IMPACT SURVEY SAMPLES

The child impact survey sample is essentially a subgroup of the core sample, but this subgroup was formed in two stages. First, a core family had to be eligible for the child impact survey by having a child age 5 to 12 who was in the household at the time of the core survey. Among the 2,951 cases interviewed for the core survey, 1,962 were eligible for the Child Impact Study, for an eligibility rate of 66 percent. Second, the eligible family had to participate in the child impact survey. Of the 1,962 families eligible for the child impact survey, we interviewed 1,475 primary caregivers, for a response rate of 75 percent. The primary reason for nonresponse was that the family had moved out of state, making an in-home interview infeasible.

Exhibits H.1a and H.1b show how the core and child impact survey samples differ by separately examining the two steps involved in moving from the core sample to the child impact survey sample. The tables first compare families in the core sample who were eligible for the child impact survey with those that were ineligible. Then, the tables compare families eligible for the child impact survey who responded to the survey with those who did not respond.

In the analysis of sample characteristics and of the impacts of welfare reform on adults, families, and children, we have used sampling weights. Weights for the child impact survey participants were based on the weights developed for core survey participants, but they were adjusted for nonresponse to the child impact survey.[1] With this adjustment, the weighted survey respondents who were ongoing FIP participants at the time of random assignment are representative of the population of ongoing FIP cases with a child from birth to age 7 in the nine research counties at the outset of welfare reform.[2] Similarly, the weighted survey respondents who were FIP applicants at the time of random assignment are representative of all applicants with a child at random assignment who was projected to be age 5 to 12 at the time of the core and child impact surveys.

Ongoing cases who were eligible for the child impact survey were more likely than those not eligible to be younger; to be never-married rather than divorced, separated, or widowed; to have a high school degree or GED; to have younger children; and to have somewhat smaller families; and to have received welfare while growing up (Exhibit H.1a). They were less likely to have worked in the months prior to random assignment. Cases eligible for the child impact survey were similar to those not eligible by race/ethnicity; in the proportion married at random assignment; in the proportion of ADC-UP cases; and in the average level of earnings in the months prior to random assignment. Differential response to the survey led to a somewhat larger proportion of white families and smaller proportion of black families in the final ongoing child impact sample.

Applicant cases who were eligible for the child impact survey were more likely than those not eligible to be married rather than never-married; to have younger children and larger families; to have a high school degree and to have higher earnings just prior to random assignment (Exhibit H.1b). Eligible applicant cases were similar to ineligible cases by age; race/ethnicity; the proportion who worked just prior to random assignment; the proportion of ADC-UP cases; and the proportion who received welfare while growing up. Differential response to the survey led to a somewhat larger proportion of white families and a smaller proportion of black families; fewer parents with some college education; a larger proportion who worked just prior to random assignment and higher average earnings just prior to random assignment.

B. IMPACTS OF WELFARE REFORM ON ADULTS AND FAMILIES WITH CHILDREN AGES 5 TO 12

The impacts of welfare reform on adults and families with children ages 5 to 12 at the time of the follow-up survey were very similar to those estimated for all families (see Exhibits H.2 – H.9). In some cases, the impact for families with children ages 5 to 12 is of the same magnitude as the impact for all families but because the child impact sample is smaller than the core sample, the impact is not statistically significant.

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[1]Details on the construction of the core survey weights are provided in Appendix C.

[2]A child in this age range at baseline would have been 5 to 12 years old at the time of the follow-up survey and thus eligible for a child impact survey interview.

Among families with a child age 5 to 12 at follow-up, welfare reform increased the proportion of both ongoing and applicant case heads who participated in PROMISE JOBS and signed a Family Investment Agreement or employability plan (see Exhibit H.2).

Chapter IV described the finding that welfare reform appeared to discourage marriage among applicant cases. Applicant cases in the treatment group were more likely to remain never married than those in the control group, and there were corresponding declines in the proportion married, separated, or divorced, although the latter impacts were not statistically significant. Exhibit H.3 shows the impacts of welfare reform on marital status for parents with a child age 5 to 12 at follow-up. None of the impacts are statistically significant, although the impacts on the proportion married and the proportion separated or divorced are similar in magnitude and direction to the impacts for all adults (Exhibit IV.5). Only the impact on the proportion never married appears to be smaller (1.7 percent in the child impact sample compared with 6.5 percent in the core sample). Nevertheless, the difference in the impact estimates is not statistically significant.

Estimates of the impact of welfare reform on housing, the neighborhood, and access to transportation indicate similar findings in the child impact sample as in the core sample (Exhibit H.4). In both samples, welfare reform had no impact on these outcomes for ongoing cases, but among applicant cases, welfare reform led to a decline in neighborhood quality and a reduction in access to a local bus. In several instances, the impacts on child impact applicant cases are not statistically significant, but they are of similar magnitude and direction to those in the core sample.

Impacts on health insurance coverage for families in the child impact sample are similar in direction and magnitude to those estimated in the core sample (Exhibit H.5). We find a significant increase in Medicaid coverage among ongoing cases with a child age 5 to 12. Among applicant cases with a child age 5 to 12, we find a reduction in private health insurance and increase in Medicaid coverage, and a reduction in the proportion of survey respondents and children continuously covered by health insurance over the follow-up period, similar in direction and magnitude to the impacts on all applicant cases.

Impacts on the use of private support networks among families in the child impact sample are similar in direction and magnitude to those estimated in the core sample (Exhibit H.6). The overall proportion of cases in the child impact sample with formal child support awards in effect (in both the treatment and control groups) is higher than in the core sample, which may be attributable to the fact that families in the child impact sample have younger children. Among ongoing cases with a child age 5 to 12, there are significant positive impacts of welfare reform on child support awards in effect and the amount of child support received in the past month. Among applicant cases, welfare reform increased the amount of informal child support payments received in the month prior to the survey.

Impacts on participation in FIP, food stamps, and all government assistance programs among families in the child impact sample are similar in direction and magnitude to those estimated for the core sample (Exhibit H.7). Among ongoing cases with a child 5 to 12, welfare reform significantly increased the proportion receiving food stamps and any government assistance program, as well as the average amount received from all government assistance

programs. Among applicant cases with a child 5 to 12, welfare reform increased the average amount of FIP benefits received in the month prior to the survey.

Employment and earnings levels were very similar among families in the child impact sample and those in the core, both in terms of average levels and the impacts of welfare reform (Exhibit H.8). Welfare reform had no impacts on employment or earnings of either ongoing or applicant case heads. However, welfare reform appeared to reduce the average level of total household earnings for applicant cases with a child age 5 to 12 in the month prior to the survey.

The welfare reform-induced decline in household earnings is reflected in a similar decline in the level of household income for applicant cases with a child age 5 to 12 in the month prior to the survey, which is consistent with findings for all applicants (Exhibit H.9). There was no statistically significant change in household income among ongoing cases with a child 5 to 12 years old, and no significant change in poverty rates for either ongoing or applicant cases.

EXHIBIT H.1a

COMPARISON OF CHILD IMPACT SURVEY PARTICIPANTS
WITH CORE SURVEY PARTICIPANTS:
ONGOING FIP CASES

	Core Survey Participants			Eligible for Child Impact Survey		
	Eligible for CIS	Not Elig. for CIS	Significant Differ?[a]	Responded	Did not Respond	Significant Differ?[a]
Characteristics of the Case Head						
Age in years	26.6	32.3	**Yes**	26.6	26.5	No
Race/ethnicity (%)						
White	78.6	76.5	No	79.8	74.1	**Yes**
Black	17.7	17.2	No	16.0	23.9	**Yes**
Hispanic or other	2.8	4.1	No	3.1	1.7	No
Marital status (%)						
Never married	64.7	45.0	**Yes**	63.9	67.8	No
Married	16.6	19.6	No	16.8	15.8	No
Divorced/separated/widowed	18.7	35.4	**Yes**	19.3	16.4	No
Education (%)						
Less than high school	31.3	34.0	No	32.6	26.5	No
High school degree or GED	60.9	54.9	**Yes**	60.2	63.4	No
Some college	4.2	6.5	**Yes**	4.1	4.3	No
Received welfare growing up (%)	34.3	28.5	**Yes**	33.4	37.3	No
Characteristics of the Case						
Age of youngest child in years	3.0	9.8	**Yes**	3.0	2.9	No
Number of dependents	3.6	3.8	**Yes**	3.6	3.3	**Yes**
Labor mkt. exp. in year prior to RA						
Case employment rate (%)	52.3	59.0	**Yes**	51.8	54.4	No
Case earnings ($)	$1,645	$1,832	No	$1,648	$1,637	No
FIP-UP (%)	3.5	1.8	No	3.3	4.3	No
Sample Size	1,033	380	1,413	813	220	1,033

SOURCE: The Iowa automated benefit calculation (IABC) system as of random assignment and IWD (UI) data for the year before the quarter of random assignment.

SAMPLE: Ongoing FIP cases were active in FIP on 9/17/93. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the surveys.

METHODS: The data were weighted to be representative of all ongoing FIP cases in the nine research counties.

NOTE: The first two columns divide the full core sample of research cases into a group eligible for the child impact survey (who had a child age 5 to 12 living in the household at the time of the surveys) and a group that was not eligible. The second two columns divide the sample eligible for a child impact survey into those who responded and those who did not respond. About half of the nonrespondents could not be interviewed because they had moved out of Iowa, making an in-home interview too costly.

CIS Child impact survey

RA Random assignment

[a]Difference between the two groups is statistically significant at the .l0 level.

EXHIBIT H.1b

COMPARISON OF CHILD IMPACT SURVEY PARTICIPANTS
WITH CORE SURVEY PARTICIPANTS:
APPLICANT FIP CASES

	Core Survey Participants			Eligible for Child Impact Survey		
	Eligible for CIS	Not Elig. for CIS	Significant Differ?[a]	Responded	Did not Respond	Significant Differ?[a]
Characteristics of the Case Head						
Age in years	26.1	25.7	No	26.1	26.3	No
Race/ethnicity (%)						
White	76.5	74.1	No	78.6	71.0	**Yes**
Black	9.4	10.1	No	8.0	13.1	**Yes**
Hispanic or other	5.0	4.5	No	4.1	7.1	No
Marital status (%)						
Never married	51.8	64.9	**Yes**	49.8	56.9	No
Married	33.2	18.6	**Yes**	33.9	31.5	No
Divorced/separated/widowed	15.0	16.5	No	16.3	11.6	No
Education (%)						
Less than high school	28.5	33.1	No	28.4	28.8	No
High school degree or GED	62.8	53.8	**Yes**	64.3	58.9	No
Some college	7.1	7.4	No	5.8	10.4	**Yes**
Received welfare growing up (%)	26.2	28.3	No	25.0	29.2	No
Characteristics of the Case						
Age of youngest child in years	3.0	5.2	**Yes**	3.0	3.1	No
Number of dependents	3.4	2.5	**Yes**	3.4	3.4	No
Labor mkt. exp. in year prior to RA						
Case employment rate (%)	65.1	69.9	No	69.6	54.0	**Yes**
Case earnings ($)	$6,475	$5,323	**Yes**	$7,103	$4,877	**Yes**
FIP-UP (%)	8.3	5.8	No	8.9	6.8	No
Sample Size	929	609	1,538	662	267	929

SOURCE: The Iowa automated benefit calculation (IABC) system as of random assignment and IWD (UI) data for the year before the quarter of random assignment.

SAMPLE: Applicant FIP cases submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied.. The child impact sample includes cases with a child age 5 to 12 living in the household at the time of the surveys.

METHODS: The data were weighted to be representative of all ongoing FIP cases in the nine research counties.

NOTE: The first two columns divide the full core sample of research cases into a group eligible for the child impact survey (who had a child age 5 to 12 living in the household at the time of the surveys) and a group that was not eligible. The second two columns divide the sample eligible for a child impact survey into those who responded and those who did not respond. About half of the nonrespondents could not be interviewed because they had moved out of Iowa, making an in-home interview too costly.

CIS Child impact survey

RA Random assignment

[a]Difference between the two groups is statistically significant at the .l0 level.

EXHIBIT H.2

EDUCATION AND TRAINING:
FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Participation in PROMISE JOBS Since						
Participated in a PROMISE JOBS activity	63.9	56.4	7.5*	40.2	31.5	
Signed FIA or employability plan	52.9	40.6	12.4***	31.8	17.3	
Assigned to LBP (voluntary or involuntary)	19.5	14.2	5.3*	11.2	7.2	
Participation in Education Since Random Assignment						
Adult basic education classes	6.8	7.9	-1.1	8.5	3.8	4.7**
High school or GED classes	20.7	24.8	-4.1	11.5	9.5	2.0
Vocational/technical/college classes	37.4	36.3	1.1	28.7	27.0	1.7
Any education classes	56.8	61.4	-4.5	47.5	45.8	1.7
Education Credential Earned Since Random Assignment						
High school diploma or GED	8.2	6.2	2.0	7.3	5.6	1.7
Associate's or bachelor's degree	12.1	12.2	-0.1	6.0	6.6	-0.7
Any education credential	27.7	23.2	4.5	17.8	16.5	1.3
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Results are based on data from the core survey for cases that participated in the child impact survey. The child impact survey sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT H.3

FAMILY STRUCTURE AND STABILITY:
FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Marital Status						
Never married	38.5	38.0	0.4	19.5	17.7	1.7
Married and living with spouse	24.8	25.6	-0.8	37.8	42.0	-4.2
Separated or divorced	35.0	36.2	-1.2	40.0	39.6	0.4
Long-Term Cohabitation						
Has lived unmarried with cur. partner 1+ years	13.4	13.6	-0.2	10.1	12.1	-2.0
Married (spouse present) or cohab. 1+ years	38.5	38.9	-0.5	48.0	53.8	-5.8
Family Stability						
Birth of child since random assignment	32.1	29.0	3.2	37.1	42.9	-5.8
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Results are based on data from the core survey for cases that participated in the child impact survey. The child impact survey sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants with a child 5 to 12 years in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT H.4

HOUSING, NEIGHBORHOOD, AND ACCESS TO TRANSPORTATION:
FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Current Housing Arrangement						
Own home	21.2	22.0	-0.8	34.7	37.9	-3.2
Rent home	66.5	66.7	-0.2	56.3	52.6	3.6
Live with friends or relatives	11.5	11.4	0.1	8.2	9.2	-1.0
Other Housing Outcomes						
Currently in public/subsidized housing	22.8	25.3	-2.5	15.9	12.9	3.1
In shelter or homeless during past year	5.5	3.4	2.2	6.7	4.1	2.6
Neighborhood Characteristics						
Neighborhood good/excellent place to raise kids	84.6	87.0	-2.4	82.8	89.5	-6.8**
Index of neighborhood quality moderate to high	84.2	84.7	-0.5	87.6	91.6	-4.0
Neighborhood deteriorated over past year	10.7	13.9	-3.2	12.4	7.8	4.6
Access to Transportation						
Neighborhood served by local bus	70.2	69.9	0.3	66.5	68.8	-2.3
Owns or has access to a working car	87.1	83.9	3.2	91.2	93.9	-2.7
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Results are based on data from the core survey for cases that participated in the child impact survey. The child impact survey sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT H.5

HEALTH INSURANCE COVERAGE:
FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP
(Percentages)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Family's Current Health Insurance Coverage						
Medicaid	58.2	49.3	8.9**	38.1	31.7	6.3
Private	39.4	40.9	-1.5	54.7	61.9	-7.3*
Any (Medicaid or private)	84.9	80.2	4.7	82.8	84.9	-2.0
Combinations of Medicaid and private						
Neither Medicaid nor private	15.1	19.8	-4.7	17.2	15.1	2.0
Medicaid only	45.3	39.3	6.0	28.4	22.6	5.8
Private only	26.5	30.9	-4.4	44.9	52.9	-8.0*
Medicaid and private	12.9	9.9	3.0	9.8	8.9	0.9
Health Insurance Coverage Since Random Assignment						
Survey respondent continuously covered	46.9	47.5	-0.6	31.2	46.5	-15.3***
Survey resp's children continuously covered	58.0	55.1	3.0	40.9	50.0	-9.1**
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Results are based on data from the core survey for cases that participated in the child impact survey. The child impact survey sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT H.6

USE OF PRIVATE SUPPORT NETWORKS:
FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Absent Parents Formal Child Support						
Child support award in effect last month (%)	51.2	40.9	10.3***	41.6	36.4	5.2
Child support received last month (%)	24.5	21.7	2.7	25.2	23.7	1.6
Amount of child support received last month, including zeros ($)	$79.89	$58.96	$20.93*	$82.09	$87.96	-$5.87
Absent Parents Informal Cash Payments						
Informal payment received last month (%)	4.1	4.5	-0.4	4.8	2.3	2.5
Amount of informal payments received last month, including zeros ($)	$5.56	$5.05	$0.50	$8.97	$0.46	$8.51***
Family, Friends, and Neighbors						
Received lodging last month (%)	13.1	9.2	3.9	8.7	9.1	-0.5
Received food or meals last month (%)	11.2	9.8	1.4	10.3	12.6	-2.2
Received financial assistance last month (%)	14.4	10.1	4.4*	11.7	13.8	-2.1
Community Organizations						
Rec'd help from food pantry, soup kitchen, crisis center, or thrift shop last year (%)	47.9	47.1	0.7	41.5	47.4	-5.9
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied Results are based on data from the core survey for cases that participated in the child impact survey. The child impact survey sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT H.7

PARTICIPATION IN SELECTED GOVERNMENT ASSISTANCE PROGRAMS:
FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP
(By Household in Month Prior to Survey)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Family Investment Program (FIP)						
Received benefit (%)	30.2	29.2	1.0	16.3	12.7	3.6
Benefit amount, including zeros ($)	$111	$103	$8	$56	$34	$22**
Food Stamps						
Received benefit (%)	49.1	40.9	8.2**	27.2	24.4	2.8
Benefit amount, including zeros ($)	$110	$92	$18	$57	$54	$2
All Government Assistance Programs[a]						
Received any benefit (%)	67.8	57.9	9.9***	48.8	48.2	0.7
Total benefit amount, including zeros ($)	$371	$302	$69**	$205	$161	$44
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Results are based on data from the core survey for cases that participated in the child impact survey. The child impact survey sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

[a]All government assistance programs include FIP, Food Stamps, General Assistance, Unemployment Insurance, Social Security, Supplemental Security Income, Foster Care Assistance, Women, Infants, and Children Program, and other government assistance programs.

EXHIBIT H.8

JOB CHARACTERISTICS AND EARNINGS: FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Hours per Week on Primary Current Formal Job (%)						
Not employed on formal job	41.4	40.0	1.4	29.9	30.2	-0.3
Employed part-time on formal job						
1 to 19 hours	2.9	1.2	1.8*	3.5	2.8	0.7
20 to 29 hours	6.4	7.0	-0.6	8.7	7.0	1.7
Employed full-time on formal job						
30 to 34 hours	6.3	8.6	-2.3	4.9	6.9	-2.0
35 to 44 hours	32.8	35.4	-2.6	41.1	41.8	-0.7
45 or more hours	10.5	8.0	2.4	11.7	11.0	0.8
Hourly Wage on Primary Current Formal Job (%)						
Not employed on formal job	41.4	40.0	1.4	29.9	30.2	-0.3
Employed on formal job						
Wage less than $5	2.0	5.3	-3.4**	3.0	3.3	-0.2
Wage $5 to $6.99	16.3	17.0	-0.7	16.4	15.6	0.8
Wage $7 to $8.99	23.0	17.9	5.1	25.5	25.3	0.2
Wage $9 or more	16.7	18.5	-1.8	24.8	24.7	0.1
Employment Status (%)						
Currently employed on a formal job	58.6	60.0	-1.4	70.1	69.8	0.3
Employed last month on informal job(s)	9.8	9.2	0.5	8.1	10.5	-2.4
Survey Respondent: Monthly Earnings From All Jobs, Including Zeros ($)						
All formal and informal jobs	$816	$808	$7	$1,053	$1,117	-$64
All Household Members: Total Earnings						
Total earnings last month, including zeros ($)	$1,067	$1,038	$29	$1,519	$1,824	-$306**
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Results are based on data from the core survey for cases that participated in the child impact survey. The child impact survey sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

EXHIBIT H.9

INCOME AND POVERTY:
FAMILIES WITH A CHILD AGE 5-12 AT FOLLOW-UP
(Household in Month Prior to Survey)

	Ongoing FIP Cases			Applicant FIP Cases		
	Treatment (T)	Control (C)	Impact (T - C)	Treatment (T)	Control (C)	Impact (T - C)
Household income, including Food Stamps ($)	$1,533	$1,451	$82	$1,857	$2,110	-$264**
Household income is below poverty (%)	51.9	53.6	-1.7	34.5	32.4	2.1
Household poverty categories (%)						
0.00 ≤ income/poverty threshold < 0.50	9.8	10.8	-1.0	11.9	5.8	6.1**
0.50 ≤ income/poverty threshold < 1.00	42.1	42.9	-0.8	22.8	26.6	-3.8
1.00 ≤ income/poverty threshold < 1.30	17.6	15.1	2.5	19.9	19.5	0.4
1.30 ≤ income/poverty threshold < 2.00	17.9	22.0	-4.1	24.1	25.4	-1.3
2.00 ≤ income/poverty threshold	12.9	9.1	3.8	21.1	22.9	-1.8
Sample Size	540	273	813	442	220	662

SOURCE: The outcome measures are from the 1998-99 core survey of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93. *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Results are based on data from the core survey for cases that participated in the child impact survey. The child impact survey sample includes cases with a child age 5 to 12 living in the household at the time of the surveys. Survey item nonresponse for a specific outcome may cause the sample size for the corresponding analysis to be smaller than that indicated at the bottom of the table. Survey item nonresponse and rounding may cause discrepancies in sums and differences.

METHODS: The data were weighted to be representative of all FIP ongoing cases and applicants in the nine research counties. The values in this table were adjusted using multivariate regression methods. The statistical significance of the impact estimates was assessed using a two-tailed t-test.

*/**/*** Impact estimate is statistically significant at the .10/.05/.01 level.

APPENDIX I

INVESTIGATION OF SPECIFIC PROVISIONS OF IOWA'S WELFARE REFORM

APPENDIX I

INVESTIGATION OF SPECIFIC PROVISIONS OF IOWA'S WELFARE REFORM

The Iowa Department of Human Services (DHS) developed the design for the evaluation of its welfare reform program to be consistent with specifications provided by the Administration for Families and Children (ACF) of the U.S. Department of Health and Human Services. ACF approved the evaluation design on August 13, 1993, in conjunction with its approval of Iowa's request for waivers to implement its welfare reform program. Implementation of the reform program and the random-assignment plan that was the basis for the evaluation design commenced on or about October 1, 1993. The following year, on August 15, 1994, DHS awarded Mathematica Policy Research a contract to monitor random assignment and to execute all other aspects of the evaluation design.

The random assignment plan underlying the evaluation design was a simple one. It entailed the random assignment of all ongoing cases and applicant cases (over a two-and-one-half year period) in nine research counties either to treatment status (subject to the requirements of welfare reform), control status (subject to the pre-reform requirements), or nonresearch status (subject to the reform requirements, but not included in the evaluation). This plan was capable of supporting estimation of the *overall* impacts of welfare reform separately for ongoing and applicant cases. We stress *overall* because it was not designed to support estimation of the impacts of components of the package (specific provisions of welfare reform). This created the possibility or even the likelihood that, while the evaluation would yield useful information on whether the reforms achieved certain objectives, it would yield little information on why that happened, that is, information on which components of the reform package were primarily responsible for various overall impacts.

There exist alternative random assignment plans that can be the basis for estimating the impacts of selected components of a reform package. Such plans are more complex than the one used in Iowa. They require random assignment to multiple treatment groups, each of which receives a somewhat different package of reform components. Implementation of these more complex random assignment plans is challenging, as is the operation of multiple different treatment programs. Nevertheless, random assignment plans incorporating these principles have been implemented. For example, in the evaluation of Minnesota's welfare reform program, research cases were randomly assigned to a control group or to either of two treatment groups (Miller et al., 2000). Cases in the control group received assistance under the rules of Minnesota's pre-reform welfare program. Cases in the two treatment groups received assistance under reform programs that included either (1) expanded work incentives, or (2) expanded work incentives *plus* increased work requirements. This random assignment plan allowed researchers to estimate the overall impacts of the full reform package, as well as the impacts of the expanded work incentives and the impacts of the increased work requirements.

In an effort to learn more about the possible programmatic reasons for unfavorable effects of Iowa's welfare reform on applicant families and children, we analyzed the impacts of welfare reform on certain subgroups that might illuminate the impacts of specific components of the state's reform program. Essentially, if a particular component of welfare reform disproportionately or uniquely targeted a particular subgroup—for example, the Work Transition

Program, an earnings incentive available to individuals with very low or no earnings in the year before obtaining employment—then differences in the overall impacts of welfare reform on the two subgroups can provide some information on the impacts of the specific component. Unfortunately, this effort failed to yield results that lend insight into our overall findings. However, the results are of some utility in that they provide information on the impacts of welfare reform on the specific subgroups considered. In this appendix, we describe our approach and the results of the analyses of three components of Iowa's welfare reform: work requirements, the Work Transition Program, and the Limited Benefit Plan.

A. SUBGROUP ANALYSIS AND ITS LIMITATIONS

In the absence of a complex random assignment plan, such as that used in Minnesota, several statistical methodologies have potential to shed light on the impacts of specific provisions of welfare reform. One of those methodologies is subgroup analysis. If a component of the overall package of reforms is more relevant for cases with a certain characteristic than for cases without it, then evaluators can divide the research sample into two subgroups based on that characteristic (a *targeted subgroup* and a *residual subgroup*) and estimate the impacts of the overall package of reforms separately for the two subgroups. Differences in the estimates between the two subgroups could be properly interpreted as estimates of the impact of the reform component, depending on the scenario under which it was obtained. Here we consider a subgroup analysis of impacts on a selected outcome under three scenarios:

1. ***Scenario One.*** The reform component that is more relevant for the targeted subgroup than for the residual subgroup is responsible for the difference in their responses to the overall package of reforms. ***Implication:*** The differences between the subgroups in the overall impact estimates reflect the influence of the reform component and is a valid estimate of its actual impact on the targeted subgroup and its potential impact on the other subgroup.
2. ***Scenario Two.*** Differences in the characteristics of the members of the two subgroups, rather than differences in the relevance of the reform component, cause them to respond differently to the overall package of reforms. ***Implication:*** The differences between the subgroups in the overall impact estimates reflect the differences in characteristics rather than the influence of the reform component. It is not a valid estimate of the impact of the reform component.
3. ***Scenario Three.*** Differences between the two subgroups in the characteristics of their members cause them to have different actual responses (by the targeted subgroup) or potential responses (by the residual subgroup) to the reform component but not to the remainder of the reform package. ***Implication:*** The subgroup differences in the overall impact estimates reflect the influence of the reform component on the targeted subgroup. They are valid estimates of that component's actual impact on the targeted subgroup, but not of its potential impact on the other subgroup.

It is rarely possible to know which of these three scenarios, or combination thereof, most nearly characterizes the context for a specific subgroup analysis. Consequently, an assumption is often made, typically on the basis of weak information. If the context for the analysis were assumed to be like Scenario One, but that assumption were incorrect, then either of two errors

would be made in interpreting differences in overall impact estimates between the targeted and residual subgroups. One type of error would be made if the true context were actually like Scenario Two but the differences between the two subgroups in the overall impact estimates were interpreted as estimates of the impacts of the specific reform provision. In this case, there would be a risk of concluding that the provision had impacts when in fact it did not. The second type of error would be made if the context were like Scenario Three, but the differences between the two subgroups in the overall impact estimates were interpreted as estimates of the impacts of the specific reform provisions. This interpretation would be correct for the particular subgroup, but a hypothetical expansion of the provision to include the residual group might not, in fact, result in impacts like those estimated for the targeted subgroup.

So the risk of misinterpreting the findings from a subgroup analysis of the impacts of a specific provision in a reform package is high.[1] However, if the provision is very substantial or dramatic, then an assumption that the context for a subgroup analysis of that provision is unlike Scenario Two has a greater likelihood of being correct. That would moderate the risk of making the more troublesome of the two possible errors in interpreting the results of the subgroup analysis. A substantial risk would remain of incorrectly concluding that the estimated impacts of the provision would apply to both subgroups.

Upon reviewing our estimates of the impacts of Iowa's overall welfare reform package, DHS expressed its interest in any information that we might be able to provide regarding the contributions of specific provisions of the package to those estimates. We felt that the strength of that interest warranted a subgroup analysis, despite the risk of misinterpreting the findings. Accordingly, we estimated impacts separately by subgroup for three key pairs of subgroups. We selected each pair because the members of one subgroup in the pair were more likely than the members of the other subgroup to have been affected by a specific component of the Iowa's reform package. The three pairs of subgroups and the associated reform provisions are:

1. ***Cases that did/did not include a child under the age of three at random assignment.*** The *expansion of work requirements* under welfare reform was a more dramatic change for FIP cases that included a child under the age of three years at random assignment than for cases that did not include one.
2. ***Cases with/without earnings in the year before random assignment.*** The 100 percent earned-income deduction that was allowed under the component of welfare reform known as the *Work Transition Period* was more likely to be available to cases that had no earnings from employment in the year prior to random assignment than for cases that had earnings in that year.
3. ***Cases at high/low risk of being assigned to the Limited Benefit Plan.*** Cases whose characteristics at random assignment were similar to those of cases that were subsequently assigned to the *Limited Benefit Plan* were more likely to be affected by this component of welfare reform.

[1]It is precisely this risk that makes a complex random assignment scheme attractive if a major goal of an evaluation is to estimate the impacts of specific provisions of a package of reforms.

In the following discussion of findings from the analysis of these subgroups, we interpret the subgroup differences in overall impact estimates under the assumption of Scenario One.[2] That is, we interpret subgroup differences in overall impact estimates as estimates of the impacts of the designated provision. However, we issue a general caution to the reader that the alternative scenarios and the associated interpretations of the analytic results might instead be correct. We occasionally remind the reader of this risk in the context of our discussion of specific findings. In general, our confidence in the results presented in this appendix and, more specifically, our confidence in our interpretation of these results as indicative of the impacts of specific provisions of welfare reform, is lower than our confidence in the estimates of the overall impacts of welfare reform that were presented in the main body of this report.

B. EXPANDED WORK REQUIREMENTS

Ongoing FIP cases in the evaluation that included a child under the age of three years at random assignment had been exempt from even the less stringent pre-reform work and PROMISE JOBS participation requirements (referred to hereafter simply as "work requirements") that were in effect prior to October 1, 1993.[3] So, for most treatment cases in this subgroup, welfare reform introduced an especially sharp change in work requirements; they lost their exemption from work requirements at the same time that the requirements were stiffened. Most applicant FIP cases (with or without a young child) in the evaluation had no experience with the pre-reform work requirements. So, applicant treatment cases did not experience the expanded work requirements under welfare reform as a significant change from a prior regime. Consequently, we might expect the expanded work requirements to have had larger impacts on ongoing cases with a child under the age of three than on their applicant counterparts. Our impact estimates for subgroups defined by the presence/absence of a child under the age of three years are consistent with this expectation.

1. Ongoing FIP Cases

Among ongoing cases, the impacts of welfare reform on employment and earnings for those with a young child were often favorable, whereas the impacts for cases without a young child were generally close to zero (Exhibit I.1).[4] Given these results for labor-market outcomes, it is not surprising that the reforms reduced FIP benefit levels among cases with a young child, but had little impact on benefits for cases without young children while increasing their participation in FIP. Our estimates of these impacts are qualitatively different for the two subgroups, but few of the differences are statistically significant.

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[2]We used multivariate statistical models to estimate the impacts of welfare reform on subgroups of ongoing and applicant FIP cases. Appendices B, D, F, and G provide information about the models and present the subgroup estimates in detail.

[3]Under pre-reform rules, the primary caretaker of a child under the age of three years was exempt from PROMISE JOBS participation requirements. Effective January 1, 1994, welfare reform restricted this exemption to the primary caretaker of a child under the age of six months. In 1996, the exemption was lowered to three months, and it was eliminated entirely in 1997. However, under the 1997 policy, participation in PROMISE JOBS may be waived for 12 weeks in accordance with the Family and Medical Leave Act.

[4]Exhibits I.1 through I.5 present qualitative summaries of subgroup impact estimates. Appendices B, D, F, and G provide full details on the estimates.

The increased labor-market activity and reduced reliance on cash assistance among ongoing treatment cases with a young child is reflected in impacts on several measures of family well-being. These impacts suggest higher levels of stress among ongoing cases with young children under welfare reform. We found unfavorable impacts of welfare reform on domestic abuse of case heads and on time spent by children with their fathers. In contrast, we found no evidence of unfavorable impacts on these measures among cases without young children. The impacts of welfare reform on these measures are significantly different for the two subgroups. Furthermore, the impacts of welfare reform on family health insurance coverage and on the head's risk of clinical depression are also significantly different for the two subgroups and less favorable for the cases with a young child.

Welfare reform suppressed subsequent births among cases that directly experienced the transition from the old work requirements to the new (ongoing cases with a young child) relative to cases that did not have that experience (ongoing cases without a young child). This reduction in births may have been a response to the expanded work requirements, the trimming of the exemption from those requirements, and the associated increase in family stress.

Welfare reform neither reduced nor improved the well-being of children in ongoing cases that included a young child (based on the measures of child well-being used in this evaluation). On the other hand, it did improve one aspect of the well-being of children in ongoing cases that did not include a young child. Specifically for the latter subgroup, welfare reform increased the percentage of children who, in the opinion of their parents, were performing well in school. However, the difference between the two subgroups in the impact on school performance is not statistically significant.

Summary—Ongoing Cases. Welfare reform increased employment and earnings and reduced welfare dependency among ongoing cases that included a child under the age of three years at the time of random assignment. However, these favorable impacts were accompanied by reductions in family well-being and by an absence of favorable impacts on child well-being. This is not surprising, given the increased demands to work and participate in PROMISE JOBS that welfare reform placed on the heads of these cases. In contrast, the impacts of the full package of reforms on labor-market and welfare outcomes for cases without a young child were small and lacked a consistent pattern. Also, this subgroup generally avoided negative impacts of welfare reform on family and child well-being and benefited from favorable impacts on several outcomes in these areas. The differences in impact estimates between the two subgroups are weak (not statistically significant) evidence that the expanded work requirements produced better labor market and welfare outcomes, and stronger (statistically significant) evidence that they caused some deterioration in family well-being and school performance by children. We would expect the work requirements to be more disruptive for parents with infants and toddlers because of the intensive caregiving needs of very young children. Therefore, the impacts of work requirements estimated in the subgroup of cases with a young child may not generalize to cases with only older children.

2. Applicant FIP Cases

Unlike their ongoing counterparts, applicant treatment cases that included a young child did not experience the expanded work requirements under welfare reform as a sharp departure from pre-reform policies. The differences in the impacts of welfare reform are more pronounced for

employment and earnings and less pronounced for family and child well-being between these two subgroups of applicant cases than for their ongoing counterparts.

Applicant cases with a young child experienced positive impacts of welfare reform on employment and earnings (Exhibit I.2). Those impacts are significantly larger than the generally negligible impacts on applicant cases without young children, suggesting that the expanded work requirements were effective in inducing applicant cases to obtain employment and increase their earnings.[5] In contrast, welfare reform essentially had no impacts on FIP participation and benefits for either subgroup of applicants.

Welfare reform had few impacts on family and child well-being for applicant cases with or without young children. The case head's risk of clinical depression is an exception to this pattern. The impact of welfare reform on this measure was unfavorable for cases without young children and significantly different from the negligible impact on cases with young children. This particular finding is contrary to that found for ongoing cases and does not fit into any pattern of subgroup findings for applicant cases in the areas of family and child well-being.

Summary—Applicant Cases. Welfare reform increased employment and earnings among applicant FIP cases with a young child and those impacts were significantly larger than the generally negligible impacts on applicant cases without a young child. There were very few other differences in impacts between these two subgroups of applicant cases.

3. Assessment of Expanded Work Requirements

Under welfare reform, exemptions from work requirements for cases with a child between the ages of six months and three years were eliminated. For all nonexempt cases, the work requirements were stiffened and the consequences for not satisfying them were made more severe. Therefore, findings from our separate analyses of the impacts of welfare reform on subgroups of cases that did or did not include a child under the age of three years at random assignment may provide insight into the effectiveness of this component of Iowa's reform package. Ongoing treatment cases with a young child were likely to have directly experienced the sharp transition from less to more stringent work requirements, whereas their applicant counterparts may never have been subject to the less stringent requirements. Accordingly, we might expect to find that welfare reform was more stressful on the former cases than the latter.

Primarily on the basis of the findings for ongoing cases that were presented in this section, we conclude that Iowa's expanded work requirements may have improved labor-market and welfare outcomes. With more conviction, we also conclude that the work requirements had unfavorable consequences with respect to several measures of family well-being and school performance by children. Thus, the expansion of work requirements appears to have had the desired effects on labor market and welfare outcomes. However, those were accompanied by negative effects on family and child functioning, especially for ongoing cases, which had become accustomed to the weaker pre-reform work requirements.

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[5]The subgroup estimates for applicant FIP cases are based on administrative data for the first cohort of applicants and on survey data for all applicants. Subgroup estimates based on administrative data for the second and third cohorts of applicants can be found in the Appendix B exhibits referenced in Exhibit I.2.

C. THE WORK TRANSITION PERIOD

To encourage work among FIP participants with weak histories of recent employment, Iowa's welfare reform originally included a component known as the "Work Transition Period," or WTP. Under the WTP, 100 percent of the earnings of a qualified member of a FIP case were disregarded when computing the case's FIP eligibility and benefit amount during the first four months of employment. This meant that the case was able to retain all of the qualified member's earnings as well as its full FIP benefit. A member of a FIP case could qualify for the WTP if his or her labor earnings in the year prior to obtaining initial employment were less than $1,200. Following the fourth month of employment, the WTP ended and the earned-income deductions that are available to all FIP cases under welfare reform came into effect. While those deductions are more generous than the pre-reform deductions, they are less generous than the 100 percent WTP deduction and in many circumstances they do not allow the case to retain both its full FIP benefit and its entire earnings.

The WTP proved difficult to administer, resulting in complaints from FIP participants that they either had been unfairly denied access to the WTP or had not received it for the full four months.[6] In 1997, as part of the state's implementation of TANF with its 60-month limit on cash assistance, the WTP was eliminated because the additional benefit to working families was viewed as less useful in the long run than conserving up to four months of eligibility for cash assistance in the future when it might be needed more. In addition, eliminating the WTP enabled the state to shift those resources toward diversion programs that would help families address short-term financial needs with minimal or no months of FIP receipt, once again conserving months of eligibility for cash assistance in the future when it might be needed more.

When the WTP was in effect, we speculate that its generous earned income disregard was an incentive for FIP participants with weak employment histories to obtain employment and to work additional hours, thereby increasing their earnings. We further speculate that it caused FIP benefits and participation to increase in the short run, since it temporarily eliminated any possibility of an earnings-induced reduction in the FIP benefit or loss of eligibility for assistance. On a conceptual level, the longer-run effects of the WTP are less clear. It would not be unreasonable to expect that the initial employment stimulated by the WTP would lead to continued or enhanced employment in the longer run and thereby to lower FIP benefits and ultimately to exit from FIP. If that scenario played out, then the WTP would increase employment and earnings in both the short run and the long run, while increasing FIP participation and benefits in the short run but reducing them in the long run.

Our capacity to investigate the effects of the WTP was limited by the fact that many applicant FIP cases had little opportunity to use it before it was eliminated in 1997. Accordingly, we restricted our analysis to ongoing FIP cases. We used the presence or absence of any earned income among all members of a case in the year before random assignment as a proxy for eligibility for the WTP. Our thinking was that members of a case that had no earnings in the

[6]Mathematica Policy Research and the Institute for Social and Economic Development (1995, pages B-25 and B-26) provide client perspectives on the WTP from focus group discussions. The report on the process study of the implementation of FIP, which was an element the overall evaluation of welfare reform in Iowa, discusses issues associated with implementing the WTP (Prindle et al., 1999, pages 83 and 84).

year before random assignment would have been likely to qualify for the WTP, whereas members of a case that did have earnings in that year would have been less likely to qualify for that component of welfare reform. Therefore, if the WTP did influence the behavior of ongoing FIP cases, we would expect to observe different overall impacts of the full welfare reform package for the two subgroups of cases defined by the presence or absence of earnings in the year before random assignment.

1. Ongoing FIP Cases

Among ongoing cases that had no earnings in the year before random assignment, the full welfare reform package increased employment and earnings in some years following random assignment and cumulatively over the full five-year follow-up period. In contrast, it had no impacts on labor-market outcomes among cases that had earnings in the year before random assignment. These subgroup findings are consistent with our expectations regarding the influence of the WTP component of the reform package on labor-market outcomes. However, the differences between the two subgroups in labor-market impacts (which we interpret as impacts of the WTP) are not statistically significant.

There is no evidence that the favorable impacts of welfare reform on labor-market outcomes for cases that were likely to qualify for the WTP carried through to impacts on welfare outcomes. There is limited evidence that the reforms increased FIP participation among ongoing cases that were less likely to qualify for the WTP. However, the differences between the two subgroups in impacts on welfare outcomes are not statistically significant.

The evaluation found little evidence of impacts by the full reform package on measures of family and child well-being for either ongoing cases that were likely to qualify for the WTP or for those that were not. It also found few significant differences in impacts between these two subgroups. Exhibit I.3 shows no such impacts or significant subgroup differences. In the full set of impact estimates for these subgroups, as presented in Appendices A, C, and D, a few impacts and significant differences are displayed, but they fit no consistent pattern.

2. Assessment of the Work Transition Period

The early elimination of the WTP from Iowa's package of reforms limited our ability to assess its impacts and may have caused some of the estimates that we were able to produce to be smaller than they otherwise might have been. Notwithstanding these limitations of our analysis, we can draw a few cautious conclusions about the impacts of the WTP on ongoing FIP cases.

Our overall findings regarding the WTP are that its impacts were, at most, modest in size and very limited in the range of outcomes affected. The empirical evidence rather weakly suggests that the WTP may have increased employment and hours of work among ongoing FIP cases that included WTP-eligible members. Our analysis found no other impacts of the WTP—on welfare outcomes or on the well-being of families and children.

D. THE LIMITED BENEFIT PLAN

Under Iowa's Family Investment Program, clients can be assigned to the Limited Benefit Plan if they fail to develop, sign, and fulfill a contract with DHS called the Family Investment

Agreement, or FIA. The FIA specifies the work activities in which the recipient will participate, the support services that the state will provide, and the intended date of exit from FIP. Clients can also choose to enter the LBP rather than following the FIA process. As originally implemented in April 1994, the LBP provided three months of full benefits, three months of reduced benefits (eliminating the adult portion of the grant), and six months of no benefits for the entire family. Family well-being visits were to be conducted in the fifth and seventh months of that one-year period. In 1996, the LBP was revised to cover a nine-month period for an initial assignment, with three months of reduced benefits followed by six months of no benefits. Well-being visits were to be conducted in the second and fourth months. If a family entered the LBP a subsequent time, benefits would be eliminated immediately for six-months and a well-being visit was to be conducted in the second month.[7]

Our approach to investigating the influence of the LBP entailed the estimation of the characteristics of treatment cases at random assignment that best predicted subsequent assignment to the LBP.[8] We used the results of this estimation to assign to each treatment case, based on its characteristics at random assignment, a probability that it would be subsequently assigned to the LBP. In a similar fashion, we also used the results of this estimation to assign to each case in the control group a probability that it would have been subsequently assigned to the LBP if it had been in the treatment group. The characteristics used to predict the probability of assignment to the LBP include the age, race or ethnicity, marital status, and education of the case head, the size of the assistance unit, the age of the youngest child, earnings in the year prior to random assignment, and the county of residence. We assigned probabilities separately for the ongoing and applicant samples of participants in the Iowa core survey. Then, within each of the samples (treatment and control cases combined), we formed two subgroups: one consisted of the cases in the highest quintile of probability of assignment to the LBP (the "high-LBP" subgroup); the other consisted of the remaining 80 percent of the cases (the "low-LBP" subgroup).

While FIP and the associated FIA process encourage and support work, the LBP places cases in a situation where they have few alternatives to working for their support. Consequently, we had no strong expectation that the impacts of the full package of welfare reforms on labor market success would differ between cases with a high probability of assignment to the LBP and cases with a lower probability. In contrast, we expected that high-LBP cases would experience more unfavorable impacts on family well-being relative to low-LBP cases, which in turn would trigger more unfavorable impacts on children's well-being. Our impact estimates for the subgroups defined by higher and lower probabilities of assignment to the LBP are not completely consistent with these expectations.

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[7]Rules for the LBP were modified again in June 1999. Under these rules, which are currently in effect as of the date of this report, assignment to the LBP causes immediate ineligibility for cash assistance until the individual signs an FIA; however, in second and subsequent assignments to the LBP, the case remains ineligible for six months and that ineligibility extends until the individual signs an FIA and completes 20 hours of work or other approved PROMISE JOBS activity. Until well-being visits were ended as a cost-saving measure on April 1, 2002, a single well-being visit was to be conducted during a family's second month on the LBP.

[8]Assignment to the LBP was determined on the basis of self-reports by case heads who participated in the Iowa core survey, which was conducted two and a half to six years after random assignment. The survey participants were asked to report LBP assignments during the intervening period.

1. Ongoing FIP Cases

The likelihood of assignment to the LBP for individual ongoing FIP cases ranged from nearly zero to 48 percent. Cases in the high-LBP subgroup had an average likelihood of 31 percent, while cases in the low-LBP subgroup had an average likelihood of 13 percent. The heads of cases that were more likely to be assigned to the LBP had lower education levels and were more likely to have never been married as of the time of random assignment.[9]

Among ongoing FIP cases that were more likely to be assigned to the LBP, the case head's employment and earnings levels were not affected by welfare reform, but welfare reform did have a positive impact on total household income (Exhibit I.4). Welfare reform had no impacts on the labor market outcomes or average income levels of cases that were less likely to be assigned to the LBP, but the poverty rate increased. The impacts of welfare reform on household income and the proportion in poverty are significantly different for the two subgroups, and more favorable for cases with a high probability of assignment to the LBP.

Consistent with the favorable impact of welfare reform on household income for ongoing FIP cases with a high probability of assignment to the LBP, welfare reform improved one aspect of family well-being among those cases—it reduced the proportion that experienced a residential move in the two years prior to the survey. Welfare reform had no significant impact on the proportion of heads of high probability cases who were married at follow-up, while among low-LBP cases, marriage rates declined. The impacts on residential moves and marriage are significantly different for the two subgroups.

Welfare reform had no impacts on parenting or child care use among ongoing cases with a high probability of being assigned to the LBP. In contrast, among cases in the low-LBP subgroup, welfare reform increased parental monitoring of children, and the difference between the two subgroups in the impacts on this measure is statistically significant. Although changes in income, marriage, residential moves, and parental monitoring have the potential to influence children's well-being, welfare reform had no impacts on a range of measures of the well-being of children in either the high- or the low-LBP subgroups.

Summary—Ongoing Cases. The heads of ongoing FIP cases with a high probability of being assigned to the LBP tended to lack a high school diploma or GED and to be never-married at random assignment. Welfare reform increased the average household income of cases in this subgroup, but without affecting the employment or earnings of the case head at the time of the follow-up survey. Welfare reform also reduced the proportion of these cases that experienced a residential move in the two years prior to the survey. In contrast, among ongoing FIP cases with a low probability of being assigned to the LBP, welfare reform increased poverty rates, reduced the proportion married at follow-up, and reduced the proportion who set up their own households in the two years prior to the survey. The significant differences between the impacts of welfare reform on these measures across the two subgroups suggests that the LBP encouraged marriage, increased household income, and reduced residential moves, but had no impacts on the well-being of children.

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[9]The statistics cited are based on data for participants in the core survey. See Appendix G, Table G.1, for more details on the characteristics of ongoing cases with high and low probabilities of assignment to the LBP.

2. Applicant FIP Cases

The likelihood of assignment to the LBP for individual applicant FIP cases ranged from nearly zero to 68 percent. Cases in the high-LBP subgroup had an average likelihood of assignment to the LBP of 31 percent, compared with just 6 percent for cases in the low-LBP subgroup. The heads of cases that were more likely to be assigned to the LBP were younger (many were teenage parents), were less likely to have completed high school, and had younger children (infants and toddlers) at random assignment.[10] The fact that many applicant cases in the subgroup with a high probability of assignment to the LBP were headed by a teenage parent means that special provisions of FIP that apply to teenage parents might, in addition to the LBP, be responsible for any differential impacts of welfare reform between the two groups. In particular, teenage parents age 19 or younger (who constitute 59 percent of the higher-probability subgroup) were required to attend parenting classes beginning in 1996. Information obtained in parenting classes could have an effect on children's well-being independent of any effects of the LBP on income, family stress, or parenting.

Among FIP applicants, the impacts of welfare reform on the head's own earnings and on household earnings and income were close to zero for cases that were more likely to be assigned to the LBP, but were negative for cases that were less likely to be assigned to the LBP (Exhibit I.5). The impact of welfare reform on the head's own earnings is significantly different for the two subgroups, but the impacts on household earnings and income are not.

Welfare reform reduced the proportion of case heads in the high-LBP subgroup who were married at follow-up, although the difference between the impacts for the high- and low-LBP subgroups are not significant. Thus, we have weak evidence that a reduction in the probability of marriage among applicant cases is associated with the LBP.

Welfare reform reduced the use of formal child care by cases in the high-LBP subgroup, and this impact is significantly different from the impact on the low-LBP subgroup. However, this finding does not fit into any pattern of impacts on the subgroup of FIP applicants with a high probability of assignment to the LBP.

Given the scarcity of differential impacts of welfare reform on household income, family stress, and parenting between applicant FIP cases with high and low probabilities of assignment to the LBP, it is surprising to find differential impacts on two measures of the behavior of children—the Positive Child Behavior scale and the Behavior Problems Index. The impacts of welfare reform on these measures for cases that were more likely to be assigned to the LBP are in a favorable direction and close to the .10 threshold of statistical significance.[11] As we indicated at the beginning of this discussion of applicant cases, welfare reform required teenage parents to attend a parenting program, and it is possible that the differential impacts on children's behavior actually reflect the impacts of the parenting program on teenage parents, who were disproportionately represented in the subgroup with a high probability of assignment to the LBP.

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[10]The statistics cited are based on data for participants in the core survey. See Appendix G, Table G.2, for more details on the characteristics of applicant cases with high and low probabilities of assignment to the LBP.

[11]The p-values for the estimated impacts on the two measures of children's behavior among applicant cases in the high-LBP subgroup are .12 and .15.

Summary—Applicant Cases. Applicant FIP cases with a high probability of being assigned to the LBP tended to be headed by younger parents (many were teenage parents) who were less likely to have completed high school; and those cases were more likely to include infants and toddlers at random assignment. Comparing findings for this subgroup with those for the low-LBP subgroup, welfare reform had few differential impacts on adult economic outcomes, family well-being, parenting, or child care. And the few statistically significant differential impacts fit no clear pattern. On the surface, the findings for applicant cases suggest that the LBP improved the well-being of children, as the differences in subgroup impacts on two measures of children's behavior for the high- and low-LBP subgroups are statistically significant. However, the absence of differential impacts on household income, family well-being, and parenting suggests caution in coming to this conclusion. The differential impacts on children's behavior may instead be due to parenting classes that were required for teenage parents, who were much more prevalent among cases that were more likely to be assigned to the LBP.

3. Assessment of the Limited Benefit Plan

Under rules in effect until 1999, the Limited Benefit Plan provided some income support to families that wanted to pursue economic self-sufficiency through paths that were likely to be inconsistent with a Family Investment Agreement under FIP. For example, some parents may have wanted to obtain welfare benefits to tide them over for a short period between jobs. Or, they may have wanted to search for work less intensively than is typically specified in a FIA. Such families may have selected the LBP because they viewed it as a more attractive alternative to full participation in FIP. Parents in other families may, for various reasons, have failed to comply with the FIA process and found that they have been assigned to the LBP. In particular, parents with very low levels of education, very young children, mental health problems, substance abuse issues, or chaotic family situations may all have had difficulty complying with the FIA process, and may have been unable to provide acceptable excuses for their noncompliance. Our analysis of the research cases that were most likely to be assigned to the LBP shows that low levels of education characterized both ongoing and applicant cases in this group, and in addition, the applicant cases tended to be headed by teenage parents and parents with infants and toddlers.

Our estimates of the impacts of welfare reform on subgroups defined by their probability of being assigned to the Limited Benefit Plan indicate that the LBP may have improved the economic and family well-being of ongoing cases, but had few impacts on applicant cases. Among ongoing cases, those that were more likely to be assigned to the LBP experienced significantly more favorable impacts of welfare reform on household income than did those that were less likely to be assigned to the LBP. Welfare reform also increased marriage rates and reduced residential moves among ongoing cases in the high-LBP subgroup relative to the low-LBP subgroup. Among applicant cases, the impacts of welfare reform on children's behavior were more favorable in the high-LBP group. However, given the absence of differential impacts on related economic or parenting outcomes and also given the large proportion of teenage mothers in the high-LBP group, we believe that the differential impacts on children's behavior were more likely to stem from parenting classes that teenage mothers were required to attend, rather than the LBP.

The effects of the LBP may have been manifested in the behavior even of FIP cases that were unlikely to be assigned to it. Many, perhaps most, FIP cases made efforts to avoid the LBP,

and even if those efforts were successful, their behavior was nevertheless influenced by the presence of an LBP. Moreover, only 30 percent of ongoing and applicant cases in the high-LBP subgroups actually experienced the LBP. Therefore, the subgroup findings presented in this section may not provide reliable estimates of the impacts of the LBP component of Iowa's overall package of welfare reforms. Rather, consistent with Scenario Two in the introduction to this appendix, these findings may provide estimates of the impacts of the full package of reforms on high-LBP subgroups that include a diverse mix of cases—some that preferred the LBP to following the FIA process and others that had difficulty coping with the demands of the FIA process. Among ongoing cases, the economic impacts of welfare reform were more likely to be favorable for those in the high-LBP subgroup, as were some impacts on family well-being. Among applicant cases, cases in the high-LBP group appear to have avoided the unfavorable impacts of welfare reform on economic outcomes that were experienced by their counterparts in the low-LBP subgroup, but they experienced an unfavorable impact on marriage and favorable impacts on the behavior of children.

E. CONCLUDING THOUGHTS ON SPECIFIC REFORM PROVISIONS

This appendix has used subgroup analysis to tease out the impacts of important components of Iowa's welfare reform program on adult economic outcomes and family and child well-being, with mixed success. The strategy we have used is to identify a subgroup that was more likely to experience the particular component, and to examine whether the impacts of welfare reform on that subgroup were significantly different from the impacts of welfare reform on the other subgroup that did not experience that component of welfare reform (or experienced it to a much smaller degree). Unfortunately, our overall assessment of the results from implementing this strategy is that they provide little insight into the contributions of specific policies to the overall impacts of welfare reform that are reported in Chapters III through V.

The strategy for the subgroup analysis was perhaps most successful in examining the impacts of expanded work requirements. Cases with a child under three years of age (but over the age of six months) were required to work (or to participate in PROMISE JOBS activities) under reform polices but not under pre-reform policies. Among cases in which the youngest child was at least three years old, work was required under both sets of policies. For both ongoing and applicant cases, we found that welfare reform improved labor-market outcomes for cases with a child under age three. Among ongoing cases only, this was accompanied by reductions in several measures of family well-being. We found no impacts or opposite impacts of welfare reform on these measures for cases without young children. Many of the differences in impacts between cases with and without young children, especially those pertaining to the family well-being of ongoing cases, are statistically significant. This pattern of impacts is consistent with the differences in work requirements applying to the two subgroups. We would be cautious in extending these findings to families with older children, however, because work requirements are likely to be particularly stressful when children are very young.

The strategy was less successful in examining the impacts of the four-month Work Transition Period. This component of Iowa's welfare reform program was eliminated in 1997, which was relatively early in the evaluation follow-up period. Among ongoing cases, we found weak evidence that this policy improved labor market outcomes, but no evidence of impacts on welfare outcomes, family well-being, or child well-being.

Our subgroup analysis of the Limited Benefit Plan appears to have failed to isolate the impacts of either the threat or the direct experience of that particular component of the reform package. The subgroups of ongoing and applicant FIP cases that had a high probability of being assigned to the LBP group generally had lower education levels, and among applicants, included a large proportion of teenage parents. These subgroups likely included families that had difficulty coping with FIP requirements as well as some families that chose to enter the LBP rather than developing and fulfilling a Family Investment Agreement under FIP.[12] The results for ongoing cases suggest favorable impacts of welfare reform on economic outcomes, marriage and residential stability for the high LBP subgroup, but no impacts on the well-being of children. These positive impacts are perhaps more likely due to the presence in the high-LBP subgroup of families that actively chose the LBP and may have been in a better position to obtain work within a short period, rather than to that particular policy component per se. Among FIP applicants, we found more favorable impacts of welfare reform on the behavior of children in cases in the high-LBP subgroup. But we suspect that these are related to provisions of welfare reform directed toward teenage parents who are disproportionately represented in this subgroup. Specifically, we suspect that the requirement to attend parenting classes may have generated these findings.

[12]This is particularly likely in the first two years of FIP, when the LBP provided full FIP benefits for three months to cases that entered prior to developing an FIA, followed by reduced benefits for three months (and no benefit for the next six months).

EXHIBIT I.1

IMPACTS OF WELFARE REFORM ON ONGOING FIP CASES,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Impact			
	Youngest Child < 3	Youngest Child ≥ 3	Sig. Difference?	Appendix Exhibit
Labor Market Outcomes				
Employment of case members since random assignment				
Year 1	0	0	No	B.1a
Year 2	+	0	No	B.1a
Years 1-5	+	0	No	B.1a
Earnings of case members since random assignment				
Year 1	+	0	No	B.1b
Year 2	+	0	No	B.1b
Years 1-5	0	0	No	B.1b
Welfare Outcomes				
FIP participation since random assignment				
Year 1	0	+	No	B.1c
Year 2	0	+	**Yes**	B.1c
Years 1-5	0	0	No	B.1c
FIP benefit amount since random assignment				
Year 1	0	0	No	B.1d
Year 2	-	0	No	B.1d
Years 1-5	-	0	No	B.1d
Family Well-Being				
Domestic abuse of case head since random assignment	+	0	**Yes**	F.1b
Child spends time with father four or more times per week	-	0	**Yes**	F.1b
Family is covered by health insurance	(-)	(+)	**Yes**	D.1b
Case head is at high risk of clinical depression	0	-	**Yes**	F.1b
Birth of child following random assignment	(-)	(+)	**Yes**	D.1b
Child Well-Being				
Parent rates child's school performance as "very good"	0	+	No	F.1c

SOURCE: Multi-year results are based on IWD (UI) and IABC administrative data for 10/93 – 9/98. Other results are based on the 1998–99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93.

METHODS: Results were generated by multivariate statistical models applied to weighted data. See Appendices B, D, and F for details.

NOTE 1: Impact estimates indicated by a "+" or "-" are statistically significant at the .10 level or less, using a two-tailed t-test. Impact estimates indicated by a "0" are not significantly different from zero. Impact estimates indicated by a "(+)" or "(-)" are not significantly different from zero, but the signs of the estimates are as indicated.

NOTE 2: A "**Yes**" in the "Sig. Difference" column indicates that the difference between the impact estimates for the two subgroups in statistically significant at the .10 level.

EXHIBIT I.2

IMPACTS OF WELFARE REFORM ON APPLICANT FIP CASES,
BY AGE OF YOUNGEST CHILD AT RANDOM ASSIGNMENT

	Impact			
	Youngest Child < 3	Youngest Child ≥ 3	Sig. Difference?	Appendix Exhibit
Labor Market Outcomes				
Employment of case members since random assignment				
Year 1	+	+	No	B.1a
Year 2	+	0	**Yes**	B.1a
Years 1-4	+	0	**Yes**	B.1a
Earnings of case members since random assignment				
Year 1	+	0	No	B.1b
Year 2	+	0	**Yes**	B.1b
Years 1-5	+	0	**Yes**	B.1b
Welfare Outcomes				
FIP participation since random assignment				
Year 1	0	+	No	B.1c
Year 2	0	0	No	B.1c
Years 1-4	0	0	No	B.1c
FIP benefit amount since random assignment				
Year 1	0	0	No	B.1d
Year 2	0	0	No	B.1d
Years 1-4	0	0	No	B.1d
Family Well-Being				
Domestic abuse of case head since random assignment	+	0	No	F.1e
Child spends time with father four or more times per week	0	0	No	F.1e
Family is covered by health insurance	0	0	No	D.1d
Case head at high risk of clinical depression	0	+	**Yes**	F.1e
Birth of child since random assignment	0	0	No	D.1d
Child Well-Being				
Parent rates child's school performance as "very good"	0	0	No	F.1f

SOURCE: Multi-year results are based on IWD (UI) and IABC administrative data for 10/93 – 9/98. Other results are based on the 1998–99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. Multi-year results are based on data for those who applied before 10/1/94. Other results are based on data for all applicants.

METHODS: Results were generated by multivariate statistical models applied to weighted data. See Appendices B, D, and F for details.

NOTE 1: Impact estimates indicated by a "+" or "-" are statistically significant at the .10 level or less, using a two-tailed t-test. Impact estimates indicated by a "0" are not significantly different from zero. Impact estimates indicated by a "(+)" or "(-)" are not significantly different from zero, but the signs of the estimates are as indicated.

NOTE 2: A "**Yes**" in the "Sig. Difference" column indicates that the difference between the impact estimates for the two subgroups in statistically significant at the .10 level.

EXHIBIT I.3

IMPACTS OF WELFARE REFORM ON ONGOING FIP CASES,
BY EARNINGS IN YEAR BEFORE RANDOM ASSIGNMENT

	Impact			
	Had No Earnings	Had Earnings	Sig. Difference?	Appendix Exhibit
Labor Market Outcomes				
Employment of case members since random assignment				
Year 1	0	0	No	B.3a
Year 2	+	0	No	B.3a
Years 1-5	+	0	No	B.3a
Earnings of case members since random assignment				
Year 1	0	0	No	B.3b
Year 2	+	0	No	B.3b
Years 1-5	+	0	No	B.3b
Welfare Outcomes				
FIP participation since random assignment				
Year 1	0	+	No	B.3c
Year 2	0	+	No	B.3c
Years 1-5	0	0	No	B.3c
FIP benefit amount since random assignment				
Year 1	0	0	No	B.3d
Year 2	0	0	No	B.3d
Years 1-5	0	0	No	B.3d
Family Well-Being				
Domestic abuse of case head since random assignment	0	0	No	F.4b
Child spends time with father four or more times per week	0	0	No	F.4b
Family is covered by health insurance	0	0	No	D.3d
Case head is at high risk of clinical depression	0	0	No	F.4b
Birth of child following random assignment	0	0	No	D.3d
Child Well-Being				
Parent rates child's school performance as "very good"	0	0	No	F.4c

SOURCE: Multi-year results are based on IWD (UI) and IABC administrative data for 10/93 – 9/98. Other results are based on the 1998–99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93.

METHODS: Results were generated by multivariate statistical models applied to weighted data. See Appendices B, D, and F for details.

NOTE 1: Impact estimates indicated by a "+" or "-" are statistically significant at the .10 level or less, using a two-tailed t-test. Impact estimates indicated by a "0" are not significantly different from zero. Impact estimates indicated by a "(+)" or "(-)" are not significantly different from zero, but the signs of the estimates are as indicated.

NOTE 2: A "**Yes**" in the "Sig. Difference" column indicates that the difference between the impact estimates for the two subgroups in statistically significant at the .10 level.

EXHIBIT I.4

IMPACTS OF WELFARE REFORM ON ONGOING FIP CASES,
BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN

	Impact			
	High LBP Probability	Low LBP Probability	Sig. Difference?	Appendix Exhibit
Labor-Market Outcomes and Income				
Works full-time	0	0	No	G.3a
Monthly earnings of case head	0	0	No	G.3a
Monthly earnings of household	0	0	No	G.3a
Monthly income of household	+	(-)	**Yes**	G.3a
Household income is below poverty	(-)	+	**Yes**	G.3a
Family Well-Being				
Married and living with spouse	(+)	-	**Yes**	G.3a
Case head at risk of clinical depression	0	0	No	G.4b
Domestic abuse of case head since random assignment	0	0	No	G.4b
Moved in the past 2 years	-	(+)	**Yes**	G.4b
Doubled up with another household in past 2 years	0	0	No	G.4b
Set up own household in past 2 years	0	-	No	G.4b
Parenting and Child Care				
Parental Monitoring scale	(-)	+	**Yes**	G.4c
HOME-modified short form total score	0	0	No	G.4c
Used formal child care, past 2 years	0	0	No	G.4c
Child cared for self, past 2 years	0	0	No	G.4c
Child Well-Being				
School engagement scale	0	0	No	G.4c
Parent rates child's school performance as "very good"	0	0	No	G.4c
Positive Child Behavior scale	0	0	No	G.4c
Behavior Problems Index – total score	0	0	No	G.4c

SOURCE: The 1998–99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Ongoing FIP cases* were active in FIP on 9/17/93.

METHODS: Results were generated by multivariate statistical models applied to weighted data. See Appendix G for details.

NOTE 1: Impact estimates indicated by a "+" or "-" are statistically significant at the .10 level or less, using a two-tailed t-test. Impact estimates indicated by a "0" are not significantly different from zero. Impact estimates indicated by a "(+)" or "(-)" are not significantly different from zero, but the signs of the estimates are as indicated.

NOTE 2: A "**Yes**" in the "Sig. Difference" column indicates that the difference between the impact estimates for the two subgroups in statistically significant at the .10 level.

EXHIBIT I.5

IMPACTS OF WELFARE REFORM ON APPLICANT FIP CASES,
BY PROBABILITY OF ASSIGNMENT TO THE LIMITED BENEFIT PLAN

	Impact			
	High LBP Probability	Low LBP Probability	Sig. Difference?	Appendix Exhibit
Labor-Market Outcomes and Income				
Works full-time	0	0	No	G.3b
Monthly earnings of case head	(+)	-	**Yes**	G.3b
Monthly earnings of household	0	-	No	G.3b
Monthly income of household	0	-	No	G.3b
Household income is below poverty	0	0	No	G.3b
Family Well-Being				
Married and living with spouse	-	0	No	G.3b
Case head at risk of clinical depression	0	0	No	G.4e
Domestic abuse of case head since random assignment	0	0	No	G.4e
Moved in the past 2 years	0	0	No	G.4e
Doubled up with another household in past 2 years	0	+	No	G.4e
Set up own household in past 2 years	0	+	No	G.4e
Parenting and Child Care				
Parental Monitoring scale	0	0	No	G.4f
HOME-modified short form total score	0	0	No	G.4f
Used formal child care, past 2 years	-	(+)	**Yes**	G.4f
Child cared for self, past 2 years	0	0	No	G.4f
Child Well-Being				
School engagement scale	0	-	No	G.4f
Parent rates child's school performance as "very good"	0	0	No	G.4f
Positive Child Behavior scale	(+)	(-)	**Yes**	G.4f
Behavior Problems Index – total score	(-)	(+)	**Yes**	G.4f

SOURCE: The 1998–99 core and child impact surveys of research cases in the Iowa welfare reform evaluation.

SAMPLE: *Applicant FIP cases* submitted their applications between 10/1/93 and 3/31/96, and they were either accepted or denied. These results are based on data for all applicants.

METHODS: Results were generated by multivariate statistical models applied to weighted data. See Appendix G for details.

NOTE 1: Impact estimates indicated by a "+" or "-" are statistically significant at the .10 level or less, using a two-tailed t-test. Impact estimates indicated by a "0" are not significantly different from zero. Impact estimates indicated by a "(+)" or "(-)" are not significantly different from zero, but the signs of the estimates are as indicated.

NOTE 2: A "**Yes**" in the "Sig. Difference" column indicates that the difference between the impact estimates for the two subgroups in statistically significant at the .10 level.