W-2 CHILD SUPPORT
DEMONSTRATION EVALUATION
PHASE 1: FINAL REPORT

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W-2 Child Support Demonstration Evaluation (W-2 CSDE)
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Acknowledgments

Table of Contents

Technical Report 1. Experimental Design
>Maria Cancian, Emma Caspar, and Daniel R. Meyer

Technical Report 2. Implementation of the Demonstration
>Thomas Kaplan and Thomas Corbett, with Victoria Mayer

Technical Report 3. Administrative Data Sources
>Steven Cook and Patricia R. Brown

Technical Report 4. Samples and Weighting
>Emma Caspar, Margaret L. Krecker, Steven Cook, and Patricia R. Brown

Technical Report 5. Design and Content of the Survey of Wisconsin Works Families
>Margaret L. Krecker

Technical Report 6. Nonresponse in the Survey of Wisconsin Works Families
>James P. Ziliak and Margaret L. Krecker

W-2 Child Support Demonstration Evaluation

Technical Report 1

Experimental Design

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In the fall of 1997 Wisconsin initiated a radically different approach to assisting low-income families with children, Wisconsin Works (W-2).[1] W-2, Wisconsin's new program under the Temporary Assistance for Needy Families (TANF) block grant, replaced Aid to Families with Dependent Children (AFDC), the program that previously offered cash to low-income, primarily single-parent families. W-2 emphasizes immediate work or work-related activities as a prerequisite for cash assistance. The fact that assistance does not vary with family size and that it is directly tied for most participants to their hours of participation are examples of ways in which W-2 attempts to replicate the "real world of work." Consistent with this approach, resident parents participating in W-2 are allowed to keep all child support paid on behalf of their children, as they would were they working outside the program. This 100 percent "pass-through" of child support to the resident parent (and subsequent total disregard of the child support amount in the calculation of W-2 payments) is unique to Wisconsin. Some other states pass through only the first $50 per month of child support collected, retaining any additional amounts to offset TANF expenditures. The majority of states no longer distribute *any* child support paid on behalf of TANF recipients, retaining it all to offset expenditures.

Because child support retentions are shared between the federal and state governments, Wisconsin's policy of passing through all child support to the resident parent could have significant financial implications for the federal government as well as the state. The federal government gave Wisconsin a waiver of federal requirements that allowed Wisconsin to experiment with a full pass-through policy. The waiver allowed Wisconsin to use savings generated by previous welfare reforms to pay the federal share of any child support no longer retained.

The federal waiver requires an evaluation of the effects of a full pass-through. The Wisconsin Child Support Demonstration Evaluation (CSDE) uses an experimental design. Experimental designs are very powerful tools for evaluating policy: the random assignment of cases to an experimental and a control group means that the groups will be equivalent in all ways except the policy treatment. Because of this equivalence, comparisons between outcomes achieved by the experimental and control groups are an unbiased measure of the impact of the policy. In this design, individuals receiving AFDC payments when W-2 began and those individuals who requested assistance after the implementation of W-2 were randomly assigned to one of two pass-through eligibility statuses. Those assigned to the control group receive a portion of the amount of child support paid on their behalf. Those in the experimental group receive the full amount paid by the nonresident parent. The experimental group was randomly divided into a group expected to be included in the evaluation analysis, and a second group also receiving the full pass-through but originally not part of the evaluation, and therefore not eligible for the survey.

This report provides information on several topics related to the structure of this experimental evaluation. In Section 1, we provide more detail on W-2, describe the original evaluation design, problems faced in implementing this design, and the strategies used to overcome them. Section 2 discusses whether the experimental and control groups are equivalent, examining whether there was a difference in the rate of entry to W-2 between those in the experimental and control groups. Section 3 documents how we selected our final research population and compares our final sample to the entire W-

2 caseload. Section 4 compares the characteristics of the experimental and control groups in our final sample. In Section 5 we provide additional detail on our approach, including discussion of a variety of technical issues faced in implementing the evaluation, the precise definitions of related terms, and a discussion of the treatment of unusual cases. Section 6 includes a discussion of the method we use to evaluate the effects of the full pass-through. Section 7 provides our conclusions that the experiment was conducted properly, that the experimental and control groups are generally equivalent, and that regression-adjusted comparisons between the experimental and control groups will provide an unbiased estimate of the program's impact.

1.   Original Evaluation Design and Initial Difficulties

The philosophy and structure of W-2 emphasize immediate employment. Under W-2, all participants are placed in one of four tiers of employment or employment experience. The most job-ready applicants are provided case management (CM) services to help them find an Unsubsidized Job on the open market or improve their current job status. Trial Jobs (TJ) provide work experience in jobs for which the state provides a partial subsidy to the employer. Participants in these two upper tiers receive no cash payments from the state (but may receive a variety of ancillary services). Community Service Jobs (CSJ) are public service jobs for which participants receive a monthly W-2 payment of $673. W-2 Transition (W-2T) is for those least able to work, either because of their own disability or because of the need to care for a child with a disability. Its participants receive a monthly W-2 payment of $628. In addition to these four tiers, the Caretaker of Newborn category provides, for parents caring for a child younger than 13 weeks, a monthly payment of $673 and exemption from work requirements. Those who apply for the program meet with a Financial and Employment Planner (FEP), who places the applicant in one of these tiers, presumably after an individualized assessment of employability.

The original evaluation design called for 8,000 cases, half drawn from the stock of AFDC cases active in August 1997. The rest were to be drawn from the flow of cases applying for assistance after the implementation of W-2 in September 1997. The random assignment code was made by the automated management information system of the Wisconsin Department of Workforce Development, CARES.[2] Resident parents were to be informed of their experimental-group assignment, the meaning of that assignment, and the fact that the experiment existed, when they applied for W-2. The state prepared a brochure for each group explaining and providing an example of how child support would be handled, according to their assignment. In addition, cases receiving AFDC in August 1997 were sent a letter that notified them of the change and explained how child support would be handled, according to their assignment.

Because the rate of new entrants to W-2 was slower than anticipated, the assignment rates for new cases were changed over time. Among the initial AFDC cases in August 1997, and from September 1997 through March 16, 1998, 20 percent of cases were assigned to the control group, 20 percent to the experimental group, and the remainder to the experimental group not eligible for the survey. From March 17 to May 8, 30 percent of new applicants were assigned to the experimental group, 30 percent to the control group, and 40 percent to the experimental group not eligible for the survey. Beginning May 11, 50 percent of new applicants were assigned to the experimental and 50 percent to the control group. As described in Volume III, Technical Report 4, we have developed weights to account for these different assignment rates. These rates mean that this is an unusual experiment: in most designs, most cases receive the traditional policy, and only a small experimental group receives the "treatment." In the

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[2]For more information on CARES, see Volume III, Technical Report 3.

CSDE, in contrast, most cases receive the new policy, and a smaller group remains subject to policies similar to those in place prior to the evaluation.

Random assignment of new entrants continued through July 8, 1998, when a code error in the administrative data system caused all incoming W-2 cases in Milwaukee that should have been assigned to the control group to be assigned to the experimental group not eligible for the survey. This error meant that cases entering during a period when the W-2 program was working more smoothly could not be included in our analysis. Because of this, the decision was made to restart random assignment in Milwaukee on January 1, 1999, continuing through June 30, 1999. Only those cases that entered W-2 between September, 1997, and July 8, 1998, are considered part of the "original cohort" of the CSDE and are included in the analysis reported here.[3]

The analysis is based on a comparison of outcomes for the experimental and control groups. The control group receives a "partial pass-through" of the first $50 per month, or 41 percent of the amount paid, whichever is larger. By distributing the first $50 per month to control-group families the state guaranteed that no one was worse off than they would have been under the prior (AFDC) policy. We noted above that the amount of child support retained is split between the state and federal government; in Wisconsin the split is 41 percent for the state and 59 percent for the federal government. By distributing 41 percent of what was paid to control-group participants—the full state share—the state guaranteed that all recipients received the maximum allowed in the absence of a federal waiver or state reimbursement of the federal share.[4] Note also that control-group members receive the partial pass-through only when they are receiving a payment from W-2 (in a lower tier); control-group cases in a higher tier (Unsubsidized Job or Trial Job) receive the full amount paid because they are treated as non-TANF recipients (i.e., they receive no state or federal funds that could be offset by child support collections); similarly control-group cases receive the full amount paid during periods in which they are off W-2 altogether.

2. Are the Experimental and Control Groups Equivalent at W-2 Entry?

Random assignment should make the experimental and control groups comparable at the time they were assigned. Random assignment of potential new W-2 cases generally took place when the individual first inquired about the program. However, our basic evaluation strategy is to compare experimental-group and control-group cases that actually enter W-2. In our view, a full pass-through is only relevant to those who actually enter W-2 and to those whose decision about entry was influenced by the full pass-through. Therefore, we first examine whether the entry decision of individuals was influenced by their research-group status. In the absence of an effect of experimental status on entry, comparisons between the experimental and control groups conditional on entering W-2 should be an appropriate measure of the effects of the full pass-through.

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[3]Cases that entered outside Milwaukee between July 9, 1998, and December 31, 1998, are referred to as the "second cohort," and cases entering statewide between January 1, 1999, and June 30, 1999, are referred to as the "third cohort." The Wisconsin DWD was recently awarded funding to extend the CSDE to allow for the analysis of the second and third cohorts.

[4]Experimental- or control-group status is relevant only to amounts of child support collected for *current* support. Amounts for past-due support, and amounts collected through intercepting tax refunds both follow different distribution rules, primarily going to benefit the government first.

Potential "Diversion" Effects

        For a simple comparison of later outcomes between the experimental and control groups to be valid, the experiment must have been implemented properly and the two groups must have been similar at the beginning of the policy change. As discussed in Chapter 2 of Volume I (and Technical Report 2 of this volume), we believe the experimental design has, for the most part, been implemented appropriately. Thus, we expect that the two groups will be similar, other than differences that result from chance. However, there are two factors that could lead to differences between the experimental- and control-group members of our main samples (resident mothers demographically eligible for child support who enter W-2 within our time frame).

        The first concern is that experimental- and control-group members *might have entered W-2 at different rates*. Consider three identical individuals, A, B, and C, all of whom anticipate receiving moderate amounts of child support. All individuals apply for W-2; A is told she is in the experimental group and thus will always receive all child support paid on her child's behalf. B is told she is in the control group and thus will receive only a portion of the child support paid on her child's behalf when she is in W-2's lower tiers; and C is in the control group but is not told (or does not understand) the implications for child support. Assume A and C proceed with the application and enter W-2. When B learns that she would be able to receive only a portion of the support paid, she makes alternative plans and does not enter W-2. If this occurs, simple comparisons of experimental-group members who entered W-2 with control-group members who entered W-2 would not be valid, as control-group members who anticipated moderate amounts of child support would have been diverted, and would not have entered W-2. Our first test of the comparability of the experimental and control groups, therefore, is to examine the percentage of experimental- and control-group cases that entered within 30 days of being told about W-2. We are particularly concerned about whether those who anticipated fairly high amounts of child support entered at a different rate if they were in the experimental group than if they were in the control group.

        Our second concern is that experimental- and control-group members *might have been assigned to different tiers*. Recall that those in the control group who are in lower tiers (Caretaker of Newborn, W-2T, CSJ) receive only a portion of the support paid on their behalf, whereas control-group members in an upper tier (TJ, CM) or off W-2 altogether and all experimental-group members, regardless of tier, receive all current support paid on their children's behalf. Continuing with the example, assume A and C have limited employment prospects, and are therefore potential candidates for a Community Service Job. If C, or her case manager, is concerned about her receiving all child support, she may be more likely to be placed in a Trial Job or Case Management; because C is in the control group, she would receive all support paid on her behalf only if she were placed in an upper tier. If this occurred, comparisons of experimental- and control-group cases that entered W-2 in a particular tier may not be valid. Our second test, therefore, is to examine those who entered W-2, comparing whether the experimental and control groups entered a lower or an upper tier. We are particularly concerned with whether those who anticipated high amounts of child support and who were in the control group were more likely to be placed in an upper tier than were experimental-group cases anticipating high amounts of child support.

        To test each of these two concerns we compare the entire experimental group with the entire control group. We then check whether these experimental-control comparisons differ based on the amount of prior child support, our primary concern. Finally, we test whether the experimental and control groups entered at different rates within Milwaukee, other urban areas, and the rest of the state, given that the implementation analysis suggested that Milwaukee County cases may have been less likely to understand the implications of their experimental-group status.

Were Experimental-Group Cases More Likely to Enter W-2 than Control-Group Cases?

The first analysis considers whether cases entered W-2. Cases were randomly assigned to the experimental or control group either on August 31, 1997 (cases that were receiving AFDC on this date) or at application to W-2. We include all cases assigned before July 8, 1998. We divide those who received an assignment code into those who "entered" and those who were "diverted." Our definition of "diversion" is as follows: those not receiving AFDC on August 31 are considered diverted if they did not enter a W-2 tier (also called a "slot") within 30 days of their random assignment (which coincides with their initial request for assistance.) Those who were receiving AFDC on August 31 and assigned at that time could have been diverted in two ways: either they could have had a W-2 interview but not entered a W-2 slot within 30 days of that interview, or they could have stopped receiving AFDC for two or more months before they had a W-2 interview. We consider the latter group "diverted," because they had received a notice about their experimental-group status and may have chosen to enter or not enter W-2 based on their experimental or control status. Among those who were diverted, we separate those who "never" entered (by June 30, 2000) from those who did enter W-2, but not within the time frame required to be part of our analysis sample ("delayed").

Entry rates into W-2 were quite similar for the experimental and control groups: 59 percent of experimental- and 58 percent of control-group cases entered W-2. Some of the diverted cases were merely delayed, but most had not entered W-2 by the end of our data collection period. There is little difference between the experimental and the control group in the proportion delayed (10 percent of experimental group cases compared to 10 percent of control-group cases) or the proportion that never entered (31 percent of the experimental group compared to 32 percent of the control group).[5]

To test whether experimental and control group cases have differential rates of entry into W-2 while controlling for other characteristics of these cases, we conduct a multivariate probit analysis.[6] In the first model in Table TR1.1, we include an indicator for experimental group as well as a variety of other variables. The coefficient on the indicator variable shows no significant difference between the experimental and control group in the rate of entry. Somewhat surprisingly, those with a history of higher child support payments ($1,000 or more in the year prior to random assignment) are no less likely to enter than those without payments. Those in Milwaukee County are more likely to enter than those in other urban areas or rural areas. We expect that characteristics generally associated with labor market success will affect entry, as those most job-ready will be encouraged to try to find private-sector

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[5]We can further separate the "delayed" group into two parts: those who entered within six months of their assignment (for new cases), W-2 interview (for AFDC cases that did not have a two-month break from AFDC before their interview) or the last month of their AFDC receipt (for AFDC cases that did not have an interview), and those with a more extensive delay. Only 4 percent of each group had short-term delays, and 6 percent of each group had a more extensive delay.

[6]Appendix Table TR1.1 compares the characteristics of the 32,674 cases that received a research group assignment before July 8, 1998 with a subset of this group, the 19,280 cases that meet our definition of timely entry to W-2 (were not diverted). A comparison of the simple characteristics of these samples leads to conclusions similar to those from the multivariate analysis: control-group cases are as common in the group that entered as they are in the "all assigned" group. Subgroups that generally had worse employment prospects (young resident parents, African Americans, those with longer AFDC histories) were more likely to enter W-2 and were therefore more represented in the last columns.

Table TR1.1

Probit Estimates of the Probability of Entering W-2 among Cases Assigned August 31, 1997 – July 8, 1998

	Model 1			Model 2			Model 3		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Intercept	0.27	0.04	**<0.0001**	0.27	0.04	**<0.0001**	0.25	0.04	**<0.0001**
Research Code (compared to control group)									
Experimental group	0.0003	0.02	0.988	0.0001	0.02	0.995	0.02	0.04	0.575
Experimental group with low child support				-0.04	0.05	0.388			
Experimental group with high child support				0.04	0.05	0.393			
Experimental group and Milwaukee County							-0.02	0.04	0.649
Experimental group and rural counties							-0.06	0.06	0.309
Child Support Paid in the Year prior to Assignment (compared to zero)									
Low ($1–$999)	0.01	0.02	0.718	0.03	0.05	0.562	0.01	0.02	0.717
High ($1,000 or more)	-0.03	0.02	0.150	-0.06	0.04	0.147	-0.03	0.02	0.151
Location of Resident Parent at Assignment (compared to other urban counties)									
Milwaukee County	0.31	0.02	**<0.0001**	0.31	0.02	**<0.0001**	0.32	0.04	**<0.0001**
Rural counties	-0.01	0.03	0.626	-0.01	0.03	0.622	0.03	0.05	0.529
Age of Resident Parent at Assignment (compared to <25)									
26–30	-0.11	0.02	**<0.0001**	-0.11	0.02	**<0.0001**	-0.11	0.02	**<0.0001**
31–40	-0.09	0.02	**<0.0001**	-0.09	0.02	**<0.0001**	-0.09	0.02	**<0.0001**
41+	-0.16	0.03	**<0.0001**	-0.16	0.03	**<0.0001**	-0.16	0.03	**<0.0001**
Sex of Resident Parent (compared to female)									
Male	-0.10	0.04	**0.013**	-0.10	0.04	**0.013**	-0.10	0.04	**0.013**

	Model 1			Model 2			Model 3		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Race of Resident Parent (compared to white)									
African American	0.09	0.02	**<0.0001**	0.09	0.02	**<0.0001**	0.09	0.02	**<0.0001**
Hispanic	-0.25	0.03	**<0.0001**	-0.25	0.03	**<0.0001**	-0.26	0.03	**<0.0001**
Native American	-0.03	0.05	0.550	-0.03	0.05	0.556	-0.03	0.05	0.554
Asian	0.13	0.04	**0.003**	0.13	0.04	**0.003**	0.13	0.04	**0.003**
Other or unknown	-0.12	0.04	**0.005**	-0.12	0.04	**0.005**	-0.12	0.04	**0.005**
AFDC Receipt prior to Assignment (compared to 0 months)									
1–6 months	-0.02	0.03	0.443	-0.02	0.03	0.443	-0.02	0.03	0.446
7–18 months	0.08	0.03	**0.005**	0.08	0.03	**0.005**	0.08	0.03	**0.004**
19–24 months	0.26	0.03	**<0.0001**	0.26	0.03	**<0.0001**	0.26	0.03	**<0.0001**
Number of Children at Assignment (compared to one)									
None	-0.66	0.05	**<0.0001**	-0.66	0.05	**<0.0001**	-0.66	0.05	**<0.0001**
Two	0.01	0.02	0.669	0.01	0.02	0.668	0.01	0.02	0.671
Three or more	0.03	0.02	0.222	0.03	0.02	0.228	0.03	0.02	0.223
Age of Youngest Child at Assignment (compared to under 1)									
1	-0.17	0.03	**<0.0001**	-0.17	0.03	**<0.0001**	-0.17	0.03	**<0.0001**
2	-0.17	0.03	**<0.0001**	-0.17	0.03	**<0.0001**	-0.17	0.03	**<0.0001**
3–5	-0.15	0.02	**<0.0001**	-0.14	0.02	**<0.0001**	-0.15	0.02	**<0.0001**
6–12	-0.11	0.03	**<0.0001**	-0.11	0.03	**<0.0001**	-0.11	0.03	**<0.0001**
13–17	-0.24	0.04	**<0.0001**	-0.24	0.04	**<0.0001**	-0.24	0.04	**<0.0001**
Unknown	-1.57	0.07	**<0.0001**	-1.57	0.07	**<0.0001**	-1.57	0.07	**<0.0001**

Table TR1.1, continued

	Model 1			Model 2			Model 3		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Case Type (compared to active AFDC on 8/31/97)									
Temporarily inactive AFDC on 8/31/97	0.75	0.04	**<0.0001**	0.75	0.04	**<0.0001**	0.75	0.04	**<0.0001**
Others assigned during 9/1/97 – 3/16/98	-0.51	0.02	**<0.0001**	-0.51	0.02	**<0.0001**	-0.51	0.02	**<0.0001**
Others assigned during 3/17/98 – 5/9/98	-0.13	0.04	**0.001**	-0.13	0.04	**0.001**	-0.13	0.04	**0.001**
Others assigned during 5/10/98 – 7/8/98	-0.17	0.04	**<0.0001**	-0.17	0.04	**<0.0001**	-0.17	0.04	**<0.0001**
N	32,169			32,169			32,169		
Log Likelihood	-19069.3			-19068.4			-19068.7		

Notes: Cases missing the resident parent's gender (N = 505) were excluded. Cases missing the resident parent's age were put in with the modal category (<25). Probability values of 0.05 or less are shown in bold type.

employment rather than enter W-2. The other variables in the model generally support this view. For example, mothers over age 25 are less likely to enter than those aged 18–25; whites are less likely to enter than African Americans or Asians, and those with longer AFDC histories are more likely to enter.[7]

Model 2 in Table TR1.1 addresses our primary concern: among those with high child support in the past, are experimental-group cases more likely to enter W-2 than control-group cases? To assess this effect, we add interaction terms between experimental-group status and high child support. The coefficients on the interaction terms are not significantly different from zero, nor is the main experimental-group term. Model 3 shows there is no interaction effect between being in the experimental group and region. Thus, we find no support for the hypothesis that differential diversion occurred.

Are Experimental-Group Cases More Likely to Enter Lower Tiers than Control-Group Cases?

Our second analysis compares the initial tier placement of cases that enter. There is virtually no difference in initial tier statewide: 70 percent of cases enter the lower tiers and 30 percent enter the upper tiers within both the experimental and control groups. We again examine this question with a multivariate model. We examine all cases that enter W-2 (using the same definition of "entry" as in the diversion analysis), and model whether these cases enter in an upper or lower tier. Table TR1.2 shows the estimates from the probit models. Model 1 includes a single indicator for experimental status. The results suggest that experimental-group cases do not differ from control-group cases in the likelihood of upper-tier placement. Those with higher child support in the past are more likely to enter a higher tier, whereas those in Milwaukee County are less likely to enter in an upper tier. The other variables are generally as expected. Somewhat surprisingly, those with more AFDC history are more likely to enter an upper tier, perhaps because new entrants include those who have just had a child (and are placed in the Caretaker of Newborn tier, a lower tier), or perhaps because new entrants are particularly disadvantaged.

We also test for differential tier assignment for the experimental and control groups among those with higher levels of child support in the year prior to assignment. Results for Model 2 in Table TR1.2 show that among those who had received high child support, experimental-group members were less likely to be placed in an upper tier than control-group members. Finally, in the last columns we examine whether there was differential tier placement across regions. We find no significant difference in the probability of entering in the upper tier in rural counties or in Milwaukee, relative to other urban counties.

Overall, it is our assessment that these results suggest that comparisons between experimental and control group cases that enter W-2 provide an appropriate measure of the impact of the experiment. On the other hand, our analysis of tier of entry suggests that evaluations of the experimental impact conditional on entry in the lower tiers should be interpreted with caution. A focus on cases entering the lower tiers was suggested by the initial evaluation plan, and is consistent with the policy—since only those in the lower tiers are potentially subject to a reduced pass-through. However, there is some evidence that initial tier assignment may be endogenous.

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[7]New W-2 cases are less likely to enter than those who were receiving AFDC on August 31, 1997. Perhaps this is because our definition of "diversion" gives new cases only 30 days to enter, but allows cases that were receiving AFDC on August 31, 1997 thirty days from the W-2 interview, which could be long after random assignment. AFDC cases that were temporarily inactive on August 31 (see section 5 below) are most likely to enter, perhaps because those not interested in W-2 did not have a W-2 interview and thus were never randomly assigned and have been excluded from our analysis. Therefore, among the temporarily inactive cases, only those particularly interested in W-2 were assigned and are included in our analysis, which may result in their high rate of entry.

Table TR1.2

Probit Estimates of the Probability of Entering W-2 in an Upper Tier among Cases That Were Assigned August 31, 1997 – July 8, 1998, and That Enter into the Research Population

	Model 1			Model 2			Model 3		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Intercept	-0.49	0.05	**<0.0001**	-0.50	0.05	**<0.0001**	-0.44	0.06	**<0.0001**
Research Code (compared to control group)									
Experimental group	0.001	0.02	0.950	0.01	0.03	0.680	-0.06	0.05	0.265
Experimental group with low child support				0.08	0.07	0.241			
Experimental group with high child support				-0.14	0.06	**0.032**			
Experimental group and Milwaukee County							0.10	0.06	0.100
Experimental group and rural counties							-0.09	0.09	0.325
Child Support Paid History prior to Assignment (compared to zero)									
Low ($1–$999)	0.10	0.03	**0.000**	0.04	0.06	0.479	0.10	0.03	**0.000**
High ($1,000 or more)	0.06	0.03	**0.024**	0.17	0.06	**0.003**	0.06	0.03	**0.024**
Location of Resident Parent at Assignment (compared to other urban counties)									
Milwaukee County	-0.31	0.03	**<0.0001**	-0.31	0.03	**<0.0001**	-0.38	0.05	**<0.0001**
Rural counties	0.005	0.04	0.909	0.005	0.04	0.907	0.07	0.08	0.365
Age of Resident Parent at Assignment (compared to <25)									
26–30	0.08	0.03	**0.003**	0.08	0.03	**0.003**	0.08	0.03	**0.004**
31–40	0.005	0.03	0.874	0.01	0.03	0.869	0.004	0.03	0.890
41+	-0.28	0.05	**<0.0001**	-0.28	0.05	**<0.0001**	-0.29	0.05	**<0.0001**
Sex of Resident Parent (compared to female)									
Male	0.14	0.06	**0.021**	0.14	0.06	**0.021**	0.14	0.06	**0.022**

Table TR1.2, continued

	Model 1			Model 2			Model 3		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Race of Resident Parent (compared to white)									
African American	-0.25	0.03	**<0.0001**	-0.25	0.03	**<0.0001**	-0.25	0.03	**<0.0001**
Hispanic	-0.09	0.04	**0.037**	-0.09	0.04	**0.037**	-0.09	0.04	**0.037**
Native American	-0.03	0.07	0.644	-0.03	0.07	0.643	-0.03	0.07	0.669
Asian	-0.25	0.06	**<0.0001**	-0.25	0.06	**<0.0001**	-0.24	0.06	**<0.0001**
Other or Unknown	-0.10	0.06	0.099	-0.10	0.06	0.105	-0.10	0.06	0.098
AFDC Receipt prior to Assignment (compared to 0 months)									
1–6 months	0.09	0.05	**0.049**	0.09	0.05	**0.050**	0.09	0.05	**0.047**
7–18 months	0.21	0.04	**<0.0001**	0.21	0.04	**<0.0001**	0.21	0.04	**<0.0001**
19–24 months	0.15	0.05	**0.002**	0.15	0.05	**0.002**	0.15	0.05	**0.002**
Number of Children at Assignment (compared to one)									
None	0.63	0.09	**<0.0001**	0.63	0.09	**<0.0001**	0.63	0.09	**<0.0001**
Two	0.12	0.03	**<0.0001**	0.12	0.03	**<0.0001**	0.12	0.03	**<0.0001**
Three or more	0.09	0.03	**0.002**	0.09	0.03	**0.002**	0.09	0.03	**0.002**
Age of Youngest Child at Assignment (compared to under 1)									
1	0.19	0.03	**<0.0001**	0.19	0.03	**<0.0001**	0.19	0.03	**<0.0001**
2	0.20	0.04	**<0.0001**	0.20	0.04	**<0.0001**	0.20	0.04	**<0.0001**
3–5	0.22	0.03	**<0.0001**	0.22	0.03	**<0.0001**	0.22	0.03	**<0.0001**
6–12	0.18	0.03	**<0.0001**	0.18	0.03	**<0.0001**	0.18	0.03	**<0.0001**
13–17	0.06	0.05	0.273	0.06	0.05	0.282	0.06	0.05	0.271
Unknown	-0.24	0.19	0.200	-0.24	0.19	0.197	-0.24	0.19	0.198

Table TR1.2, continued

	Model 1			Model 2			Model 3		
	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value	Coeff.	Std. Error	P-value
Case Type									
(Compared to active AFDC on 8/31/97)									
Temporarily inactive AFDC on 8/31/97	-0.02	0.04	0.491	-0.03	0.04	0.476	-0.02	0.04	0.482
Others assigned during 9/1/97 – 3/16/98	-0.03	0.03	0.293	-0.03	0.03	0.293	-0.03	0.03	0.301
Others assigned during 3/17/98 – 5/9/98	-0.30	0.06	**<0.0001**	-0.30	0.06	**<0.0001**	-0.30	0.06	**<0.0001**
Others assigned during 5/10/98 – 7/8/98	-0.38	0.06	**<0.0001**	-0.38	0.06	**<0.0001**	-0.39	0.06	**<0.0001**
N	19280			19280			19280		
Log Likelihood	-11354.45			-11350.84			-11350.90		

Note: Cases missing resident parent's age were put in with the modal category (<25). Probability values of 0.05 or less are shown in bold type.

3.   Comparisons between Our Research Population and the Entire W-2 Caseload

In the previous section we addressed the issue of the equivalency of the control and experimental groups, and the implications for the validity of simple comparisons of outcomes as measures of experimental effects. We now turn to the issue of the representativeness of the full research population, which includes the 15,977 cases analyzed as part of the control and experimental groups. The first column of Table TR1.3 shows the characteristics of the 23,347 cases that entered W-2 within our sample frame—that is, before July 9, 1998. (It also includes a few cases who were given a random assignment code before July 9 and who entered a W-2 slot within 30 days of their random assignment.) In this sample, 14 percent of cases had no AFDC experience in the prior 24 months and 73 percent were in Milwaukee County.

The next columns show exclusions made in defining our basic research population. Of the 23,347 cases that entered W-2 by July 9, 1998, about 1,100 did not receive a research-group assignment due to a programming error. These cases, which were eliminated from our population, are shown in column 2. We also eliminated about 800 cases that were not eligible for child support (column 3). This group includes about 700 cases that were not referred to the child support office, presumably because both parents were living together or perhaps because the nonresident parent was known to be dead. In another 48 cases, the nonresident parent is known to have died. In the remaining 37, the resident parent had a good-cause exemption from pursuing child support (primarily because of domestic violence). Because the group of cases not eligible for child support includes a large number of Hmong two-parent families, the characteristics of this group differ from all cases that entered.

These exclusions leave us with 21,447 cases that entered W-2, had a research group assignment, and were potentially eligible for child support. We then eliminate another 5,059 cases from our basic analysis sample. About 45 percent of this group was excluded due to extended post-assignment delays prior to entering W-2. Thirty-six percent had a child receiving SSI, which made them ineligible for the reduced pass-through. (Federal law does not allow the government to retain a portion of the child support paid on behalf of children receiving Supplemental Security Income (SSI).) Another 9 percent had children less than age 18 when then entered W-2 (a requirement for eligibility), but had no child who would be under age 18 on December 31, 1999; these cases were excluded because they were not demographically eligible for child support for the full period of the evaluation. The characteristics of the cases excluded at this step are shown in column 4. In this group 18 percent had no recent AFDC experience and 76 percent were in Milwaukee County, percentages a little higher than the all-entrant sample in column 1. As is consistent with the inclusion in this group of cases with only older children and children receiving SSI, the resident parents and children in this group are somewhat older, and the resident parents are more likely to be placed in W-2T, a tier that can be used for those caring for child with a disability.

Finally, we eliminate 411 cases in which the resident parent is the father (and the mother is the nonresident parent) because these cases are relatively rare and are systematically different from the cases in which the mother is the resident parent. (We do provide selected information on the child support these resident fathers receive in Volume I, Section 4.1, but in general there are too few to conduct a parallel set of analyses). Resident fathers are more likely to have no recent AFDC experience and are less likely to be in Milwaukee County.

This leaves a final research population of 15,977 resident mothers who received a research-group assignment and are potentially eligible for child support (column 6). Our research population is generally quite similar to all W-2 entrants. For example, in our research population, 13 percent had no recent

Table TR1.3
Initial Characteristics of All Cases Entering W-2

	(1) All Entered Cases		(2) Entered Cases Without an Assignment		(3) Entered Cases Ineligible for Child Support		(4) Entered Cases—Other Exclusions		(5) Entered Cases— Male Resident Parents		(6) Research Population	
	N	%	N	%	N	%	N	%	N	%	N	%
All Cases	23,347		1,096		804		5,059		411		15,977	
Case Type												
AFDC	14,728	63.1			524	65.2	2,633	52.0	238	57.9	11,333	70.9
W-2	7,241	31.0			279	34.7	2,145	42.4	173	42.1	4,644	29.1
Unable to determine	1,378	5.9	1,096	100.0	1	0.1	281	5.6				
AFDC Receipt before Entry												
None	3,182	13.6	16	1.5	154	19.2	899	17.8	108	26.3	2,005	12.6
1–18 months	7,775	33.3	441	40.2	217	27.0	1,639	32.4	146	35.5	5,332	33.4
19–24 months	12,390	53.1	639	58.3	433	53.9	2,521	49.8	157	38.2	8,640	54.1
Initial Tier												
Lower tier	14,147	60.6	407	37.1	513	63.8	3,322	65.7	271	65.9	9,634	60.3
Caretaker of Newborn	1,847	7.9	36	3.3	18	2.2	394	7.8	7	1.7	1,392	8.7
Upper tier	6,969	29.9	562	51.3	252	31.3	1,071	21.2	133	32.4	4,951	31.0
Missing	384	1.6	91	8.3	21	2.6	272	5.4				
Location of Resident Parent												
Milwaukee County	17,018	72.9	701	64.0	373	46.4	3,842	75.9	246	59.9	11,856	74.2
Other urban counties	4,330	18.6	302	27.6	319	39.7	864	17.1	99	24.1	2,746	17.2
Rural counties and tribes	1,998	8.6	92	8.4	112	13.9	353	7.0	66	16.1	1,375	8.6
Missing	1	0.0	1	0.1								

	(1) All Entered Cases		(2) Entered Cases Without an Assignment		(3) Entered Cases Ineligible for Child Support		(4) Entered Cases—Other Exclusions		(5) Entered Cases— Male Resident Parents		(6) Research Population	
	N	%	N	%	N	%	N	%	N	%	N	%
Age of Resident Parent at Entry												
16–25	9,841	42.2	406	37.0	120	14.9	1,764	34.9	38	9.3	7,513	47.0
26–30	4,695	20.1	237	21.6	90	11.2	1,016	20.1	76	18.5	3,276	20.5
Over 30	8,803	37.7	453	41.3	593	73.8	2,275	45.0	296	72.0	5,186	32.5
Missing	8	0.0			1	0.1	4	0.1	1	0.2	2	0.0
Race of Resident Parent												
White	5,802	24.9	377	34.4	221	27.5	1,076	21.3	127	30.9	4,001	25.0
African American	13,757	58.9	543	49.5	108	13.4	3,280	64.8	186	45.3	9,640	60.3
Other	3,788	16.2	176	16.1	475	59.1	703	13.9	98	23.8	2,336	14.6
Education of Resident Parent												
Less than high school	12,698	54.4	499	45.5	533	66.3	2,871	56.8	190	46.2	8,605	53.9
HS degree	8,330	35.7	441	40.2	193	24.0	1,702	33.6	165	40.2	5,829	36.5
Beyond high school	2,319	9.9	156	14.2	78	9.7	486	9.6	56	13.6	1,543	9.7
Number of Children at Entry												
None or one	7,798	33.4	333	30.4	240	29.9	1,710	33.8	201	48.9	5,314	33.3
Two	6,476	27.7	290	26.5	171	21.3	1,229	24.3	109	26.5	4,677	29.3
Three or more	9,073	38.9	473	43.2	393	48.9	2,120	41.9	101	24.6	5,986	37.5
Age of Youngest Child at Entry												
0–2	12,312	52.7	500	45.6	310	38.6	2,133	42.2	85	20.7	9,284	58.1
3–5	4,321	18.5	248	22.6	150	18.7	963	19.0	88	21.4	2,872	18.0
6 or older	6,566	28.1	342	31.2	320	39.8	1,884	37.2	219	53.3	3,801	23.8
Missing	148	0.6	6	0.6	24	3.0	79	1.6	19	4.6	20	0.1

	(1) All Entered Cases		(2) Entered Cases Without an Assignment		(3) Entered Cases Ineligible for Child Support		(4) Entered Cases—Other Exclusions		(5) Entered Cases— Male Resident Parents		(6) Research Population	
	N	%	N	%	N	%	N	%	N	%	N	%
Average Annual Pre-Entry Earnings of Highest-Earning Nonresident Parent												
None	4,336	18.6	199	18.2	27	3.4	1,055	20.9	89	21.7	2,966	18.6
$1–$5,000	7,133	30.6	320	29.2	22	2.7	1,508	29.8	139	33.8	5,144	32.2
$5,000–$15,000	4,239	18.2	201	18.3	11	1.4	888	17.6	52	12.7	3,087	19.3
$15,000–$25,000	1,723	7.4	88	8.0	4	0.5	367	7.3	17	4.1	1,247	7.8
$25,000 or more	829	3.6	36	3.3	2	0.3	171	3.4	9	2.2	611	3.8
No nonresident parent	4,405	18.9	219	20.0	733	91.2	909	18.0	82	20.0	2,462	15.4
Nonresident parent missing SSN	682	2.9	33	3.0	5	0.6	161	3.2	23	5.6	460	2.9
Child Support Paid prior to Entry												
None	16,016	68.6	705	64.3	778	96.8	3,451	68.2	368	89.5	10,714	67.1
$1–$999	3,477	14.9	180	16.4	15	1.9	741	14.7	22	5.4	2,519	15.8
$1,000 or more	3,854	16.5	211	19.3	11	1.4	867	17.1	21	5.1	2,744	17.2
Quarters of Employment prior to Entry												
None	5,138	22.0	117	10.7	408	50.8	1,278	25.3	108	26.3	3,227	20.2
1–6 Quarters	13,694	58.7	718	65.5	293	36.4	2,874	56.8	201	48.9	9,608	60.1
7–8 Quarters	4,505	19.3	260	23.7	99	12.3	903	17.9	102	24.8	3,141	19.7
Missing social security number	10	0.0	1	0.1	4	0.5	4	0.1			1	0.0
Number of Legal Fathers												
None	7,447	31.9	317	28.9	719	89.4	1,530	30.2	83	20.2	4,798	30.0
One	11,560	49.5	570	52.0	83	10.3	2,507	49.6	324	78.8	8,076	50.6
Two or more	4,309	18.5	207	18.9			995	19.7	4	1.0	3,103	19.4
Missing	31	0.1	2	0.2	2	0.2	27	0.5				

	(1) All Entered Cases		(2) Entered Cases Without an Assignment		(3) Entered Cases Ineligible for Child Support		(4) Entered Cases—Other Exclusions		(5) Entered Cases— Male Resident Parents		(6) Research Population	
	N	%	N	%	N	%	N	%	N	%	N	%
Relationship of Resident Parent with Nonresident Parents												
Marital only	1,973	8.5	119	10.9	11	1.4	542	10.7	118	28.7	1,183	7.4
Other	21,374	91.6	977	89.1	793	98.6	4,517	89.3	293	71.3	14,794	92.6
Resident Parent Has Child Support Order at Entry												
No	11,040	47.3	469	42.8	767	95.4	2,410	47.6	341	83.0	7,053	44.1
Yes	12,307	52.7	627	57.2	37	4.6	2,649	52.4	70	17.0	8,924	55.9

AFDC experience (compared to 14 percent in column 1), 60 percent enter either in the W-2T tier or a CSJ tier (compared to 61 percent in column 1), 74 percent are from Milwaukee (compared to 73 percent in column 1). The distribution of the research population is graphically depicted in Figures TR1.1 and TR1.2.

4.   Are the Experimental and Control Groups Equivalent in Our Final Research Population?

        In Table TR1.4 we examine the comparability of the experimental and control groups in the final research population. The groups could differ by chance at random assignment, they could differ if there were differential rates of entry onto W-2, or they could differ if we differentially excluded experimental-group cases in the construction of the final sample. The first two sets of columns show the characteristics of the experimental group and the control group. The final columns show the results of a multivariate test of the statistical significance of any difference. Specifically, we conduct a probit analysis in which the dependent variable is being a member of the experimental group. On most dimensions we examine, the distributions for the experimental and control groups are not significantly different, as indicated by the lack of statistically significant coefficients in the final column. The primary exceptions are case type/assignment periods, mother's age, and mother's child support history. Those in the experimental group are more likely to have transitioned from AFDC, are older, and are more likely to have had $1,000 or more of child support paid on their behalf in the previous year. In addition, those marginally more likely to be in the experimental group are African Americans, those with two children (but not three or more), and those whose ex-partner's earnings are in one of the middle categories. Because of these differences in initial characteristics, we conduct regression analyses to estimate the effect of the policy, as discussed below.

5.   Timing, Unusual Cases, and Other Technical Issues
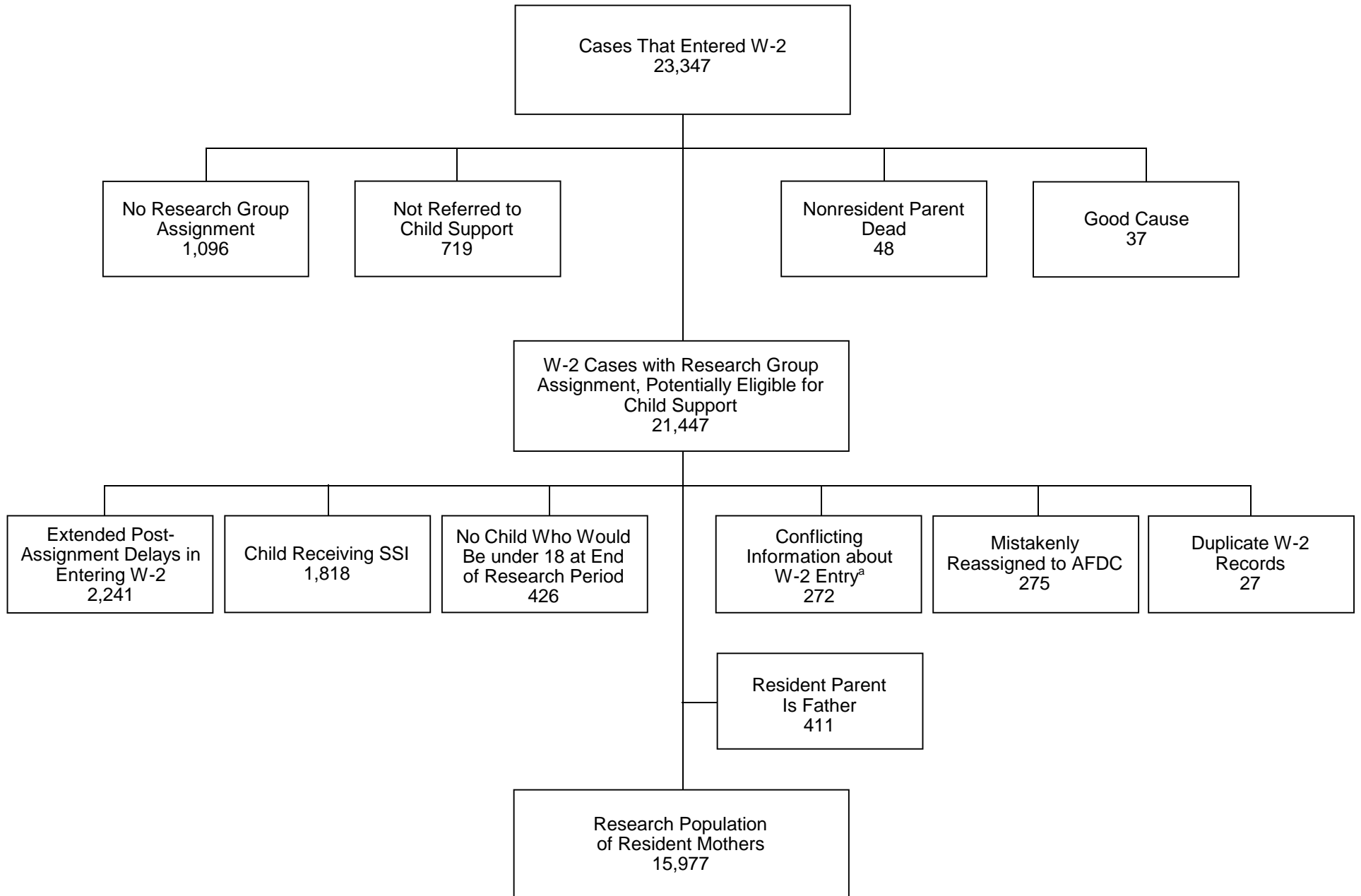
Definition of Baseline/Entry into the Experiment

        We view the intervention we are testing as the *combination* of a full pass-through and the other features of the W-2 program. For this reason, we include in our analysis only those cases that enter the W-2 program. Our approach is influenced by the finding that experimental status does not appear to have large effects on the decision to enter.

        This approach has implications for the period we consider in evaluating the effects of the intervention. If we were interested only in the effects of a full pass-through without considering W-2, we could examine all changes that occur after a case is randomly assigned. For existing AFDC cases our analysis would then start on August 31, 1997 (when these cases were initially assigned) rather than at first entry to W-2 (which was as much as seven months later). We have not taken this approach, in part because W-2 began gradually, and it is not clear whether individuals who were receiving AFDC on August 31, 1997 understood anything about their pass-through status. Therefore, for cases receiving AFDC on August 31, we set the baseline at the time they have an interview with a W-2 caseworker, and track changes that occur *after* that time (i.e., after they learned about the full intervention). "New" cases (those not receiving AFDC on August 31) who applied for assistance were told about the W-2 program and the pass-through, and assigned to the experimental or control group in their initial interview.[8] Thus for these cases we set the baseline at the time of their assignment and track changes after this date. The
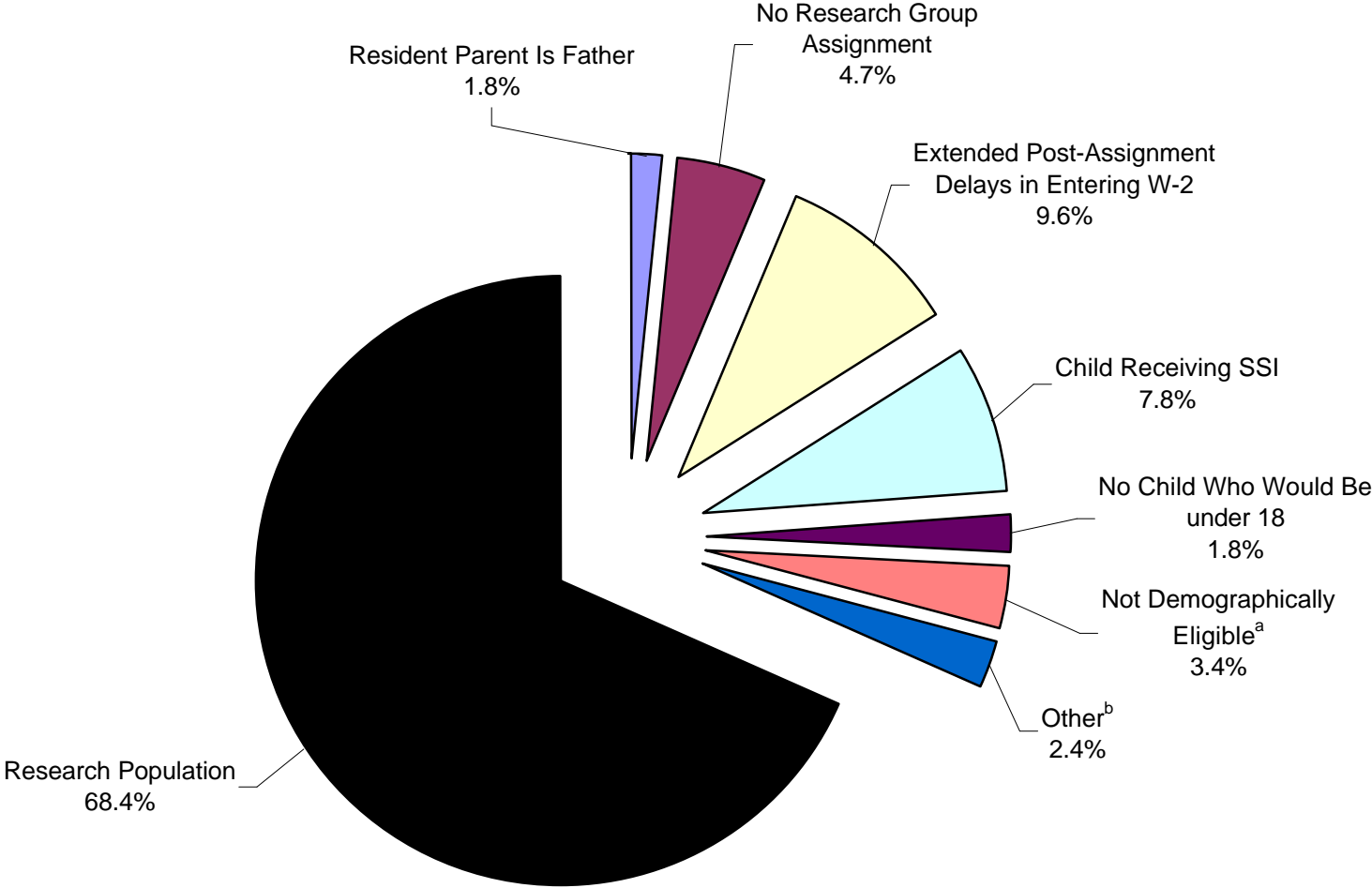
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        [8]Or at their "request for assistance," which may have been by phone prior to an in-person "interview."

Figure TR 1.1
Derivation of CSDE Research Population, Phase 1

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                          ┌─────────────────────────────┐
                          │     Cases That Entered W-2   │
                          │           23,347            │
                          └─────────────────────────────┘
```

| No Research Group Assignment 1,096 | Not Referred to Child Support 719 | Nonresident Parent Dead 48 | Good Cause 37 |

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              ┌──────────────────────────────────┐
              │ W-2 Cases with Research Group     │
              │ Assignment, Potentially Eligible  │
              │ for Child Support                 │
              │           21,447                  │
              └──────────────────────────────────┘
```

| Extended Post-Assignment Delays in Entering W-2 2,241 | Child Receiving SSI 1,818 | No Child Who Would Be under 18 at End of Research Period 426 | Conflicting Information about W-2 Entry[a] 272 | Mistakenly Reassigned to AFDC 275 | Duplicate W-2 Records 27 |

Resident Parent Is Father 411

```
              ┌──────────────────────────────────┐
              │     Research Population            │
              │     of Resident Mothers           │
              │           15,977                  │
              └──────────────────────────────────┘
```

[a]Some administrative data indicated that these cases entered W-2. However, they never received a payment or participated in any W-2 activities.

Figure TR 1.2
W-2 Participants: Research Population and Excluded Categories, Phase 1

Resident Parent Is Father
1.8%

No Research Group
Assignment
4.7%

Extended Post-Assignment
Delays in Entering W-2
9.6%

Child Receiving SSI
7.8%

No Child Who Would Be
under 18
1.8%

Not Demographically
Eligible[a]
3.4%

Other[b]
2.4%

Research Population
68.4%

[a]Not referred to Child Support (719), Nonresident Parent Dead (48), and Good Cause (37).
[b]Mistakenly Reassigned to AFDC (275), Conflicting Information about W-2 Entry (272), and Duplicate W-2 Records (27).

Table TR1.4
Comparison of the Experimental and Control Groups in the Final Research Population
(Weighted Percentages)

	Experimental Group		Control Group		P-value in Probit Model of E Status (vs. C Status)[a]
	N	%	N	%	
Total Cases	12,502		3,475		
Case Type					
AFDC	9,172	71.4	2,161	68.6	omitted
W-2	3,330	28.6	1,314	31.4	**<0.001**
AFDC Receipt before Entry					
None	1,430	12.4	575	13.2	omitted
1–18 Months	4,162	33.5	1,170	33.1	0.982
19–24 Months	6,910	54.1	1,730	53.7	0.790
Initial Tier					
Lower tier	7,554	60.3	2,080	60.1	omitted
Caretaker of Newborn	1,036	8.7	356	9.1	0.918
Upper tier	3,912	31.0	1,039	30.8	0.875
Location of Resident Parent					
Milwaukee County	9,330	74.3	2,526	74.0	omitted
Other urban counties	2,118	17.1	628	17.3	0.716
Rural counties and tribes	1,054	8.6	321	8.7	0.402
Age of Resident Parent at Entry					
16–25	5,819	46.6	1,694	48.3	omitted
26–30	2,569	20.6	707	20.7	0.161
Over 30	4,113	32.8	1,073	31.0	**0.018**
Missing	1	0.0	1	0.0	0.626
Race of Resident Parent					
White	3,066	24.9	935	26.0	omitted
African American	7,596	60.5	2,044	59.5	0.065
Other	1,840	14.6	496	14.5	0.384
Education of Resident Parent					
Less than high school	6,784	54.0	1,821	52.9	omitted
High school degree	4,521	36.3	1,308	37.5	0.178
Beyond high school	1,197	9.7	346	9.7	0.488
Number of Children at Entry					
None or one	4,141	33.5	1,173	32.4	omitted
Two	3,630	29.0	1,047	30.2	0.071
Three or more	4,731	37.4	1,255	37.4	0.138

Table TR1.4, continued

	Experimental Group		Control Group		P-value in Probit Model of E Status (vs. C Status)[a]
	N	%	N	%	
Age of Youngest Child at Entry					
0–2	7,240	58.1	2,044	58.3	omitted
3–5	2,258	18.0	614	18.0	0.570
6 or older	2,989	23.9	812	23.5	0.112
Missing	15	0.1	5	0.1	0.866
Average Annual Pre-Entry Earnings of Highest-Earning Nonresident Parent					
None	2,325	18.6	641	18.5	omitted
$1–$5,000	3,970	31.7	1,174	34.1	0.300
$5,000–$15,000	2,469	19.7	618	18.0	0.346
$15,000–$25,000	956	7.6	291	8.4	0.067
$25,000 or more	478	3.9	133	3.7	0.654
No nonresident parent	1,932	15.6	530	14.8	0.789
Nonresident parent missing SSN	372	3.0	88	2.5	0.231
Child Support Paid prior to Entry					
None	8,342	66.9	2,372	67.9	omitted
$1–$999	1,960	15.6	559	16.4	0.903
$1,000 or more	2,200	17.6	544	15.8	**0.004**
Quarters of Employment prior to Entry					
None	2,550	20.3	677	19.7	omitted
1–6 quarters	7,546	60.0	2,062	60.8	0.998
7–8 quarters	2,405	19.7	736	19.5	0.983
Missing SSN	1	0.0			
Number of Legal Fathers					
None	3,738	30.2	1,060	29.4	omitted
One	6,331	50.5	1,745	50.6	0.774
Two or more	2,433	19.3	670	20.1	0.504
Relationship of Resident Parent with Nonresident Parents					
Marital only	929	7.5	254	7.1	0.240
Other	11,573	92.5	3,221	92.9	omitted
Resident Parent Has Child Support Order at Entry					
No	5,485	44.3	1,568	43.4	omitted
Yes	7,017	55.7	1,907	56.6	0.488

[a]Model also includes time period of assignment. Probability values of 0.05 or less are shown in bold type.

baseline date, which for convenience we generally term "entry into W-2," is also the point at which we measure initial demographic characteristics.[9]

<u>Treatment of Experimental Cases Originally Ineligible for the Evaluation</u>

In all analyses using administrative data, we include those experimental-group cases that by the original process of random assignment were ineligible for the evaluation and were not included in any survey analysis. But because these cases were subject to the same policy treatment as the experimental group that *was* eligible for the survey, and because our implementation research suggests that the two groups were generally treated identically, we combine these two groups in the analysis that uses administrative data only. Comparisons of characteristics of the two groups generally show few differences (there are, for example, fewer older mothers in the original experimental group; see Table TR1.5), and we control for the characteristics that differ in a regression context.[10] Including the full set of experimental cases improves the accuracy of our estimates for those subject to the full pass-through. For simplicity, we generally refer to the combined group simply as the "experimental" group. The results we show have been weighted to account for the different assignment rates in different time periods.

<u>Determining the Research Population</u>

In this section we describe six types of cases in which a decision about their inclusion in the basic research population is not straightforward. In each case we present information on the number of cases affected and our rationale for including or excluding the cases.

A. Cases receiving AFDC on August 31, 1997. These cases, given an assignment code on August 31 (experimental, control, or experimental group not eligible for the survey), were sent a letter explaining their assignment status, and they began receiving the amount of child support consistent with their assignment (partial amounts for control-group cases receiving W-2 payments; the full amount for all others). Individuals in this group were scheduled for W-2 interviews at various points over the next six months. Prior to the W-2 interview, they may (or may not) have understood the implications of their group assignment. Those in this group who made a transition directly from AFDC to W-2 are included in our analysis; as discussed above, we consider their baseline date to be the date they interviewed for W-2. Those who left AFDC and did not begin a W-2 slot within two months are treated as "diverted." These diverted cases are included in our diversion analysis above (Tables TR1.1 and TR1.2), but are not included in our research population. If these individuals did not understand their assignment until they had a W-2 interview, the appropriate time to begin a diversion analysis for them would have been after the interview. Had we pursued this approach, these cases would have been classified as diverted only if

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[9]Another date that we considered using as the baseline is the slot date; that is, the date shown on CARES as the beginning of the first W-2 assignment. However, it appears that workers routinely back-dated the slot date in order to insure continuity of payments for those receiving AFDC. As the slot date is therefore an unreliable indicator, the interview date, which falls near the actual time of tier placement, was selected as the best available date to serve as baseline. Cases assigned on August 31, 1997 were immediately subject to the pass-through policy corresponding to their research code. But since there were no tiers in AFDC, all controls were subject to the same $50 or 41 percent policy during the remainder of their tenure on AFDC (which could have ended no later than March 1998). This period between August 31, 1997 and their W-2 interview date is considered pre-baseline for the purposes of the analyses in this report.

[10]The p-values are the result of a probit in which the dependent variable is being in the original experimental group.

Table TR1.5

Comparison of the Two Experimental Groups (Weighted Percentages)

	First Assignment Period					Second Assignment Period				
	Original Experimental Group		Experimental Group Not Originally in Evaluation		P-value in Probit Model of E Status (vs. N Status)	Original Experimental Group		Experimental Group Not Originally in Evaluation		P-value in Probit Model of E Status (vs. N Status)
	N	%	N	%		N	%	N	%	
Total Cases	2,859		8,601			259		357		
Case Type										
AFDC	2,291	80.1	6,859	79.8	omitted	9	3.5	12	3.4	n/a
W-2	568	19.9	1,742	20.3	0.703	250	96.5	345	96.6	n/a
AFDC Receipt before Entry										
None	241	8.4	699	8.1	omitted	119	46.0	158	44.3	omitted
1–18 months	902	31.6	2,841	33.0	0.234	105	40.5	145	40.6	0.392
19–24 months	1,716	60.0	5,061	58.8	0.310	35	13.5	54	15.1	0.303
Initial Tier										
Lower tier	1,729	60.5	5,221	60.7	omitted	162	62.6	199	55.7	omitted
Caretaker of Newborn	196	6.9	607	7.1	0.697	46	17.8	80	22.4	0.341
Upper tier	934	32.7	2,773	32.2	0.253	51	19.7	78	21.9	0.290
Location of Resident Parent										
Milwaukee County	2,198	76.9	6,493	75.5	omitted	169	65.3	216	60.5	omitted
Other urban counties	436	15.3	1,427	16.6	0.113	53	20.5	98	27.5	0.352
Rural counties and tribes	225	7.9	681	7.9	0.820	37	14.3	43	12.0	0.594
Age of Resident Parent at Entry										
16–25	1,315	46.0	3,978	46.3	omitted	132	51.0	192	53.8	omitted
26–30	603	21.1	1,760	20.5	0.552	55	21.2	55	15.4	0.360
Over 30	941	32.9	2,863	33.3	**0.040**	72	27.8	110	30.8	0.235
Missing										

Table TR1.5, continued

	First Assignment Period					Second Assignment Period				
	Original Experimental Group		Experimental Group Not Originally in Evaluation		P-value in Probit Model of E Status	Original Experimental Group		Experimental Group Not Originally in Evaluation		P-value in Probit Model of E Status
	N	%	N	%	(vs. N Status)	N	%	N	%	(vs. N Status)
Race of Resident Parent										
White	656	23.0	2,041	23.7	omitted	85	32.8	116	32.5	omitted
African American	1,801	63.0	5,250	61.0	0.495	147	56.8	190	53.2	0.822
Other	402	14.1	1,310	15.2	0.382	27	10.4	51	14.3	0.156
Education of Resident Parent										
Less than high school	1,544	54.0	4,768	55.4	omitted	124	47.9	161	45.1	omitted
HS degree	1,042	36.5	3,041	35.4	0.076	101	39.0	163	45.7	0.212
Beyond high school	273	9.6	792	9.2	0.203	34	13.1	33	9.2	0.366
Number of Children at Entry										
None or one	902	31.6	2,738	31.8	omitted	127	49.0	168	47.1	omitted
Two	785	27.5	2,547	29.6	0.289	74	28.6	100	28.0	0.744
Three or more	1,172	41.0	3,316	38.6	0.118	58	22.4	89	24.9	0.323
Age of Youngest Child at Entry										
0–2	1,627	56.9	4,961	57.7	omitted	154	59.5	226	63.3	omitted
3–5	510	17.8	1,597	18.6	0.796	35	13.5	54	15.1	0.803
6 or older	720	25.2	2,033	23.6	**0.036**	70	27.0	75	21.0	0.082
Missing	2	0.1	10	0.1	0.505			2	0.6	0.999
Average Annual Pre-Entry Earnings of Highest-Earning Nonresident Parent										
None	560	19.6	1,575	18.3	omitted	44	17.0	65	18.2	omitted
$1–$5,000	913	31.9	2,756	32.0	0.324	83	32.1	101	28.3	0.162
$5,000–$15,000	573	20.0	1,709	19.9	0.459	51	19.7	63	17.7	0.328
$15,000–$25,000	215	7.5	659	7.7	0.480	19	7.3	32	9.0	0.909
$25,000 or more	94	3.3	337	3.9	0.100	12	4.6	13	3.6	0.377
No nonresident parent	420	14.7	1,302	15.1	0.696	45	17.4	74	20.7	0.831
Nonresident parent missing SSN	84	2.9	263	3.1	0.491	5	1.9	9	2.5	0.845

	First Assignment Period					Second Assignment Period				
	Original Experimental Group		Experimental Group Not Originally in Evaluation		P-value in Probit Model of E Status		Original Experimental Group		Experimental Group Not Originally in Evaluation		P-value in Probit Model of E Status
	N	%	N	%	(vs. N Status)	N	%	N	%	(vs. N Status)
Child Support Paid prior to Entry										
None	1,884	65.9	5,719	66.5	omitted	181	69.9	253	70.9	omitted
$1–$999	484	16.9	1,352	15.7	0.093	29	11.2	45	12.6	0.290
$1,000 or more	491	17.2	1,530	17.8	0.775	49	18.9	59	16.5	0.961
Quarters of Employment prior to Entry										
None	647	22.6	1,744	20.3	omitted	43	16.6	48	13.5	omitted
1–6 quarters	1,726	60.4	5,306	61.7	**0.005**	125	48.3	192	53.8	0.405
7–8 quarters	486	17.0	1,550	18.0	**0.004**	91	35.1	117	32.8	0.671
Missing SSN			1	0.0	0.998					
Number of Legal Fathers										
None	800	28.0	2,507	29.2	omitted	98	37.8	151	42.3	omitted
One	1,491	52.2	4,371	50.8	0.207	124	47.9	154	43.1	0.315
Two or more	568	19.9	1,723	20.0	0.568	37	14.3	52	14.6	0.569
Relationship of Resident Parent with Nonresident Parents										
Marital only	209	7.3	615	7.2	0.986	22	8.5	38	10.6	0.084
Other	2,650	92.7	7,986	92.9	omitted	237	91.5	319	89.4	omitted
Resident Parent Has Child Support Order at Entry										
No	1,216	42.5	3,659	42.5	omitted	142	54.8	216	60.5	omitted
Yes	1,643	57.5	4,942	57.5	0.293	117	45.2	141	39.5	0.496

Note: The first assignment period includes cases assigned from September 1, 1997 to March 16, 1998. The second assignment period includes cases assigned from March 17, 1998 to May 8, 1998. Probability values of 0.05 or less are shown in bold type.

they had failed to enter a slot within 30 days of the interview.[11] A sensitivity test of our diversion analysis using this alternate method revealed a diversion differential nearly identical to the results reported in Tables TR1.1 and TR1.2 and does not change the conclusion that there was no substantial differential diversion.[12]

B. Temporarily inactive AFDC cases. The second problematic type includes about 1,800 cases not receiving payments on August 31, but receiving AFDC some time in August, and again some time before September 30. Because these cases were not active on August 31, they did not receive an assignment code when they did return to AFDC. The computer system assumed all of these cases should receive the full pass-through since they had no research code. When these individuals later had a W-2 interview, they were given a random assignment code, and then their pass-through status varied accordingly. About 90 percent of these cases entered W-2, in part because most women who had a W-2 interview followed through with entry. Within this group, there was no significant difference between the experimental group and the control group in the likelihood of entry. Still, these cases differ somewhat from the other cases, so we included an indicator variable for them in a variant of our basic diversion analysis and tested whether those who were in the control group had a different rate of entry to W-2 than those assigned to the experimental group. This sensitivity test showed no significant difference in the rate of entry between experimental and control-group cases that were temporarily inactive. We therefore have kept these cases in our basic research sample as long as they entered W-2 within 30 days of their random assignment.[13]

C. Erroneous placements. About 300 cases were incorrectly placed in the AFDC program after October 1. These cases were not receiving AFDC on August 31 nor did they receive AFDC in September. Program rules state that they should have entered W-2, rather than returning to AFDC. We eliminated these cases from our analysis because of the mistake in program status and their relatively small number.[14]

D. Confusion over child support eligibility. There are cases for which CARES records suggest child support eligibility and referral to the child support enforcement system, but for which we find no

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[11]We originally included these cases in our research sample as long as they entered by July 9, 1998. Because they were part of our original research sample, some of these cases were selected to be surveyed, and some of these completed surveys. We now believe it is more appropriate to consider these cases as "diverted" and thus have excluded them from both administrative and survey analyses.

[12]More specifically, in this variant we took cases receiving AFDC on August 31that were then off AFDC for two or more months, and counted them as entering W-2 (and our analysis population) as long as they (1) had an interview prior to July 9, 1998, when our sample ended, and (2) entered a W-2 slot within 30 days of their interview. This change in treatment means that 496 cases that we treat as "diverted" in our main analysis are treated as "entered" in this alternate analysis. Under these alternate rules, 61 percent of the experimental group and 60 percent of the control group entered W-2, compared to 59 percent and 58 percent in our main analysis.

[13]Cases without a two-month break in payments were classified as "transitioned from AFDC" rather than "new W-2" cases for the purpose of defining the survey sample. Cases with a two-month break in payments were still included in our research population as long as they entered within 30 days of receiving a random assignment code (received when they requested information on W-2). For the purpose of the survey sample, we counted these as "new W-2 cases."

[14]Moreover, these cases did not receive an assignment code unless they had a W-2 interview. These cases did not differ in their rate of entry: an unweighted analysis shows that of those assigned, 91 percent of the experimental group entered, compared to 87 percent of the control group.

matching record within KIDS, the child support data system. Our investigation of these cases showed that most are appropriately included in our population as having no child support activity. Although a small number of the cases are errors and should have been excluded from the population, it is not feasible to distinguish the erroneous cases. Since most of the nonmatching cases are in fact cases in which child support was not pursued, and since we are unable to distinguish those with a mismatch, we have included all the cases in this category.

E. Cases that rapidly became ineligible for child support. Our basic rule for case inclusion was to keep all cases that were eligible for child support, received a research code, had at least one child in the home who would be younger than age 18 on January 1, 2000, and entered W-2 during the sample intake period. In some cases, either the nonresident father or the mother of all the children in the case died after the children entered W-2; in others all children died or went to live with someone else shortly after entry. Because these affect a very small number of cases, and because we are not always certain that deaths are appropriately recorded in the administrative record, we have not deleted these cases from the research population. These cases remained in the administrative-data sample, but most were not eligible for inclusion in the survey sample. One subgroup that we can identify with more precision is cases in which there was only an older child who would turn 18 during our follow-up period. Because in general child support is *not* due or paid after a child's eighteenth birthday, we eliminated these cases from our research population.

F. Cases that entered W-2 but appeared to have no children in the home. In most of these cases, the mother was pregnant at entry into W-2, and there were no other children in the case.[15] Since W-2 is only for families with children, we believe that these cases exist mainly because of quirks in how dates are recorded on CARES; in most of these cases, the child was born very soon after entry into W-2. In all of these cases, we included the unborn child in the analyses. In cases that had both an unborn child and other children present at entry into W-2, we included only those children already born at entry into W-2, excluding any children born after entry into W-2.

Unit of Analysis

A final issue is the appropriate unit of analysis in complicated cases. We examine the resident parent as our primary unit of analysis, further limiting our examination to resident mothers, the vast majority of cases. Random assignment was based on a resident parent, so it is appropriate to compare resident parents in the experimental group with those in the control group. But the full pass-through could affect the nonresident parent as well as the resident parent, so we also want to examine effects on nonresident parents. For some resident parents, there was no legal nonresident parent associated with the case (legal paternity had not been established for the children in the case); for others, there was one, and for others, more than one.

Our basic strategy for nonresident parents is to count each couple once. When a mother in our research population is associated with more than one father, we count each father once, so that a single mother may be implicitly counted more than once when we examine fathers (and couples). In the less common case, when a father is associated with more than one mother in our population, we count a

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[15]Others appear to be data errors. Because the presence of children is an eligibility requirement for receiving W-2 (except for first-time pregnancies), we assume that in these cases there are children in the home who are missing from the household grid in CARES.

single father as many times as he is part of a couple.[16] About 30 percent of the 15,977 mothers in our sample had only nonmarital children who had not had paternity established, so no fathers are associated with these mothers are in our population. Of the remaining 11,179 mothers, 28 percent are associated with more than one legal father. Of the 13,339 fathers, 7 percent are associated with more than one mother in our population, and thus are counted more than once, bringing the total to 14,343 couples. To the extent that multiple fathers associated with one mother are not independent, a simple count of fathers overstates the number of independent observations. This might be expected to lead to downwardly biased estimates of standard errors. Huber-White standard errors were estimated for selected direct effects and measured effects were robust to this alternative approach. We hope to explore this issue further in future analysis.

6.   Methods of Analysis

The random assignment of cases to an experimental and a control group provides a powerful tool to evaluate the effects of a policy. In theory, given random assignment, simple comparisons between the experimental and control groups should provide unbiased measures of the impact of the policy. This comparison is appropriate if the groups are comparable, differing only in the pass-through policy they face. The implementation analysis, discussed in Technical Report 2 of this volume, suggests that the initial random assignment worked appropriately. The analysis of diversion, above, suggests there are no overall significant differences in the proportion of cases in the experimental and control groups that entered W-2 (and our research sample). The analysis of the initial characteristics of the experimental and control groups largely confirms our expectation that they are equivalent.

Although the experimental and control groups are not significantly different in most respects, the results in Table TR1.4 suggest that there are some differences in initial characteristics. For this reason, we present regression-adjusted means, rather than simple means, in the analysis of experimental effects.[17] This approach has a number of advantages. First, even if random assignment worked perfectly, there will be some chance difference in the initial characteristics of the experimental and control groups. Regression-adjusted means adjust for chance variation in characteristics included in the regression. The regression-adjusted difference reflects the estimated effect of experimental status (i.e., the coefficient on the indicator for experimental or control status) after accounting for differences in characteristics at entry into W-2. This approach will also adjust for any nonrandom differential assignment based on observable characteristics included among the control variables. Finally, to the extent control variables account for the variance in the outcome of interest, we are more likely to be able to discern the effect of the experiment.

Most of the analyses of experimental effects, discussed in Volume I, Chapter 4, use one of two standards sets of control variables. The first set of control variables includes assignment rate, mother's age and race, and whether the mother had a history of high child support payments on her behalf. The second, more extensive set includes additional measures of AFDC and employment history, initial W-2 tier, location, education and family structure. The first set of control variables was generally used in the

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[16]Random assignment was based explicitly on resident parents (mothers in the samples we consider). Thus each mother is in only one of the three groups (experimental, control, or experimental group not eligible for the survey), but an individual father could be in more than one if he had children with more than one mother who entered W-2.

[17]We thank participants in the CSDE National Advisory Board Meeting, especially Greg Duncan, for their comments and suggestions regarding these issues.

analysis of survey data because of the limited sample size. The more extensive list was used in most analyses of administrative data. A full list of the variables and details of their specifications are included in Appendix TR1.1.

The regression-adjusted means reported in the experimental-impact analyses were generated as follows. First, the outcome was estimated as a function of one of the two standard sets of control variables, with an indicator variable for experimental status.[18] All observations—from both experimental and control groups—were included in the regression analysis.[19] Second, weighted mean values for each control variable were calculated, and a predicted value for the outcome variable was generated by evaluating the estimated regression coefficients at these means. The experimental impact (and associated p-value) was measured with the indicator variable for experimental status.

7.   Conclusions

The evaluation design assumes that the experimental-group cases that entered W-2 are equivalent to the control-group cases that entered W-2. The multivariate analysis of W-2 entry and diversion suggests no significant difference by experimental status. This result holds even among resident parents with a history of higher child support payments, a group that could be expected to be more likely to have differential diversion. When we examine only those who entered, we find some evidence that those with higher child support in the past were more likely to be placed in the upper tiers. Finally, when we examine our research population (those who enter W-2 and are eligible for the experiment), we find that the full pass-through group and the partial pass-through group are generally quite similar, but have a few statistically significant differences.

These findings lead to our basic approach in the impact analyses in this report. Because there is no differential diversion, comparisons between the random assignment groups who enter are valid. Because there are some differences between the experimental and control groups in our research population, our estimates of the effects of the policy control for these differences through a multivariate regression approach. Finally, because there may be some difference in initial tier assignment depending on experimental status, our research population includes all those who entered W-2, though we also report results separately for those who entered in the lower tiers.

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[18]In a few cases additional control variables were included, and are noted in the discussion of that particular analysis in Chapter 4 of Volume I.

[19]For administrative-data analysis the regressions were unweighted, since administrative-data weights are designed to adjust for assignment rate, which was included as a control variable. For outcomes measured using survey data, regressions were weighted. Survey weights account for assignment rate, differential sampling, and nonresponse. Given the limited survey sample size, it was not feasible to include all the variables used in generating the weights as control variables.

Appendix TR1.1

Lists of Control Variables Used in Volume I Regressions

All control variables are dummy variables. The basic list was used, at minimum, in all analyses. Some analyses also used all or part of the extended list.

Basic List

- Assignment rates

    – 20% experimental group, 20% control group, 60% not in experiment (omitted)

    – 30% experimental group, 30% control group, 40% not in experiment

    – 50% experimental group, 50% control group

- Higher child support history (more than $1,000 paid on behalf of the mother in the one-year period October 1996 through September 1997)

- Mother's age 31 or greater

- Mother is African American

Extended List

- Assignment rates

    – 20% experimental group, 20% control group, 60% not in experiment (omitted)

    – 30% experimental group, 30% control group, 40% not in experiment

    – 50% experimental group, 50% control group

- Child Support history; amount paid on behalf of the mother in the one-year period October 1996 through September 1997

    – $0 (omitted)

    – $1–$999

    – $1,000 or more

- Mother's age

    – 25 or younger (omitted)

    – 26–30 years

    – 31 or older

- Mother's race/ethnicity

    – White (omitted)

    – African American

    – Other

- Months of AFDC receipt during the 24-month period October 1995 through September 1997

    – 0 months (omitted)

    – 1–18 months

    – 19–24 months

- Region

    – Milwaukee County

    – Other urban counties

    – Rural counties (omitted)

- Initial W-2 tier

    – Upper tier (omitted)

    – Lower tier

    – Caretaker of Newborn

- Age of child; for the mothers and fathers, this is the age of the youngest child. For the mothers, this variable is based on the natural and adoptive children of the mother; for the fathers, it is based on the natural and adoptive children of the couple. For nonmarital children, this is the age of each child.

    – 0–2 years (omitted)

    – 3–5 years

    – 6 or older

- Mother's education

    – Grade 11 or less

    – High school diploma or equivalent

    – Post high school (omitted)

- Father's average annual earnings during the two-year period October 1995 through September 1997; for the mothers, if there is more than one father, this is based on the highest-earning father.

    – $0–$14,999 (omitted)

    – $15,000 or more

- Mother's employment history; number of quarters employed during the two-year period October 1995 through September 1997 (not included in analyses of fathers' sample)

    – 0 quarters (omitted)

    – 1–6 quarters

    – 7–8 quarters

- Divorce or paternity case

    – Paternity (omitted category for fathers only)

    – Paternity or a combination of divorce and paternity (omitted category for mothers only)

    – Divorce

- Number of legal fathers associated with mother

    – 0 (omitted category for mothers only)

    – 1 (omitted category for fathers, included category for mothers)

    – 2 or more

- Whether child support order existed at entry; for mothers this is any order among all the fathers associated with the case; for fathers this is an order for that particular father

    – No (omitted)

    – Yes

- Number of children; for mothers this is count of natural or adopted children in that case, for fathers this is number of those children that are the couple's natural or adopted children

    – 1 (omitted)

    – 2

    – 3 or more

Appendix Table TR1.1
Initial Characteristics of Assigned Cases

	All Assigned Cases		Assigned Cases Who Entered W-2	
	N	%	N	%
All Cases	32,674		19,280	
Research Code				
Control	7,315	22.4	4,174	21.7
Experimental	7,259	22.2	4,233	22.0
Experimental cases originally ineligible for evaluation	18,100	55.4	10,873	56.4
Age of Resident Parent at Assignment				
Under 26	13,036	39.9	8,200	42.5
26–30	6,376	19.5	3,866	20.1
31–40	8,609	26.4	5,150	26.7
Over 40	4,653	14.2	2,064	10.7
Sex of Resident Parent				
Female	30,647	93.8	18,711	97.1
Male	1,522	4.7	569	3.0
Race of Resident Parent				
White	9,409	28.8	4,692	24.3
African American	16,960	51.9	11,467	59.5
Hispanic	2,781	8.5	1,465	7.6
Native American	768	2.4	408	2.1
Asian	1,069	3.3	664	3.4
Other	38	0.1	18	0.1
Location of Resident Parent at Assignment				
Milwaukee County	21,548	66.0	14,209	73.7
Other urban counties	7,187	22.0	3,439	17.8
Rural counties and tribes	3,939	12.1	1,632	8.5
Case Type				
Active AFDC on 8/31/97	18,068	55.3	12,460	64.6
Temporarily inactive AFDC on 8/31/97	1,817	5.6	1,633	8.5
Others assigned 9/1/97 – 3/16/98	9,016	27.6	3,334	17.3
Others assigned 3/17/98 – 5/9/98	1,834	5.6	920	4.8
Others assigned 5/10/98 – 7/8/98	1,939	5.9	933	4.8
AFDC Receipt prior to Assignment				
None	7,035	21.5	2,501	13.0
1–6 months	3,559	10.9	1,919	10.0
7–18 months	7,570	23.2	4,500	23.3
19–24 months	14,510	44.4	10,360	53.7
Child Support Paid History prior to Assignment				
None	22,737	69.6	13,204	68.5
Low ($1–$999)	4,635	14.2	2,930	15.2
High ($1,000 or more)	5,302	16.2	3,146	16.3

	All Assigned Cases		Assigned Cases Who Entered W-2	
	N	%	N	%
Number of Children at Assignment				
None	698	2.1	216	1.1
One	10,380	31.8	6,134	31.8
Two	8,621	26.4	5,348	27.7
Three or more	11,471	35.1	7,526	39.0
Age of Youngest Child at Assignment				
Under 1	7,618	23.3	4,873	25.3
1	4,638	14.2	2,902	15.1
2	3,228	9.9	1,987	10.3
3–5	6,455	19.8	3,990	20.7
6–12	6,651	20.4	4,123	21.4
13–17	2,380	7.3	1,328	6.9

W-2 Child Support Demonstration Evaluation

Technical Report 2

Implementation of the Demonstration

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April 2001

This report describes the implementation of the Child Support Demonstration Evaluation (CSDE) experiment, focusing on the role of county child support and W-2 agencies in the implementation of the CSDE and the knowledge and attitudes of W-2 staff concerning the CSDE. The findings in this report derive from surveys of W-2 agency Financial and Employment Planners (FEPs), who function as case managers in the W-2 system, from a survey of staff in child support agencies, from interviews with FEPs and other W-2 agency managers and staff and with child support staff and managers, and from observations of sessions in which W-2 staff received training on the CSDE.

The report attempts to address at least three interrelated concerns:

1.   *Implementation details can affect the validity of an experiment*. For a variety of reasons, an experiment may not operate in the way its designers had expected, and these differences may influence the measured impact of an experiment. The translation of policy into practice rarely occurs without unanticipated challenges or modifications, and new programs seldom remain stable over extended periods. If the changes become large enough, the experiment may not be a valid test of the program that policymakers thought they were testing.

2.   *Implementation challenges are useful to describe for the benefit of others interested in trying the reform in different jurisdictions.* Managers interested in replicating a new program elsewhere profit from an account of both the problems that arose and the resources that were available to address them. Other sites with more resources may be able to address the problems more easily, but those with fewer resources may especially profit from an early warning.

3.   *Learning that occurs during the implementation study can be given as feedback to program managers, who can then make modifications as the program is implemented.* This report describes instances in which that process occurred.

The Economic and Political Context of the Experiment

Both the national and the Wisconsin economies were strong during the entire period of the CSDE. Unemployment rates were low throughout the period, lower in Wisconsin than in the nation. Unemployment rates were, however, higher in Milwaukee County (where over 80 percent of W-2 participants reside) and in the City of Milwaukee than in the rest of Wisconsin during the period of the CSDE, as Table TR2.1 indicates.

The CSDE generally operated outside of public view and attracted little political attention. We subscribed to a statewide newspaper clipping service from the time we signed a contract to evaluate the program through the time of this writing. So far as we can determine, no newspaper has mentioned the existence of a CSDE evaluation or the fact that W-2 participants have been treated differentially with respect to the child support pass-through. The only coverage of any aspect of the pass-through of which we are aware appeared in a report on a Milwaukee TV station early in the CSDE. The report described difficulties that those in the reduced pass-through group had in immediately receiving all their child support when they moved out of a W-2 tier that makes a cash payment. For about the first year of the program, the linkages between the state public assistance data system (CARES) and its child support data system (KIDS) did not make the appropriate adjustments automatically.

Table TR2.1
Annual Unemployment Rates (%) in Milwaukee, in Wisconsin, and in the United States, 1996–1999

Year	City of Milwaukee	Milwaukee County	Milwaukee MSA	Wisconsin	U.S.
1996	5.3	4.1	3.4	3.5	5.4
1997	5.7	4.3	3.6	3.7	4.9
1998	5.3	4.0	3.3	3.4	4.5
1999	5.0	3.8	3.1	3.0	4.2

Sources: The unemployment rates for the city of Milwaukee, Milwaukee County, the Milwaukee MSA, and Wisconsin are estimates from Local Area Unemployment Statistics of the Wisconsin Department of Workforce Development, at <www.dwd.state.wi.us/dwelmi/LAUS_Avg_90-97.htm>. The U.S. unemployment rates are from the Bureau of Labor Statistics, U.S. Department of Labor, at <ftp.bls.gov/pub/special requests/lf>.

Note: The Milwaukee MSA (Metropolitan Statistical Area) includes all of Milwaukee, Ozaukee, Waukesha, and Washington counties.

The Administrative Context: The Implementation of W-2

The Connection between the CSDE and W-2

The contextual element affecting the CSDE most significantly was the experiment's connection to Wisconsin's new TANF program, W-2. The CSDE was one of many features of the new W-2 program, which was first put into operation over a seven-month period (September 1997–March 1998) during which new applicants were placed into W-2 and existing AFDC recipients were asked to convert to W-2. The implementation of W-2 was a major undertaking presenting severe challenges. Among many other tasks, the automated case management system had to be reworked to include case-management-only cases which provided no cash payment and to track participants through the tiers of W-2, new contracts with W-2 agencies had to be written, and W-2 agency staff had to be trained on new state policies. Perhaps most significantly, five new private agencies had to be established or adapted to operate W-2 in Milwaukee County, the source of over 80 percent of the state's W-2 caseload. The five agencies, each handling cases residing in particular geographic districts of the county, had to hire entirely new staff and train them on W-2, community resources, agency policies, and use of the state's complex public assistance data system, CARES.

W-2 agency staff also had to be trained on the CSDE, including how to find in CARES whether a participant was a full or partial pass-through case, the implications of pass-through status, and how to assure that participants understood their pass-through status and its implications. There is ample evidence (described below) that, in the midst of the broad implementation challenges, W-2 agency staff in Milwaukee did not understand the CSDE in the early months of the experiment. There is also evidence (described below as well) that the CSDE never became a central part of routine discussions between Milwaukee case managers (FEPs) and program participants. The state did devote intensive effort to training W-2 staff on the CSDE, and the Department of Workforce Development (DWD) also developed a form for the W-2 application process that briefly described the experiment and required participants to acknowledge an understanding of their receipt of the full or partial pass-through. As the use of this form became institutionalized in the application process, we believe that many participants at least roughly understood that some W-2 participants received all their child support and that other W-2 participants might receive less than all their child support, and that participants who believed the distinction to be

relevant to their own situation may also have understood at least initially which group they were in. But little subsequent discussion occurred that might have reinforced these points.

The Role of County Child Support Agencies in the Administration of the CSDE

Because the CSDE influences the amount of child support that resident parents receive, we had expected that child support agencies might play a major role in the implementation of the CSDE, perhaps helping to explain pass-through status and its implications to most resident and some nonresident parents. That did not turn out to be the case. When we asked child support workers in a survey fielded in March–April 1999 if they ever discussed pass-through policies with resident parents receiving W-2 payments, 76 percent said they never had such discussions. When we asked child support workers and W-2 managers who in their county told most W-2 recipients whether they would receive the full or partial pass-through, 63 percent of child support workers said that someone in the W-2 agency did that and another 30 percent said they did not know. W-2 case managers generally agreed. Only 14 percent (27 percent in Milwaukee) said that a child support worker would provide such information, and 80 percent said a W-2 case manager would do that.

With the exception of Milwaukee County child support specialists stationed at W-2 agencies (there is one at each Milwaukee W-2 agency), most child support workers we interviewed viewed the demonstration neither as a part of their work nor as something they should discuss with resident parents. A child support specialist in an urban county other than Milwaukee, responding to an interview question asking whether she mentioned the demonstration or the pass-through to groups of resident parents, said, "No, 'cause that has nothing to do with us. That's all Human Services. We don't have control of that at all." The following partial transcript of an interview with a paralegal was representative of the attitudes of several other child support staff (except those stationed in Milwaukee W-2 agencies) with whom we talked:

Interviewer: Do you mention anything about the child support waiver or their pass-through group?

Respondent: No.

Interviewer: So you don't discuss what they're going to get at all?

Respondent: Absolutely not. No. (pause) To be honest with you it would be dangerous for me to do that because I don't know enough about it.

Interviewer: Have you gotten any training at all?

Respondent: We've gotten some basic training as to, what different things on our screen might mean to us in our everyday jobs or whatever.

Interviewer: Can you tell whether someone is in one group or the other?

Respondent: Yeah you can, you can look it up in, you know, you can still go into CARES and get a whole background and who the participants are, you know, and all those sorts of things, but it's never been our job to discuss those, you know, those issues. I, I feel as though, if I did that I might be more prone to a mistake and that should be the [W-2] worker's job to do that, because I don't feel capable of dealing with, I tell them to call their workers, go right to their worker.

Although the lack of discussion of the pass-through demonstration by child support workers may indicate a lost opportunity to increase understanding of the experiment, most child support workers have little direct contact with resident parents after an order is established.

Family court staff were, for the most part, similarly uninvolved in the CSDE. In every county in which we held interviews except Milwaukee, family court commissioners and judges did not know whether a resident parent was receiving the full or partial pass-through. In Milwaukee County, pass-through status was known. In the early months of the demonstration, full pass-through assignment reduced the willingness of commissioners to establish orders or initiate civil enforcement procedures when the resident parent was not present at a hearing, apparently owing to a belief that family court had less standing in full pass-through cases and that the court should not extend itself if the resident parent did not first demonstrate responsibility. Some difference in the treatment of full and partial pass-through recipients apparently continues, according to an attorney in the Milwaukee child support office, although the patterns have changed. Family court commissioners now generally set an order if the resident parent does not appear at the hearing, regardless of pass-through status. However, if a resident parent with a full pass-through assignment appears at the hearing and requests that no order be set, Milwaukee family court commissioners are likely to honor that request, whereas they would be more likely to set an order if a partial pass-through recipient made the same request. The Milwaukee child support agency generally appeals to family court when a commissioner rejects its recommendation to set an order. In these cases, judges have usually ruled in favor of setting an order.

The lack of broad involvement by child support agencies in the CSDE, although understandable, has had important ramifications for the implementation of the experiment. The operational unit within the DWD assigned primary responsibility for training local staff on the CSDE was the Bureau of Child Support (BCS), which has frequent and routine communications with county child support agencies, but relatively little routine communication with W-2 agencies. Yet the W-2 agencies had much greater responsibility for informing resident parents of their pass-through status and its implications, both at initial sessions in which new W-2 participants received information and in continuing discussions with FEPs in which child support issues and pass-through status might have been emphasized. The occasional training sessions (see below) which BCS was able to organize for W-2 staff were, so far as we could judge from what we observed, of high quality but probably needed to be repeated more frequently if discussion on the CSDE was to become a prominent part of routine W-2 case management. Given its overall relationship with W-2 agencies, it was difficult for BCS to organize more training than it did.

In summary, except during paternity and order establishment, child support staff have little opportunity to initiate discussion of pass-through policies with resident parents, and do not usually attempt to do so even when they have the opportunity. W-2 staff have more opportunity to explain the pass-through and its implications for individual W-2 families, and the desirability of doing so has been emphasized through high-quality (but perhaps too infrequent) state-organized training.

Informing Resident and Nonresident Parents of Their Pass-Through Status

The most basic implementation activity—necessary for an actual experiment to have occurred—is assignment of resident parents to treatment and control groups and the provision of information to resident and nonresident parents concerning that assignment. The CARES computer system randomly generated these assignments. Starting in August 1997, 20 percent of AFDC cases that were open in that month were assigned to the control group and received only a partial pass-through. Another 20 percent (and the remaining unassigned 60 percent) were placed in the experimental group and received the full pass-through. From March 17 to May 8, 1998, 30 percent of new applicants were assigned to each group, and beginning May 11, 50 percent of new applicants were assigned to the experimental and 50 percent to the control groups. The increases in percentages assigned to treatment and control groups occurred because the numbers entering W-2 were lower than had been anticipated.

Resident parents were to be informed of their experimental-group assignment, the meaning of that assignment, and the fact that the experiment existed, when they applied for W-2. The state prepared a brochure for each group explaining and providing an example of how child support would be handled, according to their assignment. In addition, cases transitioning from AFDC were sent a letter notifying them of the change and explaining how child support would be handled, according to their assignment. All nonresident parents paying child support initially received a general notice informing them of the change in policy with W-2. However, this notice did not provide any information about specific group assignments.

We developed a new notice that was sent to nonresident parents in our sample who were associated with a resident parent assigned to the experimental group. Beginning in June 1998, this notice informed nonresident parents that their family now received all of the child support that they paid. Nonresident parents associated with resident parents in the control group did not receive a notice; because the control group pass-through varies with the W-2 tier of the resident parent, it was deemed impractical to explain the details of the pass-through to these nonresident parents.[1]

Throughout this period, the state required W-2 agencies to present to participants a standard "Notice of Assignment of Child Support" form. However, the first draft of the form which the state distributed to W-2 agencies made no distinction between the full and partial pass-through. Although by the start of W-2 in September 1997, the state had developed a revised form which asked participants to identify their pass-through assignment and indicate with their signature whether their assignment had been explained to them, some Milwaukee agencies apparently continued to use the old draft forms for many months, and staff in one Milwaukee agency did not appear to know that the form in either version existed even in January 1999.

The suspension of the process of experimental- and control-group assignment and its resumption in January 1999 afforded an opportunity for the state to reemphasize training on the pass-through demonstration. We believe that by March 1999 all agencies were using the correct form and that program participants were receiving at least a rudimentary explanation of the pass-through at first application for W-2.

For W-2 participants already in the program, the CSDE was apparently a less central part of routine discussions between FEPs and program participants in Milwaukee than in the rest of the state. In a survey fielded in March and April 1999, 41 percent of Milwaukee FEPs said they never discussed child support pass-through policies with resident parents receiving W-2 payments, compared with 15 percent of FEPS in the rest of the state. Responding to a slightly different question on the same topic in May 2000, 76 percent of Milwaukee FEPs said that they had not discussed the full or partial pass-through assignment with W-2 participants in the past month.

In summary, then, the child support pass-through was probably explained to new applicants in most Wisconsin counties except Milwaukee from the start of the experiment. In Milwaukee County, new applicants appear to have received a rudimentary explanation starting no later than early 1999. However, the CSDE was never a central part of ongoing discussions between FEPs and W-2 participants in Milwaukee.

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[1]Notices were not sent to the small number of nonresident parents associated with one resident parent in the experimental group and another in the control group.

Reactions of Those Limited to the Partial Pass-Through

In interviews carried out as the CSDE was being implemented, staff working for both child support agencies and W-2 agencies generally indicated that they were surprised at the relatively muted reaction among those limited to the partial pass-through. They had expected considerable anger, but the initial reactions seemed more modest. Child support workers in larger counties all said that they had received complaints from resident parents receiving the partial pass-through—although not as many as they had anticipated—and that they had a hard time explaining why these parents did not receive the full amount. Some just told the resident parent to call the state BCS in Madison. Perhaps because even those limited to the partial pass-through could receive a more generous pass-through than had been provided under AFDC, the complaints were often not so much about the amount of child support as about the timing. Those receiving the full pass-through got it almost immediately, since there was no need for the child support agency to wait until the end of the month to determine the total and the correct apportionment for that month. In contrast, those receiving the partial pass-through had to wait for the end-of-month reconciliation so that the correct pass-through amount could be calculated.

The reactions may have become more severe over time, or at least W-2 staff subsequently recalled more problems than we had noticed at the time. In state training sessions on the CSDE for Milwaukee W-2 agencies at the end of 1998, there was considerable discussion about the difficulty of explaining to those receiving a partial pass-through why they were in that status. One FEP said, "It's really a hard feeling when they call in and say, 'the father paid for this amount,' and I said 'Well, you're in that group.' 'Why did I get picked, you know?'" Several other trainees nodded their heads and said "Yes!" to this story. Another trainee said, however, that "the thing to tell them is, 'Well, if you get a job then you get a full pass-through.'" Many other trainees seemed to agree with that strategy. In an interview conducted in the summer of 2000, one Milwaukee W-2 agency manager recalled occasions of "big uproar" when some participants believed they were being treated unfairly in comparison to those receiving the full pass-through.

In summary, the reaction of those assigned to the partial pass-through may have grown over time, perhaps as they better understood the implications of their status. The reactions were strong enough to generate some discomfort in W-2 agencies, although we do not believe this was ever considered a major management problem.

Knowledge and Attitude of W-2 Staff concerning the CSDE

Throughout much of the experiment, staff in most of the W-2 agencies outside of Milwaukee exhibited greater understanding of the CSDE than did those in Milwaukee. Some of the evidence for this derives from interviews with W-2 case managers. From the beginning of the experiment, staff in those W-2 agencies that had previously administered AFDC exhibited an understanding of the pass-through demonstration. Almost all of the experienced FEPs we talked to in these agencies could describe the program accurately, and all said they mentioned it to resident parents starting on W-2, although most also said that, in their judgment, the demonstration had little actual relevance, since few of their W-2 participants could expect to receive enough child support to be affected by experimental or control status.

The level of staff understanding was quite different in the Milwaukee W-2 agencies. For these agencies, everything—including the CARES system—was new, and the child support demonstration was not immediately understood, nor were explanations of it made a part of routine agency operations. The state did provide one training session on the demonstration to each Milwaukee agency before the demonstration began; these sessions all occurred before the Institute for Research on Poverty (IRP) evaluation contract

was signed, and we did not observe the training. Perhaps inevitably, given the context of so much simultaneous change, the Milwaukee training sessions did not seem to be effective. The following partial transcript of a research interview held in February 1998 with a Milwaukee FEP is reasonably representative of the status of FEP training in Milwaukee on this topic at that time:

FEP: (The CARES computer system) might tell us this person has been selected for the control group. But I never tell them that they have been selected because I really don't know. We don't have a screen that we can just look in there and it will show, that's what I'm saying.

Interviewer: So you don't have a screen that tells you that?

FEP: I mean there might be a screen in there, but we're not familiar with it. But I just tell them to go forward (with obtaining as much child support as possible), you know. Every little bit helps.

Interviewer: Do you talk about it at all with them, that some people are in this group and some are in this? Or do you just leave that to the Child Support staff?

FEP: I tell them that, you know, because sometimes they asked "Are they going to get the full amount," or "Could they?" Because they, a lot of times clients hear from other people and everything, and I tell them "Yeah, but I don't know what group you will fall up under." You know, I tell them, the only thing I could tell them is just, you know, "You'll be notified as to if you will get the whole amount opposed to part of it anyways." You know, because I can't tell them who will, because, I don't know. But they, you know, I don't talk to them about it.

Interviewer: How will they get notified? Do you know?

FEP: I have no idea.

In a major new initiative like W-2, the child support experiment must have seemed relatively minor to FEPs. The purpose of citing this interview is not to belittle the knowledge of the FEP (there is, in fact, a CARES screen that would tell the FEP whether the participant was in the full or partial pass-through group), but to demonstrate the challenge that Milwaukee FEPs faced. The child support pass-through program was a only small part of a large set of changes in policy and practice.

We believe that understanding of the pass-through policy grew incrementally through the spring of 1998. The DWD organized two statewide training broadcasts for all W-2 agencies over the state Educational Training Network in May. In June of that year, in detailed interviews with two different FEPs in the same Milwaukee agency for which the FEP quoted above worked, it was apparent that one FEP was quite knowledgeable of the policy details of the pass-through, knew how to determine an applicant's assignment, and discussed the assignment with participants, and that the other FEP was aware of the program but could not describe the policies and told participants only that an experiment was occurring.

During the suspension of the treatment and control group assignment process in late 1998, the state reemphasized training on the pass-through demonstration. Overall, the state's training efforts on the demonstration in preparation for the resumption of automatic assignment were impressive. We observed two Milwaukee training sessions, which seemed to be effective in describing the policies for the full and partial pass-throughs and the relevant CARES screens, using a series of very clear examples. The training sessions also seemed to convey effectively that the demonstration was a high priority of DWD and that W-2 agencies should make the explanation of the pass-through to participants a high priority of their own. Comments and questions from staff receiving the training focused on what the data were showing about the impact of the pass-through so far (the trainers did not know), who in the W-2 agency (Resource Specialists

or FEPs) was responsible for getting the notice of assignment forms filled out, and concern that the full pass-through would reduce Food Stamp payments for some W-2 participants.

In W-2 agencies outside of Milwaukee, we detected continuing understanding of the pass-through policies. In general, FEPs outside Milwaukee believed that any resident parent who received enough child support to make a difference in full or partial pass-through status would probably not need W-2. There was also some frustration with the demonstration, in part because of the difficulty of explaining why partial recipients were in that status and in part because it added to the complexity of an already complex program. An FEP in a large urban county expressed this somewhat common sentiment: "My thing is, it should be one way or the other, either they all get it or they all don't."

Surveys of FEPs confirmed the greater understanding of the CSDE outside of Milwaukee, even after the intensive retraining that occurred in January 1999. In a survey to which FEPs responded in March and early April 1999, questions were asked about knowledge of the CSDE. Responses are summarized in Table TR2.2.

Table TR2.2
Percentages of FEPs Who Correctly Answered Questions concerning Knowledge of the CSDE
March–April 1999

Survey Question	Milwaukee County	Other Urban Counties	Rural Counties	All Respondents
Knew at least one CARES screen to check pass-through status	53.5	84.7	81.6	72.8
Knew the CARES code indicating partial pass-through status	51.5	77.7	86.4	71.8
Knew that those assigned to partial pass-through would have same assignment if they applied for W-2 again at a later time	73.1	82.1	85.0	80.1

Source: IRP survey of W-2 staff, 1999.

Notes: "Other urban counties" are Brown, Calumet, Chippewa, Dane, Douglas, Eau Claire, Kenosha, La Crosse, Marathon, Outagamie, Ozaukee, Pierce, Racine, Rock, St. Croix, Sheboygan, Washington, Waukesha, and Winnebago. "Rural counties" are all counties in Wisconsin except for Milwaukee County and the "other urban counties." Response rates for the county groupings were 52.9 percent (of 187 FEPs) in Milwaukee County; 56.7 percent (of 150 FEPs) in other urban counties; and 79.2 percent (of 130 FEPs) in rural counties. The overall response rate was 61.5 percent (of 467 FEPs).

In a second survey of only FEPs in Milwaukee fielded in June–July 2000, we repeated one question about knowledge of W-2 from the 1999 survey: could respondents correctly identify one CARES screen that would tell them the pass-through status of their cases. Whereas 53.5 percent of the respondents correctly answered that question in March–April 1999, only 33.0 percent correctly listed at least one CARES screen in the 2000 survey. The answers are not directly comparable, since the first survey was a mail-in instrument that did not prevent respondents from looking the answer up or talking to a colleague, whereas the second survey was administered by IRP staff to groups of FEPs at each W-2 agency. Still, the answers on the second survey do not indicate that Milwaukee FEPs were in the habit of frequently checking the pass-through status of their W-2 cases.

Milwaukee FEPs also seemed to have held somewhat less optimistic attitudes toward the full pass-through than FEPs in the rest of the state, perhaps owing to a belief that child support was not a significant potential source of income for their cases. In the 1999 survey, Milwaukee FEPs were about as likely as those elsewhere to believe that the full pass-through would be moderately or extremely effective at increasing the willingness of nonresident parents to make court-ordered child support payments. However, just 65 percent of Milwaukee FEPs, compared with 86.3 percent of other FEPs, thought the full pass-through would increase the funds that resident parents would have available to care for their children.

Because interviews with Milwaukee FEPs seemed to point out other concerns about the full pass-through, we asked a few more questions in the second survey about attitudes toward the full pass-through. The questions were worded as statements about the pass-through, and respondents were supposed to check whether they thought the statement was "completely true," "somewhat true," "somewhat untrue," or "completely untrue." The responses are summarized in Table TR2.3.

Table TR2.3
Perceptions of the Impact of the Full Pass-Through among FEPs in Milwaukee W-2 Agencies,
Summer 2000

	Percentage Responding:			
Statement	Completely True	Somewhat True	Somewhat Untrue	Completely Untrue
Receiving child support payments of more than $50 per month helps Community Service Job participants to prepare to find and keep a job	8.0	36.4	34.1	21.5
Receiving child support payments of more than $50 per month reduces the motivation of Community Service Job participants to prepare for finding and keeping a job	4.5	35.8	32.6	28.1
Receiving child support payments of more than $50 per month makes sanctions for nonparticipation less effective at promoting attendance	4.4	42.2	27.8	25.6

Source: IRP survey of FEPs in Milwaukee W-2 agencies.

Notes: A total of 89 FEPs responded to these questions, out of an estimated total number of 125 Milwaukee FEPs, for an estimated response rate of 71.2 percent. The responses summarized here are unweighted. Responses weighted by agency nonresponse (so that the responses of FEPs in agencies with a low response rate are weighted more heavily than the responses of FEPs in agencies with a high response rate) do not change the broad picture. For example, the weighted responses in the column "Percentage Completely True" are, from top to bottom, 8.4, 3.9, and 3.9 (compared to 8.0, 4.5, and 4.4).

Because the first two statements in Table TR2.3 partially conflict with each other yet received similar responses, it is possible that the responses are sensitive to questionnaire wording. To test this, we calculated the correlation of individual responses to the two questions. If responses had not been sensitive to question wording, we would have expected a highly negative correlation. The actual coefficient of correlation, however, was close to zero (.06). Still, taken as a whole, the responses suggest that many Milwaukee FEPs had at least some concerns that the full pass-through could reduce the motivation of Community Service Job participants to find and keep a job or reduce the effectiveness of W-2 sanctions.

The Implications of CSDE Implementation for Judging Net Impact

Abundant evidence indicates that the CSDE was implemented less than perfectly, particularly in Milwaukee County, where over 80 percent of W-2 participants reside. In the general confusion of establishing entirely new W-2 agencies to operate a major new welfare reform, the CSDE was lost in the shuffle. Although the Milwaukee County child support office assigned one staff specialist to each W-2 agency, child support agency staff did not take responsibility for the CSDE, believing it to be largely under the purview of the W-2 agencies. The W-2 agency staff agreed that the program was primarily their responsibility, but Milwaukee FEPs did not have a good understanding of the CSDE and could not have explained it very well if a participant had asked about it. Even in the summer of 2000, a survey revealed that most Milwaukee FEPs could not name a CARES screen that would tell them the pass-through status of someone on their caseload. Moreover, just 41 percent of responding Milwaukee FEPs knew that participants who first enrolled for W-2 after random assignment was shut off in June 1999 were receiving the full pass-through. A sizable minority appeared to believe that the full pass-through might alter the motivations of program participants and thus contradict other goals of W-2.

Nevertheless, even in Milwaukee, a procedure was in place by early 1999 to inform all new W-2 applicants of their pass-through status. Although it might have been desirable for FEPs to include the CSDE (and other child support topics) in their case management approaches more than they did, knowledge on the part of FEPs was not really crucial to the initial sessions with new applicants, since a different category of worker, Resource Specialists, handled these sessions in Milwaukee. Our interviews with Resource Specialists indicated that they knew about the CSDE and could explain its implications to program participants (although they did not always know that they were supposed to have participants sign a Notice of Assignment form).

Our general judgment is that, if the experiment had been implemented in a more stable policy environment (that is, without the other new features introduced by W-2), case managers in Milwaukee would have better understood the policy. Placement of training responsibilities for the CSDE in the Bureau of Welfare Initiatives, which had routine relationships with W-2 agencies, rather than the Bureau of Child Support, might also have increased understanding of the policy in W-2 agencies and led to larger effects. The actual difference in program impact owing to these factors is impossible to specify, however, in part because parents could learn about the CSDE from direct experience (as they saw a change in the amount of child support they received), as well as from interactions with W-2 agency staff.

W-2 Child Support Demonstration Evaluation

Technical Report 3

Administrative Data Sources

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Most of the analyses in this report rely on data collected by the state of Wisconsin to administer its various public assistance, unemployment insurance, and child support programs.[1] These data have provided a tremendously rich set of information on people's program participation and payment receipt along with a broad assortment of characteristics of individuals and their households. These data have been supplemented by a survey of W-2 recipients (discussed in Technical Report 5) which provided further information on survey respondents that was not collected by the state administrative information systems.

Though the data collected by the state allow us an extremely detailed view of program participation, they do have their limitations. Because the state's information systems are designed primarily for program administration, and not for data analysis, the project has devoted considerable resources to extracting and linking records from the state databases and converting those records into a form that allows for easier data analysis. Great attention has been paid to resolving issues of record duplication, missing data, and error correction in the extraction process. This process has been quite laborious, but it has, and will have, a number of benefits. First, we have arranged data into a form necessary for the analyses in this report; in addition, we have been able to provide feedback to the state information system managers on errors in their data collection systems that we have uncovered, and we have made progress toward creating a public data set appropriate for future research on issues of program participation.

A second problem in using state administrative records is that these records are limited to individuals' experiences in the state. If an individual works in another state, that person's earnings or receipt of government program payments will not appear in Wisconsin administrative data. For some cases who move out of state, an out-of-state address will appear in the state's information systems, but, more often, case records will just stop being updated. There may be other reasons that people disappear from the administrative data records, however, so we cannot reliably say how many cases move out of state. Among those parents who entered W-2, attrition from this sample through the end of 1999 was relatively small. Six months after their entry into W-2 only 2.4 percent no longer received any payments (W-2, food stamps, or Medicaid), received any child support, or reported any in-state earnings, and only 1.2 percent reported an out-of-state address.

Data Confidentiality

An overriding concern in using government-collected data on individuals is the need to keep the data confidential. The University of Wisconsin–Madison College of Letters and Science committee for the protection of human subjects approved the CSDE project's provisions for data confidentiality, and reviews these provisions annually. The procedures to insure that subjects' confidentiality is maintained include:

1)   Research and interviewing staff who have access to individually identifiable records must sign confidentiality agreements.

2)   Data files provided by the State of Wisconsin which contains individual identifiers (e.g., names, Social Security numbers, or state program case numbers) are accessible only to limited Institute for Research on Poverty (IRP) research staff or those they designate, such as survey contractors. IRP researchers who do not have need to access individual identifiers are provided with access to data records with these identifying codes removed or masked. All researchers or other designees who have access to these data records must have signed confidentiality agreements.

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[1]The authors thank Zhichun Jing, Lynn Wimer, Cynthia White, and Dan Ross for assistance with programming.

3)   Access to all electronic files containing project data records is restricted to those with project accounts that provide them with permission to access the secured files.

Administrative Information Systems

The state of Wisconsin uses a variety of separate statewide information systems to manage its public assistance programs, its child support enforcement program, and its unemployment insurance programs, including the three that we have accessed for this project—Client Assistance for Re-employment and Economic Support (CARES), Kids Information Data System (KIDS), and Unemployment Insurance Wage Record Files (UI). IRP staff extract appropriate cases from each data system and match records based on the individuals in the case. The three administrative record databases and the processes used for extracting and matching records are described below.

CARES (Client Assistance for Re-employment and Economic Support)

Wisconsin's public assistance information system is referred to as CARES. CARES was originally designed in the mid-1990s to administer state-delivered assistance programs to low-income families. These programs included AFDC, Food Stamps, Medicaid and child care. In 1997 the CARES system was expanded to administer the state's new W-2 program that replaced AFDC.

Data about assistance applicants are entered into the CARES system by county social or human services departments. In counties that have contracted with private agencies to administer their W-2 program, data about W-2 applicants are entered into the system by the private agency staffs. Since data are entered into the CARES system by agents of a wide variety of institutions, there is significant variation in the quality of data put into the system.

Until the child care subsystem in CARES is fully implemented, data from SCRIPTS (a Milwaukee County child care database) is periodically extracted and merged into CARES. For the purposes of this project, our access to the Milwaukee child care data is through the CARES system.

Since the same management information system has been used for both the old AFDC program and the new Wisconsin Works program, we have been able to track individuals as they made the transition from AFDC to W-2. In fact, all cases that were on the AFDC rolls as of August 31, 1997, were randomly assigned to either the experimental group or the control group as part of the demonstration in anticipation of their possible transfer to the W-2 program. New applicants for assistance from September 1, 1997 through July 8, 1998 were also randomly assigned to experimental or control groups (see Technical Report 1 for more information on the assignment process). The CARES system itself was used to administer the CSDE project. The identification of eligible cases and the assignment of cases to experimental or control groups was done within the CARES system and information on an individual's assignment status was available to case workers through the system.

CARES records for W-2 participants include demographic information on the resident parent(s) in the case. This information includes birth date, sex, race, marital status, educational background, citizenship status, primary language, and residential location. Birth date, sex, and race of children in the case are also recorded. In addition, the CARES record tracks the W-2 participant's progress through the W-2 system, including dates of application and entry, dates of entry and departure from slot levels, W-2 payments (including cash payments, child care copayments, and Trial Job subsidies) received and sanctions enforced against the case.

Beyond W-2, CARES also is the administrative data system for the federal Food Stamp and Medicaid programs in the state. Information on Food Stamp and Medicaid eligibility, receipt history, and payment amounts is collected as well.

Data are entered into CARES at application, and updated at eligibility redetermination. Eligibility is redetermined monthly for W-2, every three months for Food Stamps, and every six months for Medicaid. For BadgerCare, eligibility is redetermined every 12 months. Additionally, under all programs, participants are to report changes in income and family situation as they occur.

KIDS (Kids Information Data System)

KIDS is Wisconsin's administrative data system for child support enforcement which began operation in 1996. The state, as mandated by federal law, developed the KIDS system as a unified statewide database to track child support orders and payments. It replaced manual and automated systems that had been managed at the county level. Data on individual cases are entered into the KIDS by county child support agencies and clerk of court staff.

Cases are entered into KIDS for resident parents and their children in a somewhat irregular manner. In the simplest situation a record may exist for a resident parent and associated children and for the nonresident parent who has obligations to that resident parent. In other situations, separate records would be created in KIDS for each child of a resident parent, even when multiple children have the same nonresident parent with obligations. KIDS cases are also opened for potential nonresident parents pending paternity adjudication, so that there may be several records in KIDS for a single child, with each record corresponding to a possible nonresident parent for the child. Finally, additional KIDS cases may be opened when parents move to other counties or other states, or if custody changes.

KIDS contains information on child support orders, payments, and arrearages, the method of payment (wage withholding, tax intercepts), destination of the payment (resident parent, state), demographic information about the parents and children in the case (birth dates, residential location of both parents), and child support case history. It can include information about dates of marriage and divorce and the date of paternity establishment for nonmarital children. KIDS also includes some cases without child support orders, but with child support potential: paternity cases in which the paternity adjudication process has begun, cohabiting paternity cases, and cases in which no child support order has been made owing to extenuating circumstances, such as the economic situation of the nonresident parent, problems in locating the nonresident parent, good-cause cases, and parental stipulations of no order. The KIDS system is also updated nightly with data from the CARES system.

KIDS has valuable information on child support, but there are limitations. KIDS was developed as an accounting system for the payment and distribution of child support and does not contain some kinds of information necessary in an overall evaluation of child support. Some families in CARES were not found in the KIDS data system (for some families this is due to no child support being ordered, but in other cases the reasons are unclear); there is no straightforward way of determining whether cases are the result of a paternity establishment or a divorce order; and no easily accessible information is available on the legal custody of the children. Even when data fields have been set up for the entry of information, the information is often missing in KIDS, particularly in older cases that were loaded onto the data system in a massive conversion effort in 1996. Missing data particularly plague information on income, physical custody awards, and date of paternity establishment. And even though KIDS functions as an accounting system for the payment and distribution of child support, it is not possible in all cases to clearly follow the dollars paid by a nonresident parent on a particular date, then sent out as a payment of child support to the resident parent at some later date. Additionally, with the possibility of multiple KIDS cases pertaining to a

particular child, and with the proliferation of multiple "unique" personal identifiers in the data, especially for children and nonresident parents, it is difficult to track some individuals over time in the KIDS data system.

<u>UI (Unemployment Insurance Wage Record Files)</u>

UI data provide quarterly income, for covered workers, as reported by their employers. These data allow us to track workers' income and employment histories and are used to determine such information for both resident and nonresident parents. There are some serious limitations to these data, however. "Covered" employees include about 91 percent of Wisconsin workers. The self-employed, commission sales workers, farmers, church employees, federal employees, military personnel, and employees of not-for-profit organizations with fewer than four workers are excluded from having their income reported to the state. Individuals employed outside of the state of Wisconsin will not have that income reported, either. In addition, a six-month lag occurs between the end of a quarter and the time at which the information in the state information system can be considered complete. Finally, the data only record a worker's quarterly overall income. UI data do not contain more specific information about employment which would useful, such as the hourly wage, the number of hours worked per quarter, or the type of work done.

Selecting Records from CARES

IRP staff extract records from the CARES system once every quarter, two weeks after the end of the quarter, allowing time for the completion of entry of data pertaining to the last month of the quarter. This extraction includes information on all cases on AFDC on August 31, 1997 (whether or not they subsequently transferred into the W-2 program) and all new requests for assistance (RFA) after August 1997 (also regardless of whether they actually entered W-2). The W-2 program began accepting participants as of September 1, 1997. All new applicants for public assistance after September 30, 1997 were supposed to be assigned to the W-2 program, but administrative errors did lead to a few cases being assigned to AFDC after that date. County welfare agencies then had until March 30, 1998 to transition all outstanding AFDC program participants to the new W-2 program.

Cases that were on AFDC and did not transfer to W-2, or transferred to W-2 two or more months after exiting AFDC, or who requested assistance but did not actually enter an assistance group, are considered "diverted" cases and are examined as part of the diversion analysis in Technical Report 1.

For the current analysis we only examine cases that entered W-2 (either as a new applicant or as a transitioned AFDC case) on or before July 8, 1998. In the CARES database there are 23,347 cases that entered W-2 from September 1, 1997 to July 8, 1998. Of these,

- 14,728 cases were on AFDC in August or September 1997 and transferred to W-2 within two months of leaving AFDC;

- 7,241 cases started W-2 without previously having been on AFDC or having been off AFDC for at least two months before starting AFDC;

- 1,378 cases had errors in their handling: 1,096 cases started W-2 but were never assigned to an experimental or control group, and an additional 282 cases were not on AFDC in August or September 1997 but were then mistakenly assigned to AFDC after September 1997.

The 23,347 cases that started W-2 between September 1, 1997 and July 1, 1998 were divided into two groups, based on whether the resident parent was the mother (N=22,648) or the father (N=699). For

the most part we do not consider cases in which the father is the custodial parent in this analysis. From the 22,648 mother custodial parent cases we make the following exclusions, in the following order:

1)   1,066 cases which were mistakenly not assigned to an experimental group.

2)   651 cases which were determined at entry not to be eligible for child support. These were cases where both parents were living with the children, or where the noncustodial parent was known to be deceased, or where the mother had a "good cause" exemption from pursuing child support (usually because of a history or fear of domestic violence).

3)   253 cases which did not actually enter a W-2 slot.

4)   1,790 cases which had a child with a disability and was therefore eligible for Supplemental Security Income (SSI). Because federal law does not allow retaining a portion of the child support paid to a custodial parent who has a child receiving SSI payments, these cases were excluded from the experiment.

5)   266 cases which were mistakenly assigned to AFDC after September 30, 1997.

6)   571 cases which entered W-2 two or more months after having left AFDC. Since these cases were on AFDC in August 1997 and received a research assignment at that time, but did not enter W-2 until two or more months later, these cases are considered to have been "diverted" and are included in the diversion analysis.

7)   1,621 cases which did not enter a slot assignment for at least 30 days after they first requested assistance, but did later enter a slot. Because many RFAs do not result in actual slot assignments, the experiment needed to establish a deadline for deciding whether an applicant had actually been qualified for services. County-level workers must determine the appropriate placement for a W-2 applicant within seven days, with an extension allowed to 30 days if the applicant needs additional time to provide verification of need. Since 30 days is then the approximate time that county-level workers are allowed to complete an applicant's paperwork, it seemed likely that cases exceeding this 30 day deadline might have had reasons beyond simple administrative delay for not entering into a slot.

8)   23 cases in which the resident parent had multiple CARES cases with active W-2 participation. A resident parent who reapplies for W-2 should usually have her/his old case number reopened instead of a new case number being assigned. Since a resident parent with two case numbers could be assigned to both the experimental and control groups, we do not consider them in our analyses.

9)   399 cases in which the youngest child is listed as being over 18 years old as of January 1, 2000. Since resident parents are required to be living with a minor child as of this date to be eligible for the survey component of CSDE, we excluded these cases from our administrative analyses as well for consistency.

With the exclusions considered above, we are left with a research sample of 15,977 resident mother cases.

Determining the Date of Entry into the Experiment

The movement into W-2 is not a smooth process, especially for those cases which transitioned into W-2 from the preceding AFDC program, but it was important for our analyses to be able to describe a case's characteristics at its entry into the experiment. This means that determining the date when a case

was first fully subject to the experiment is crucial to evaluating the results of the experiment, but it is not always straightforward.

For cases new to W-2, either because they had never been on AFDC or because they had been off of AFDC in August and September 1997, the determination of entry into the experiment is clear-cut. When applicants requested assistance, they were assigned to a research group at the time of their initial request. Their case worker should have informed them of their experimental status, and they immediately became subject to the child support pass-through policy of the W-2 program. For these cases we consider their date of their entry into the experiment as their date of assignment to an experimental group.

For cases which had been on AFDC on August 31, 1997, the situation is more complicated. These cases were assigned to an experimental group in the CARES system on September 1, 1997, but without the AFDC participants actually being made aware of their status. In addition, it was not until October 1, 1997 that the state adjusted participants' child support pass-through amounts to reflect their experimental status. It was not until participants actually had an interview with their case worker to transition to W-2 that they learned of their experimental status and were assigned to a W-2 slot. For this reason, we have decided to use the date of that interview as the date of entry into the experiment for these cases.

Linking CARES Cases to KIDS Cases

As noted in the section on KIDS above, many different cases in the KIDS system can correspond to a resident parent and children from a single CARES case. In some situations there will be separate KIDS cases for each individual child, in other situations all the children of a resident parent may be consolidated into a single KIDS case. If the mother is not sure of the father of a child, then a separate KIDS case will be opened for each potential father of the child. Changes in custody of the children, the placement of children into foster care, changes in the marital status of the children's parents, movement of parents to another county or out of state, or even simple administrative errors can cause additional KIDS cases to be created for the same children.

The most straightforward way to connect a CARES case with all of its related KIDS cases is by a CARES pin number attached to each KIDS case in which the CARES resident parent is a current KIDS "custodial parent." This attachment is done in an automated nightly link between CARES and KIDS, based on Social Security number, name, date of birth, and sex. This automated match is supplemented with a match made by IRP programmers based on the resident parent's Social Security number, in order to capture related KIDS cases where the CARES resident parent was a KIDS custodial parent in the past but not currently, and in situations where the child has since "aged out" or otherwise become inactive in the KIDS case.

In matching the 15,977 cases in our research sample, we found 146 CARES cases that had no related case in the KIDS database as of June 30, 2000. The 15,831 remaining cases have been linked to 56,038 separate KIDS cases to date.

Determining Legally Established Fathers

Several hypotheses in this analysis involve effects on the behavior of nonresident parents, so it was important to be able to determine the set of fathers whose legal relationship to the resident parent had been established at time of entry into the experiment. To limit the set of nonresident parents to just the set of legally established nonresident fathers at W-2 entry, we began with the set of children attached to the

15,977 resident mothers in our research sample. Of the 44,249 resulting children in CARES, we removed those children who were born after the case's entry into the experiment (or whose birth date was unknown), who were over 18 at entry, or who had died before entry. This resulted in 37,464 children. Of these, 21,167 children were determined to have a legally established father when their CARES case entered into the experiment. The remaining children do not have a legally established father. The determination of a legally established father is based on a complex set of decision rules using a number of unrelated KIDS variables (i.e., there is no straightforward, nor perfectly accurate, method of determining the legal father from the KIDS data system).

These 21,167 children have 14,461 separate combinations of resident mother and nonresident father, but in 118 of these couples the nonresident father had died before the time of entry, leaving a final set of 14,343 legal nonresident fathers at W-2 entry.

It is important to note that these 14,343 nonresident fathers in our sample are actually determined by a mother/father pair. A father can be counted more than once in this sample if he is a legally established nonresident father on more than one CARES case. Similarly, a CARES case can appear multiple times in this sample if it has multiple fathers associated with different children in the case. Of the 15,977 CARES cases in our research sample, 4,798 have no legally established father associated with them. Of the remaining 11,179 CARES cases, 8,076 have a single legally established nonresident father associated with them, while 3,103 have multiple fathers associated with them. Similarly in the 14,343 couples defined in our nonresident father sample, there are 13,339 fathers attached to a single CARES case, while there are 880 fathers who are attached to multiple CARES cases. Among these 880 fathers, it is possible for them to be attached to a case in the experimental group and a case in the control group; in fact, 313 fathers are attached to both experimental and control group cases.

Determining Nonmarital Children

One of the outcomes of interest in the evaluation is whether the experiment has any effect on the likelihood of establishing paternity for children. As such we needed to establish the set of children in our research sample who were susceptible to that outcome. Again we derived the set of 37,464 children who were known to be a part of the CARES household at the time of entry into the experiment. [Children who were conceived, but unborn, at the time of entry into W-2 were not included in the sample, except in cases where this unborn child was the only child in the case, thereby making the mother eligible for the CMP (Case Management for Pregnancy) slot.] We then removed those children who were born to parents who were married and for whom paternity establishment was not necessary. This resulted in a set of 31,441 nonmarital children. This includes children who had a legally established father at entry, and those who did not.

Linking Parents to Unemployment Insurance Wage Records

We were able to link to UI wage records for both resident parents and nonresident parents using Social Security numbers. Among the resident mothers in our research sample there is only one case with no recorded Social Security number; among the nonresident fathers in our sample there are 670 (4.6%) with no Social Security number. These cases were usually treated in analyses as having missing income information.

W-2 Child Support Demonstration Evaluation

Technical Report 4

Samples and Weighting

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Introduction

In our analyses of mothers, fathers, and children, a number of different, but related, samples were used.[1] This Technical Report describes these samples and how they are related. It also describes the weights that were used in analyses to correct for changes in the random assignment rate and for survey sample stratification.

Research Population

The derivation of the research population is explained in detail in Technical Report 1. Briefly, of the 23,347 cases that entered W-2 by July 8, 1998, 1,900 were excluded because they were not eligible for child support, or because they did not receive a research group assignment. Remaining were 21,447 cases that entered W-2, had a research assignment, and were potentially eligible for child support. Of these, we excluded 5,059 cases for reasons including extended postassignment delays prior to entering W-2, having a child on SSI, and having no child who would be under 18 at the end of the research period, as well as 411 cases in which the resident parent was the father. This left a final research population of 15,977 mothers who received a research group assignment and were potentially eligible for child support.

Administrative Data Samples

Three standard samples, described below, were used for the analyses in Volume I: resident mothers, nonresident fathers, and children of nonmarital parents.

Research Population of Resident Mothers

This is the overall population of 15,977 mothers described above. It consists of cases that entered W-2 before July 8, 1998, with a mother as resident parent. It excludes cases that did not receive a research assignment, were ineligible for child support, included a child on SSI, had a delayed entry onto W-2, had multiple active CARES cases, or had no minor children. This group defines the primary research population for the experiment.

Legal Nonresident Fathers at Entry

There are 14,343 resident mother/nonresident father pairs in which the resident mother is part of our research population and the nonresident father is the legally established parent of a child in the case at the time of entry into the experiment. Because this population is defined by the couple, an individual mother or father may appear in this sample more than once. Resident mothers who have children with different legal fathers will appear in this sample with each nonresident father (as the mother of their child[ren]). Similarly, nonresident fathers who are the legally established father of children living with separate mothers in the resident mother population will also be represented more than once.

Children of Nonmarital Parents

There are 31,441 minor children of resident mothers in our research population who were listed on a W-2 case at the time of entry and whose parents were not married. This sample is primarily used to

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examine the effect of the experiment on paternity establishment, so the children of divorced parents—who are not eligible for paternity establishment—are excluded from this sample.

Survey of Wisconsin Works Families (SWWF)[2]

The SWWF is a panel study of resident mothers and nonresident fathers selected from the research population. We collected data in two waves, with the first period of data collection measuring families' experiences during 1998—the first year that W-2 was in place—and the second period focusing on 1999. The University of Wisconsin Survey Center was contracted to conduct the fieldwork.

Survey Sample Design

The survey sample is a subset of the research population, and the core administrative data sources for the research population—CARES and KIDS—serve as the survey sample frame. The research population includes W-2 cases established between September 1, 1997 and July 8, 1998 which had children who were eligible to receive child support from a father. As described in Technical Report 1, the research population accurately reflects the population of all W-2 cases during this period with the following exceptions: a) cases in which there is not a living father; b) cases in which there is a Good Cause exemption from pursuing child support; c) cases in which the resident parent or a child receives SSI; and d) cases in which the father is the resident parent. Families receiving SSI were not eligible to receive a partial pass-through of child support and therefore were excluded from the experiment. Cases in which the father is the resident parent are very small in number (about 2 percent of the population) and are sufficiently different from resident mothers that they cannot be easily compared. The resident mothers, nonresident fathers, and children attached to a W-2 case are the primary elements of interest in analyses of the research population.

The survey sample design involves representative samples of resident mothers and nonresident fathers attached to the W-2 cases included in the research population.[3] All of the cases that were excluded from the research population also were excluded from the survey samples. In addition, experimental cases were randomly assigned to two groups. One group of experimental cases was not originally to be included in the evaluation analysis and was not eligible for the survey sample. Only cases in the original experimental group or in the control group were eligible for the survey sample.

From the cases in the control group and original experimental group we selected a stratified probability sample of 3,000 resident mothers from the list of W-2 cases in CARES and KIDS. The sample that was ultimately fielded was somewhat smaller (2,980). Errors that we identified in the sample frame prior to the beginning of the fieldwork led to the exclusion of 20 cases that were determined to be ineligible. These involved cases where updates in the sample frame showed that the mother had never participated in W-2 or that the selected mother had died before field efforts began. The original sample of 3,000 was stratified by case type (AFDC transitioned to W-2 and new W-2 cases) and initial W-2 tier placement (upper and lower tier).

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[2]For more information about the topics discussed in this section, see Technical Report 5.

[3]By "nonresident father" we mean the legal father for whom paternity has been established or who was married to the child's mother at the child's birth. Although KIDS includes information about "potential" fathers, these individuals do not always become legal fathers, and some children have multiple potential fathers listed.

To prepare and field a sample of nonresident fathers, we selected a focal child from information available on the sample frame. We randomly selected a child from among the children who were listed on the W-2 case at entry and who would be under age 18 on December 31, 1999.[4] Because we sampled from a population of W-2 *cases,* the focal child was selected without reference to the status of his or her father. There may or may not be a nonresident father identified for that child, and the father may or may not have been alive at the time the focal child was selected. Thus, the focal children in the study do not disproportionately represent children whose fathers were alive or whose fathers had paternity established.

The nonresident fathers of the randomly selected focal children make up the survey sample of fathers. This group is representative of the nonresident fathers in the research population with the following exceptions. We exclude cases in which the father was a minor on January 1, 1999, as well as cases in which there was a Good Cause exemption from pursuing child support. Good Cause exemptions generally involve evidence of domestic violence and occur in a very small proportion of cases. We excluded these fathers from the survey to comply with guidelines for protecting human subjects in experiments and to minimize the possibility that contact with the study itself would lead to unwanted contact between the parents and possibly harm to an individual. After these exclusions, there were 2,028 fathers in the Time 1 survey sample.[5]

Survey Samples at Time 2

At Time 2, we fielded samples of 2,950 resident mothers and 2,225 nonresident fathers. The Time 2 samples remained largely unchanged from Time 1. Although the SWWF is a panel study, we did not restrict the follow-up to persons who participated at Time 1. Mothers and fathers were included in the sample regardless of their Time 1 respondent status, and the designated focal child remained the same.[6]

The resident mother and the nonresident father became ineligible at Time 2 if we identified errors in the sample frame indicating that the mother had never participated in W-2, if she had entered W-2 after July 8, 1998, or if the focal child had died before December 31, 1999. In addition, errors in the sample frame and the difficulties of establishing father-child linkages in KIDS revealed that some fathers were identified incorrectly as the nonresident (legal) father of a focal child at Time 1. A small number of paternity decisions had been reversed or vacated. These cases were excluded at Time 2, though some instances involved the identification of a new, correct nonresident father who was then included in the study.

If a mother or a focal child died before December 31, 1999, the father became ineligible for the study. If a mother or father was reported dead during the fieldwork at Time 1 but this information was not confirmed in CARES or KIDS, the surviving parent remained eligible for a follow-up interview. Fathers also became ineligible if a Good Cause exemption had been established between January 1, 1999 and December 31, 1999.

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[4]In a small number of cases, the only child listed was born after W-2 entry.

[5]By design, the survey includes only one nonresident father per case even though a W-2 case may include more than one father. The survey weights (discussed later in this report) adjust for the differential probabilities of selection for multiple- and single-father cases.

[6]We later discovered errors in five cases in which a different focal child was inadvertently selected at Time 2, potentially involving a different nonresident father. These cases were excluded from analyses.

The largest change in the Time 2 sample involved the addition of 201 newly identified nonresident fathers. If paternity for the focal child had been established between January 1, 1999 and December 31, 1999, this nonresident father was included in the Time 2 survey sample. Three cases (mother and father) became ineligible because the focal child died. Four resident mothers died before December 31, 1999 and 18 of the nonresident fathers died. One additional Good Cause exemption appeared in the administrative record.

In-Scope and Standard Survey Samples

The final survey samples of resident mothers and nonresident fathers at Time 1 and Time 2 were ultimately smaller than those originally fielded. Just as we identified errors in the sample frame between Time 1 and Time 2, there were additional changes in the administrative record following the end of the fieldwork indicating that some cases were "out of scope" or not eligible for the survey. Specifically, cases (both mothers and fathers) in the fielded samples were later determined to be out of scope if the mother or the focal child had died before December 31, 1998 (Time 1) or December 31, 1999 (Time 2). Nonresident fathers also were ruled ineligible if the father had died before December 31, 1998 (Time 1) or December 31, 1999 (Time 2) or if the father was discovered not to be the legal father of the focal child. A determination of ineligibility for the father did not affect the eligibility status of the mother.

Ultimately, the Time 1 survey samples included 2,879 eligible (or "in-scope") resident mothers and 1,936 nonresident fathers. At Time 2, the final survey samples of in-scope cases included 2,873 resident mothers and 2,130 nonresident fathers. Of these cases, we completed interviews with 2,362 resident mothers at Time 1 and 643 nonresident fathers. At Time 2, 2,354 resident mothers and 696 nonresident fathers completed interviews.

Analyses of survey data reported here involve a subset of in-scope respondents who were the resident mother or nonresident father of the randomly selected focal child during the reference period covered by the interview. Although only mothers who were resident parents and fathers who were the nonresident parents were eligible for the survey sample, resident parent status may have changed since the time the survey sample was selected or between the first and second wave of data collection. To maintain a consistent definition of the population of interest, mothers who were not the resident parent during the reference period and fathers who were the resident parent are not included in the analysis of survey data reported here. Cases in which the focal child was reported dead are also excluded from analysis.

Resident parent status was defined for the reference period of interest (1998 for Time 1 and 1999 for Time 2) based on respondents' answers to survey questions about the focal child's living arrangements. Specifically, a mother was defined as a *nonresident* parent if the focal child lived with her less than six months during the reference year or did not "usually" live with her.[7] A father was defined as a *resident* parent if the focal child lived with him and apart from the mother at least six months during the reference year. If the mother, father, and child lived together six months or more during the reference year, the mother was defined as the resident parent and the father was treated as a nonresident parent.

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[7]The inclusion of "usual residence" to define resident parent status for mothers was meant to cover situations in which the focal child was very young and may not have been born until after July of the reference year. In practice, a small number of cases were defined as resident parent based on "usual residence," but this included a few situations in which the child was several years old and had not lived with the mother for six months during the reference year.

At Time 1, we completed interviews with 2,362 mothers, 2,295 of whom were the resident parent of focal child during 1998. Among the 643 fathers who completed interviews at Time 1, 572 were the nonresident parent. Similarly at Time 2, 2,247 of the 2,354 mothers who completed interviews were the resident parent during 1999 and 608 of the 696 fathers were the nonresident parent.

Weighting

Weights were used in all analyses to correct for variation in assignment rates and, in the case of survey data, for stratification in survey sample selection.

Administrative Data

Because the rate of new entrants to W-2 was slower than anticipated, the assignment rates for new cases were increased over time to insure an adequate sample size. Among the initial AFDC cases in August 1997, and from September 1997 through March 16, 1998, 20 percent of cases were assigned to the control group, 20 percent to the experimental group, and the remaining 60 percent received the full pass-through but were not assigned to a research group. From March 17 to May 8, 30 percent of new applicants were assigned to the experimental group, 30 percent to the control group, and the remaining 40 percent received the full pass-through but no group assignment. Beginning May 11, 50 percent of new applicants were assigned to the experimental group and 50 percent to the control group.

Because cases entering earlier or later in the random assignment process were likely to differ, we used weights to approximate static assignment rates over time. So, for example, cases entering in the first period, when they were less likely to be assigned to the control group, were weighted more than control group cases entering in the last period.

Survey Data

When the survey sample was chosen, it was stratified to ensure sufficient numbers of cases that entered in an upper tier of W-2, and of cases that were new to W-2. The survey sampling weights, therefore, in addition to correcting for the changes in assignment rates described above, also correct for this stratification, so that analyses of the survey data can be used to generalize to the population from which the sample was drawn. Detail of how the sampling weights were calculated is shown in the appendix. The survey sampling weights were revised during the analysis period, after a small error was found. The difference between the original and revised weights is also described in the appendix.

For the fathers' survey sample, there is an additional step involved in deriving the sampling weights, because there could be more than one father per mother's case, and only the father of the focal child (if legally established) is included in the sample. The probability of a given father being selected is the ratio of the number of his children in the case to the total number of children in that case. The total number of children in a case ranges from 1 to 10. The ratio ranges from 0.125 to 1.0, with over half of fathers having a ratio of 1. This ratio is multiplied by the survey sampling weights described above to produce survey sampling weight for fathers.

Nonresponse weights were also used for both mothers' and fathers' samples. These nonresponse weights are described in detail in Technical Report 6. The final weights used for analyses of the survey data are the product of the sampling weights and the nonresponse weights.

Appendix

Original and Revised Survey Sampling Weights

The survey sampling weights (those that correct the survey sample for changes in assignment rates and sample stratification) were revised during the analysis period. While all of the analyses reported in Volume I use the revised weights, *most/all* of the analyses in Volume II use the original weights, as indicated. In the original weights, an incorrect weight applied to the initial AFDC cases led to those cases being slightly underweighted. Analyses done with the original and revised weights produced very similar results.

The weights that correct the population of experimental and control group cases for differential assignment are as follows:

Assignment Rates			
Old AFDC Cases	New W-2 Cases		
20%E, 20%C, 60%N[1]	20%E, 20%C, 60%N	30%E, 30%C, 40%N	50%E, 50%C, 0%N
2.5	2.5	1.6667	1

When these weights are applied to the population of experimental and control group cases from which the sample was drawn, the weighted sample is distributed as follows:

	Assignment Rates			
	Old AFDC	New W-2		
Initial W-2 Tier	20/20/60	20/20/60	30/30/40	50/50/0
Lower Tier[2]	3,317	935	296	292
Upper Tier	1,604	418	77	71

The actual survey sample, stratified by case type and initial tier, is distributed as follows:

	Assignment Rates			
	Old AFDC	New W-2		
Initial W-2 Tier	20/20/60	20/20/60	30/30/40	50/50/0
Lower Tier	915	424	192	320
Upper Tier	570	284	68	111

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[1]E= experimental group, C= control group, N= received full pass-through but not assigned to a research group.

[2]Includes Caretaker of Newborn.

So, as a percentage of the population weighted to correct for assignment rate, the actual observed sampling proportions are:

	Assignment Rates			
	Old AFDC	New W-2		
Initial W-2 Tier	20/20/60	20/20/60	30/30/40	50/50/0
Lower Tier	0.28	0.45	0.65	1.10
Upper Tier	0.36	0.68	0.89	1.57

The survey sample of 2,884 represents 41 percent of the 7,010 cases from which the sample was drawn. Taking the ratio of the overall sampling proportion to the cell proportions results in the following final weights[3]:

	Assignment Rates			
	Old AFDC	New W-2		
Initial W-2 Tier	20/20/60	20/20/60	30/30/40	50/50/0
Lower Tier	1.49	0.91	0.63	0.38
Upper Tier	1.16	0.61	0.46	0.26

When the weights were initially calculated, an incorrect weight was applied to the initial AFDC cases, as follows:

	Assignment Rates		
Old AFDC Cases	New W-2 Cases		
20%E, 20%C, 60%N	20%E, 20%C, 60%N	30%E, 30%C, 40%N	50%E, 50%C, 0%N
1.0	2.5	1.6667	1

This resulted in the following original weights:

	Assignment Rates			
Original Weights	Old AFDC	New W-2		
Initial W-2 Tier	20/20/60	20/20/60	30/30/40	50/50/0
Lower Tier	1.35	1.14	0.79	0.47
Upper Tier	1.05	0.69	0.53	0.30

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[3]The weights may not exactly equal the ratio of the numbers shown, due to rounding. The actual weights used for analysis had four decimal places.

Compared to the revised weights shown above, the original weights underweighted old AFDC cases, and overweighted new W-2 cases. The difference, however, is very small, and made almost no difference in the resulting analyses.

W-2 Child Support Demonstration Evaluation

Technical Report 5

Design and Content of the Survey
of Wisconsin Works Families

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Introduction

        The Survey of Wisconsin Works Families is a panel study of resident mothers and nonresident fathers selected from the research population.[1] We collected data in two waves. The first period of data collection, Time 1, gathered information in 1999 on families' experiences during 1998, the first year that W-2 was in place. The second period, Time 2, focused one year later on 1999 experiences. This report describes the sample design, tracking and locating efforts, data collection methods, and outcomes of the fieldwork. Analyses of survey coverage—how well the survey samples (defined below) reflect the population—and characteristics of respondents are also reported. Technical Report 4 and Technical Report 6 provide additional analyses of survey respondents and nonrespondents, discuss the development of survey sampling and nonresponse weights, and describe the relationship between the survey sample and other samples used in the Child Support Demonstration Evaluation.

Sample Design

        The survey population is a subset of the research population. The core administrative data sources for the research population, CARES and KIDS, served as the sample frame; that is, they provided the list of cases (the frame) from which we selected the survey sample.

        Technical Report 1 discusses the derivation of the *research population* and examines how accurately it reflects the characteristics of the population of all W-2 cases. Briefly, the research population includes all W-2 cases assigned to one of three groups (experimental group, control group, or neither group) between September 1, 1997, and July 8, 1998, excluding (a) cases in which there was no living father; (b) cases in which there was a good-cause exemption from pursuing child support, usually because of evidence of domestic violence; (c) cases in which the resident parent or a child received SSI; and (d) cases in which the father was the resident parent. Families receiving SSI were not eligible to receive a partial pass-through of child support and therefore were excluded from the experiment. Cases in which the father was the resident parent are very few (about 2 percent of the population) and are sufficiently different from resident-mother cases to render comparisons difficult. The total number of cases remaining was 15,977.

        The survey design involved interviewing resident mothers and the nonresident fathers associated with them.[2] All of the cases that were excluded from the research population also were excluded from the *survey population* and from the frame for the survey sample. The survey population is the aggregation of W-2 cases from which we selected resident mothers and nonresident fathers whom we planned to interview. This aggregation includes all W-2 cases in the research population except the group of cases not assigned to experimental or control status. This group was not originally to be included in the evaluation analysis and was not eligible to be in the survey population.

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        [1]I thank Nancy Mathiowetz and Nora Cate Schaeffer for comments on an earlier version of this report. Maria Cancian advised on part of the analysis, and Tymofiy Mylovanov provided helpful research assistance.

        [2]By "nonresident father" we mean the legal father for whom paternity has been established or who was married to the child's mother at the child's birth. Although KIDS has information about "potential" fathers, we do not include them in our sample. These men do not always become legal fathers and some children have multiple potential fathers listed.

After excluding those cases, we selected a stratified probability sample, the *survey sample* of 3,000 resident mothers. The sample that was ultimately fielded was somewhat smaller (2,980) owing to errors that we identified in the sample frame before fieldwork began, rendering 20 cases ineligible. These were cases in which updates in the administrative records showed that the mother had never participated in W-2 or that the selected mother died before field efforts began.

To prepare a survey sample of nonresident fathers, we selected a focal child using information from CARES and KIDS that was attached to the sample frame. We randomly selected a child from among those listed on the W-2 case record at entry and who would be under age 18 on December 31, 1999.[3] Children who would be 18 or older on December 31, 1999, were not eligible to be a focal child because they could "age out" of child support and not be exposed to the full or partial pass-through policy during the entire period of the study. Because we sampled from a population of W-2 *cases,* the focal child was selected without reference to the status of his or her father. A nonresident father may or may not be subsequently identified for that child, and the father might or might not be alive at the time the focal child was selected.

The nonresident fathers of the randomly selected focal children make up the survey sample of fathers. This group should accurately reflect the characteristics of all nonresident fathers in the survey population, with the following exceptions: cases in which the father was a minor on January 1, 1999 (which would mean that parental permission would be required), and cases in which there was a good-cause exemption from pursuing child support. We excluded the latter to minimize the possibility that the study would lead to unwanted contact between the parents and possible harm to an individual. After these exclusions, there were 2,028 fathers in the Time 1 survey sample.[4]

Survey Samples at Time 2

At Time 2, we went into the field to interview 2,950 resident mothers and 2,225 nonresident fathers. The Time 2 samples remained largely unchanged from Time 1. Although the Survey of Wisconsin Works Families is a panel study, we did not restrict the follow-up only to persons who participated at Time 1. Mothers and fathers were included in the sample even if they had not responded at Time 1 and the designated focal child remained the same.[5]

Changes in the survey sample at Time 2 (i.e., the cases selected from the sample frame for the second survey) resulted from information gained from CARES and KIDS, including errors in the frame, death of a sample member or focal child, or changes in nonresident parent status. Specifically, the resident

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[3]In a small number of cases, the only child listed was born after W-2 entry. For each case, "W-2 entry" is the date on which there was an initial interview with a W-2 caseworker or a "request for assistance." Technical Report 1 defines this term and discusses its implications for analysis.

[4]By design, the survey includes only one nonresident father per case even though a W-2 case may include more than one father. The survey weights (discussed later in this report and in Technical Report 4) adjust for the differential probabilities of selection for multiple- and single-father cases. This design also makes the unweighted survey population of fathers less comparable to the research population of all nonresident fathers insofar as multiple-father cases differ systematically from one-father cases and the former are disproportionately represented in the research population. These differences are discussed later in this report.

[5]We later discovered five cases in which a different focal child was inadvertently selected at Time 2, potentially involving a different nonresident father. These cases were excluded from analyses.

mother and the nonresident father became ineligible at Time 2 if we found errors in the sample frame indicating that the mother had never participated in W-2, if she entered W-2 after July 8, 1998, or if the focal child died before December 31, 1999. In addition, some fathers had been incorrectly identified as the nonresident father of a focal child at Time 1, and a small number of paternity decisions had been reversed or vacated. These cases were excluded at Time 2, although some instances involved the identification of a new, correctly identified nonresident father, who was then included in the study.

If a mother or a focal child died before December 31, 1999, the father became ineligible for the Time 2 interview. If a mother or father was reported dead during the fieldwork at Time 1 but this information was not confirmed in CARES or KIDS, the surviving parent remained eligible for a Time 2 interview. Fathers also became ineligible if a good-cause exemption had been established between January 1 and December 31, 1999.

The largest change in the Time 2 sample involved the addition of 201 newly identified nonresident fathers. If paternity for the focal child had been established between January 1 and December 31, 1999, this nonresident father was included in the Time 2 survey sample. Three cases (mother and father) became ineligible because the focal child died. Four resident mothers and 18 nonresident fathers died before December 31, 1999. One additional good-cause exemption appeared in the administrative record.

To summarize, we selected *survey samples* of resident mothers and nonresident fathers at Time 1 and Time 2 stratified by case type and initial W-2 tier placement, as described below. The survey samples include one resident mother per W-2 case and at most one nonresident father. For many W-2 cases, there was not a corresponding nonresident father because we could not identify a legal nonresident father for the randomly selected focal child. In addition, the survey sample of nonresident fathers excludes fathers for whom there was a good-cause exemption and fathers who were minors on January 1, 1999. The survey sample of resident mothers should have characteristics that are similar to all resident mothers in the survey population, but the survey sample of nonresident fathers may differ slightly from all nonresident fathers in the survey population because of its exclusions.

Sample Stratification

The original sample was stratified by case type (an AFDC case that transitioned to W-2, as opposed to new W-2 cases) and initial W-2 tier placement (upper two or lower three tiers). The strata, and the proportion allocated to each, were selected to ensure adequate coverage of the population of W-2 cases and to permit comparisons between cases entering in different tiers and between new entrants and cases that transitioned from AFDC. AFDC and new W-2 cases were selected at equal fractions of 0.50 (compared with a distribution of 70-30 in the research population). Within case type, the sample was to be stratified so that one-third of the cases were from upper tiers of W-2 and two-thirds were from lower tiers. However, decreasing rates of entry into W-2 generated too few cases in the upper tiers. As a result, all new W-2 cases in the upper tier were selected, and a larger proportion of AFDC-transitioned cases in the upper tiers were included to obtain the desired sample size.[6]

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[6]The original survey design called for a sample of 4,000 cases, but there were not enough upper-tier cases to achieve the desired size of the upper-tier strata. Several months before the survey was fielded, we reduced the sample size to 3,000 cases. There actually was a sufficient number of cases in the survey population to sample from cases assigned to the upper tiers, rather than select all such cases, but this was not discovered until after the original sample was scaled back to 3,000. The reduction to 3,000 cases was achieved by eliminating 10 survey replicates (random subsamples of 100) rather than redrawing the entire sample.

Table TR5.1 shows the final sample strata and the proportion of cases represented in each. Proportions are shown for the strata by case type and initial tier placement as well as initial assignment to control or experimental group or to neither group. The latter is shown because rates of assignment to these three groups changed over the period during which the research population developed (September 1, 1997, to July 8, 1998), as described in Technical Report 1. Initially, cases were randomly assigned to experimental, control, or neither group at rates of 20, 20, and 60 percent, respectively. Because cases were entering W-2 at much lower rates than anticipated, this assignment regime would yield too few cases to achieve the final desired sample sizes in the control and experimental groups. To increase the number of available cases, the assignment rates were adjusted by the state. Initial assignments of 20-20-60 were in place from September 1, 1997, to March 16, 1998. From March 17, 1998, to May 10, 1998, the rates were 30-30-40. An insufficient number of new W-2 cases was still anticipated, and the rates changed to 50-50-0 on May 11, 1998. The final survey data are weighted to adjust for disproportionate stratification and differential rates of entry into experimental and control groups. Survey sample weights are discussed at the end of this report.

Comparison of Research and Survey Populations at Time 1 and Time 2

Table TR5.2 presents descriptive statistics on the initial characteristics of resident mothers as reported in administrative data at the time of entry to W-2. Data are shown for the research population, the Time 1 and Time 2 survey populations, and the Time 1 and Time 2 survey samples. By comparing the characteristics of mothers in these different groups, we can assess how well the survey samples represent the populations from which they were drawn as well as the larger research population. Frequencies are unweighted. Percentages for the research and survey populations are weighted to adjust for differential assignment to experimental or control group over the study period. Survey sample data are weighted to adjust for differential rates of assignment and stratification by case type and initial W-2 tier.[7]

The only difference, by design, between the research population and the survey populations at Time 1 and Time 2 is the exclusion from the survey of cases originally not assigned to the treatment or control group. Thus, the survey population should closely reflect the research population as a whole. Indeed, the resident mothers eligible to be selected for the survey sample are indistinguishable, at least on the basis of characteristics examined here, from the research population. The only notable difference occurs by design and involves the large number of cases in the research population in which the resident mother was assigned to neither treatment nor control group.

Resident mothers selected for the survey at Time 1 and at Time 2 also mirror the survey populations from which they were drawn. The survey samples tend to include slightly larger proportions of younger mothers, between the ages of 18 and 25, mothers who are African American, and mothers residing in Milwaukee or in rural counties rather than in other urban counties. Compared to the populations from which they were drawn, the survey samples also include a slightly larger proportion of mothers with one child.

It is more difficult to present a straightforward comparison between the research population of nonresident fathers and the fathers in the survey populations. The fathers' populations are subject to the same exclusion as the mothers—that is, if the resident mother was not assigned to either treatment or

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[7]Technical Report 1 discusses differential rates of assignment over the study period. Technical Report 4 discusses weights used for administrative and survey data.

Table TR5.1
Sample Stratification by Initial W-2 Tier, Case Type, and Assignment Rate

Initial W-2 Tier	Case Type		Case Type, by Assignment Rate to E/C/N Groups			
	AFDC	New W-2	AFDC	New W-2		
	All	All	20/20/60[a]	20/20/60[a]	30/30/40[b]	50/50/0[c]
Lower Tier	0.317	0.324	0.317	0.147	0.066	0.111
Upper Tier	0.198	0.160	0.198	0.098	0.024	0.038
Total	0.515	0.485	0.515	0.245	0.09	0.149

Notes: Table entries are cell percentages based on a survey sample of 2,884 (final number of cases eligible for interviews according to information in administrative records on the sample frame). Assignment rates pertain to the rate of assignment to each of three research groups during the period September 1, 1997, to July 8, 1998. E = Experimental group, C = Control group, N = Neither group. See Technical Report 1 for a discussion of changes in the assignment rate. Upper tiers of W-2 are Unsubsidized Jobs and Trial Jobs. Lower tiers are Community Service Jobs, W-2 Transition, and Caretakers of Newborn. AFDC cases are active AFDC cases on August 31, 1997, that subsequently transitioned to W-2. New W-2 cases were not active on August 31, 1997, and subsequently entered W-2.

[a]Assignment rate September 1, 1997, to March 16, 1998.
[b]March 17, 1998, to May 10, 1998.
[c]May 11, 1998, to July 8, 1998.

Table TR5.2
Initial Characteristics of Resident Mothers in the Research Population, Survey Population, and Survey Samples (Weighted Percentages)

	Research Population		Time 1 Survey Population		Time 1 Survey Sample		Time 2 Survey Population		Time 2 Survey Sample	
	N	%	N	%	N	%	N	%	N	%
Total Cases	15,977		7,010		2,884		6,990		2,873	
Age										
16–17	6	0.0%	4	0.0%	1	0.0%	4	0.0%	1	0.0%
18–25	7,507	46.9	3,336	47.3	1,425	48.9	3,329	47.3	1,423	49.1
26–30	3,276	20.6	1,461	21.0	597	20.8	1,457	21.0	596	20.9
31 or older	5,186	32.4	2,207	31.7	860	30.2	2,198	31.6	853	30.0
Unknown	2	0.0	2	0.0	0	0.0	2	0.0	0	0.0
Race										
White	4,001	25.1	1,835	25.1	834	25.3	1,829	25.1	827	25.2
African American	9,640	60.3	4,199	60.8	1,682	62.0	4,190	60.8	1,678	62.0
Hispanic	1,200	7.5	494	7.2	190	6.9	494	7.3	190	6.9
Native American	365	2.3	159	2.2	70	2.1	158	2.2	70	2.1
Asian	274	1.7	104	1.5	27	1.0	102	1.5	27	1.0
Other	16	0.1	10	0.1	1	0.0	10	0.1	1	0.0
Unknown	481	3.0	209	3.0	80	2.7	207	3.0	80	2.7
Education										
Less than high school	8,605	53.8	3,672	53.0	1,449	52.6	3,660	53.0	1,447	52.7
High school	5,829	36.6	2,624	37.2	1,131	37.9	2,619	37.2	1,126	37.8
More than high school	1,543	9.7	714	9.8	304	9.5	711	9.8	300	9.4
Language										
English speaker	15,498	97.0	6,810	97.0	2,826	97.7	6,792	97.1	2,815	97.7
Non-English-speaker	479	3.0	200	3.0	58	2.3	198	3.0	58	2.3

| | Research Population | | Time 1 | | | | Time 2 | | | |
| | | | Survey Population | | Survey Sample | | Survey Population | | Survey Sample | |
	N	%	N	%	N	%	N	%	N	%
Residential Location										
Milwaukee County	11,856	74.2	5,145	74.8	2,030	75.6	5,135	74.8	2,026	75.7
Other urban counties	746	17.2	1,217	16.6	509	15.3	1,210	16.6	503	15.2
Rural counties and tribes	1,375	8.6	648	8.6	345	9.1	645	8.6	344	9.1
Employment History[a]										
No UI-covered employment	3,227	20.2	1,434	20.9	523	20.1	1,427	20.8	522	20.1
1–4 quarters	6,764	42.4	2,875	42.6	1,111	42.3	2,869	42.6	1,108	42.4
5–7 quarters	4,131	25.8	1,796	25.0	807	25.9	1,792	25.0	804	25.8
All 8 quarters	1,854	11.6	905	11.6	443	11.7	902	11.6	439	11.7
Unknown/missing SSN	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Earnings History[a]										
$0	3,227	20.2	1,434	20.9	523	20.1	1,427	20.8	522	20.1
$1–$5,000	10,688	66.9	4,598	66.8	1,863	67.0	4,589	66.9	1,857	67.1
$5,001–$15,000	1,928	12.1	908	11.6	461	12.1	905	11.6	458	12.1
$15,001 or more	133	0.8	70	0.8	37	0.8	69	0.8	36	0.8
Unknown/missing SSN	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
AFDC Receipt[a]										
None	2,005	12.6	1,145	12.9	616	13.1	1,142	12.9	612	13.1
1–18 months	5,332	33.4	2,343	32.8	1,012	33.1	2,338	32.8	1,009	33.1
19–24	8,640	54.0	3,522	54.3	1,256	53.9	3,510	54.3	1,252	53.9
Number of Children										
No children at W-2 entry	145	0.9	79	1.0	35	0.7	78	1.0	35	0.7
One	5,169	32.4	2,325	31.9	1,036	33.9	2,316	31.9	1,030	33.9
Two	4,677	29.3	2,027	28.9	823	28.3	2,022	28.9	819	28.2
Three or more	5,986	37.4	2,579	38.3	990	37.1	2,574	38.3	989	37.2

| | Research Population | | Time 1 | | | | Time 2 | | | |
| | | | Survey Population | | Survey Sample | | Survey Population | | Survey Sample | |
	N	%	N	%	N	%	N	%	N	%
Age of Youngest Child										
Unborn	1,599	10.0	723	9.7	311	9.5	722	9.7	310	9.5
0–2	7,685	48.1	3,370	48.2	1,395	49.0	3,362	48.2	1,389	49.0
3–5	2,872	18.0	1,221	17.8	505	17.8	1,218	17.8	504	17.8
6–12	3,106	19.5	1,369	19.7	556	19.3	1,362	19.7	553	19.2
12–18	695	4.3	318	4.5	117	4.4	318	4.5	117	4.4
No child with known birthdate[b]	20	0.1	9	0.1	0	0.0	8	0.1	0	0.0
Focal Child's Parentage										
Legal father, unknown how	26	0.2	14	0.2	5	0.2	14	0.2	5	0.2
Nonmarital child	14,109	88.3	6,183	88.4	2,515	88.5	6,166	88.4	2,505	88.6
Marital child	1,825	11.4	807	11.3	364	11.3	805	11.3	363	11.3
Unknown	17	0.1	6	0.1	0	0.0	5	0.3	0	0.0
Number Legal Fathers										
None	4,798	30.1	2,138	29.3	892	29.2	2,130	29.3	887	29.2
One	8,076	50.5	3,544	51.0	1,469	51.9	3,535	51.0	1,464	51.9
Two or more	3,103	19.5	1,328	19.6	523	18.9	1,325	19.7	522	18.9
Child Support Order[c]										
No order	7,053	44.1	3,175	43.8	1,329	43.4	3,167	43.8	1,324	43.5
Has order	8,924	55.9	3,835	56.3	1,555	56.6	3,823	56.2	1,549	56.5
Child Support Paid by All Nonresident Parents[a]										
$0	10,714	67.1	4,738	67.2	1,928	66.2	4,726	67.2	1,921	66.3
$1–$999	2,519	15.8	1,119	16.3	450	16.5	1,116	16.4	446	16.4
$1,000 or more	2,744	17.2	1,153	16.5	506	17.3	1,148	16.5	506	17.3

	Research Population		Time 1 Survey Population		Survey Sample		Time 2 Survey Population		Survey Sample	
	N	%	N	%	N	%	N	%	N	%
Research Group Assignment										
Control	3,475	21.8	3,470	49.5	1,438	49.5	3,464	49.5	1,434	49.6
Experimental	3,544	23.4	3,540	50.5	1,446	50.5	3,526	50.5	1,439	50.5
Neither	8,958	54.9	0	0.0	0	0.0	0	0.0	0	0.0
Case Type										
AFDC	11,333	70.8	4,457	70.2	1,485	70.2	4,443	70.2	1,478	70.2
W-2	4,644	29.2	2,553	29.8	1,399	29.8	2,547	29.8	1,395	29.8
Initial W-2 Assignment										
W-2 Transition	1,540	9.7	683	9.3	264	8.9	678	9.2	262	8.8
Community Service Job	8,094	50.6	3,523	51.0	1,277	51.3	3,515	51.0	1,275	51.4
Caretaker of Newborn	1,392	8.8	703	8.8	307	8.9	700	8.8	304	8.8
Upper tier	4,951	30.9	2,101	31.0	1,036	31.0	2,097	31.0	1,032	31.0
Quarter of Entry										
4th quarter of 1997	8,754	54.7	3,487	55.0	1,321	54.2	3,479	55.0	1,316	54.2
1st quarter of 1998	5,702	35.7	2,307	35.5	946	36.4	2,299	35.5	942	36.4
2nd quarter of 1998	1,521	9.6	1,216	9.5	617	9.4	1,212	9.5	615	9.4

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]In the 12 months prior to October 1, 1997.

[b]There was no child with a known birthdate who was under 18 and listed on the resident parent's CARES case at W-2 entry or who was born within seven months of W-2 entry.

[c]As of October 1, 1997.

control group, none of the legal fathers listed on her case record was eligible to be in the survey population. (If these fathers were *also* listed as legal fathers on another W-2 case, and that case was in the control or experimental group, then they would be included in the survey population.) However, there are two additional differences, as noted above: the fathers' survey populations include those for whom paternity was identified between July 8, 1998, and December 31, 1998 (Time 1), or subsequently determined by December 31, 1999 (Time 2), and the research population includes *all* fathers listed on a W-2 case, whereas the survey populations include only one father per case. If multiple-father cases differ systematically from those in which only one nonresident father is identified, the distribution of characteristics among the survey populations will differ from those in the research population. That is, analysis of the survey population will contribute the characteristics of one nonresident father and one resident mother per case. Analysis of the research population will contribute the characteristics of all nonresident fathers associated with a case and the characteristics of the resident mother may be included multiple times, once for each nonresident father on the case.

Table TR5.3 attempts to sort out the factors likely to contribute to the largest differences between the research population and the survey populations. It includes characteristics of fathers in the Time 1 and Time 2 surveys and all fathers in the research population, dividing the latter into those cases in which only one legal father was identified when the resident mother entered W-2 and those in which two or more legal fathers were identified. Differences between the survey populations and the research population should be attributable to inclusion of multiple fathers in the research population. Put another way, the survey population should closely resemble the subset of cases in the research population in which there is only one nonresident father.[8]

As compared to the research population of all nonresident fathers, the survey populations are noticeably younger, include a larger proportion of fathers who are white, represent larger families with younger children, have lower levels of child support orders, and are less likely to include fathers who have been paying child support. The mothers associated with fathers in the survey populations have more years of schooling as compared to mothers in the research population, and are more likely to live in rural counties or in urban counties other than Milwaukee, and to include higher proportions of new W-2 entrants. All of these differences also appear in a comparison of columns 2 and 3, showing characteristics of fathers in one-father cases and multiple-father cases. The remaining differences are those associated with newly identified paternities that were not originally included in the research population.

The survey samples at Time 1 and Time 2 accurately reflect the survey populations from which they were drawn (Table TR5.4). Small differences occur in the ages of children, the likelihood of child support payments, and the location of the resident parent at W-2 entry. The Time 1 and Time 2 samples include a larger share of children under age 12 and a slightly higher proportion of fathers who paid child support to the resident mother prior to W-2 entry as compared to their respective survey populations. In addition, a higher percentage of the partners of men in the survey samples lived in Milwaukee at W-2 entry and a slightly smaller fraction lived in other urban counties.

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[8]Percentages reported for the research population are weighted to adjust for differential rates of assignment to control and experimental groups. Percentages for the survey sample populations are adjusted for differential assignment as well as the probability that the father was selected (i.e., the ratio of his children on a case to the total number of children on the case).

Table TR5.3

Initial Characteristics of Nonresident Fathers in the Research Population and in the Survey Population,
by Number of Legal Fathers on the W-2 Case Record (Weighted Percentages)

| | Research Population | | | | | | Survey Population | | | |
| | All Cases | | One Father | | Multiple Fathers | | Time 1 | | Time 2 | |
	N	%	N	%	N	%	N	%	N	%
Total Cases	14,343		7,858		6,485		4,387		4,911	
Age										
16–17	20	0.1%	0	0.2%	0	0.6%	20	0.5%	33	0.7%
18–25	3,997	27.8	2,583	32.8	1,414	21.8	1,401	31.9	1,638	33.4
26–30	3,777	26.4	1,787	22.8	1,990	30.7	1,096	25.0	1,198	24.4
31 or older	6,435	44.9	3,406	43.4	3,029	46.7	1,839	41.9	2,009	40.9
Unknown	114	0.8	66	0.8	48	0.7	31	0.7	33	0.7
Race										
White	1,814	12.7	1,130	14.4	684	10.6	685	15.6	772	15.7
African American	5,911	41.2	3,053	39.0	2,858	44.0	1,795	40.9	2,093	42.6
Hispanic	600	4.2	399	5.1	201	3.1	202	4.6	247	5.0
Native American	234	1.6	119	1.5	115	1.8	73	1.7	83	1.7
Asian	85	0.6	71	0.9	14	0.2	30	0.7	31	0.6
Unknown	5,699	39.7	3,086	39.1	2,613	40.3	1,602	36.5	1,685	34.3
Employment History[a]										
No UI-covered employment	4,119	28.8	2,211	28.2	1,908	29.5	1,222	27.9	1,374	28.0
1–4 quarters	3,414	23.8	1,900	24.2	1,514	23.3	1,063	24.2	1,203	24.5
5–7 quarters	2,927	20.4	1,611	20.5	1,316	20.3	914	20.8	1,030	21.0
All 8 quarters	3,213	22.5	1,756	22.4	1,457	22.5	996	22.7	1,084	22.1
Unknown/missing SSN	670	4.7	380	4.8	290	4.5	192	4.4	220	4.5

	Research Population						Survey Population			
	All Cases		One Father		Multiple Fathers		Time 1		Time 2	
	N	%	N	%	N	%	N	%	N	%
Earnings History[a]										
$0	4,119	28.8	2,211	28.2	1,908	29.5	1,222	27.9	1,374	28.0
$1–$5,000	5,248	36.6	2,957	37.6	2,291	35.3	1,645	37.5	1,865	38.0
$5,001–$15,000	2,836	19.8	1,521	19.4	1,315	20.4	861	19.6	946	19.3
$15,001 or more	1,470	10.2	789	10.1	681	10.5	467	10.6	506	10.3
Unknown/missing SSN	670	4.7	380	4.8	290	4.5	192	4.4	220	4.5
Focal Child's Parentage										
Legal father, unknown how	43	0.3	24	0.3	19	0.3	7	0.2	14	0.3
Paternity established	11,941	83.2	6,200	78.9	5,741	88.4	3,668	83.6	4,127	84.0
Father by marriage	2,359	16.5	1,634	20.8	725	11.3	712	16.2	770	15.7
Number of Children with Resident Parent										
No children at W-2 entry	0	0.0	0	0.0	0	0.0	31	0.7	48	1.0
One	9,690	67.6	4,740	60.4	4,950	76.4	2,793	63.7	3,155	64.2
Two	3,044	21.2	1,901	24.2	1,143	17.6	999	22.8	1,093	22.3
Three or more	1,609	11.2	1,217	15.5	392	6.0	564	12.9	615	12.5
Age of Youngest Child with Resident Parent										
Unborn	193	1.3	138	1.7	55	0.9	57	1.3	71	1.4
0–2	3,592	25.1	2,391	30.5	1,201	18.5	1,234	28.1	1,413	28.8
3–5	4,028	28.1	2,229	28.4	1,799	27.7	1,096	25.0	1,125	22.9
6–12	5,382	37.6	2,516	32.0	2,866	44.3	1,407	32.1	1,465	29.8
12–18	1,103	7.7	574	7.2	529	8.2	294	6.7	313	6.4
No child with known birthdate[b]	45	0.3	10	0.1	35	0.5	299	6.8	524	10.7
Number of Legal Fathers on Resident Parent's Case										
No legal father at W-2 entry	0	0.0	0	0.0	0	0.0	446	12.1	741	17.4
One	7,858	54.8	7,858	100.0	0	0.0	2,781	71.5	2,976	67.7
Two or more	6,485	45.3	0	0.0	6,485	100.0	1,160	16.4	1,194	15.0

	Research Population						Survey Population			
	All Cases		One Father		Multiple Fathers		Time 1		Time 2	
	N	%	N	%	N	%	N	%	N	%
Child Support Order with Resident Parent[c]										
No order	3,774	26.3	2,236	28.3	1,538	23.9	1,465	33.4	1,896	38.6
Has order	10,569	73.7	5,622	71.7	4,947	76.1	2,922	66.6	3,015	61.4
Child Support Paid to Resident Parent[a]										
No child support paid	8,840	61.7	4,869	61.9	3,971	61.4	2,859	65.2	3,332	67.8
$1–$999	2,809	19.6	1,505	19.2	1,304	20.1	771	17.6	801	16.3
$1,000 or more	2,694	18.8	1,484	18.9	1,210	18.6	757	17.3	778	15.8
Education of Resident Parent										
Less than high school	7,632	53.0	4,030	51.1	3,602	55.4	2,155	49.1	2,440	49.7
High school	5,320	37.2	29,080	38.1	2,340	36.3	1,732	39.5	1,925	39.2
More than high school	1,391	9.7	848	10.9	543	8.4	500	11.4	546	11.1
Location of Resident Parent										
Milwaukee County	10,865	75.8	5,790	73.8	5,075	78.3	3,133	71.4	3,488	71.0
Other urban counties	2,238	15.5	1,319	16.7	919	14.1	783	17.8	897	18.3
Rural counties and tribes	1,240	8.7	749	9.5	491	7.7	471	10.7	526	10.7
Research Group of Resident Parent										
Control	3,102	21.6	1,700	21.3	1,402	22.0	2,169	49.4	2,448	49.8
Experimental	3,146	22.9	1,760	23.6	1,386	22.0	2,218	50.6	2,463	50.2
Neither	8,095	55.5	4,398	55.1	3,697	56.0	0	0.0	0	0.0
Case Type of Resident Parent										
AFDC	10,835	75.5	5,721	72.8	5,114	78.8	2,894	66.0	3,151	64.2
W-2	3,508	24.5	2,137	27.2	1,371	21.2	1,493	34.0	1,760	35.8

	Research Population						Survey Population			
	All Cases		One Father		Multiple Fathers		Time 1		Time 2	
	N	%	N	%	N	%	N	%	N	%
Initial W-2 Assignment of Resident Parent										
W-2 Transition	1,396	9.8	859	11.0	537	8.3	456	10.4	495	10.1
Community Service Job	7,371	51.4	3,948	50.1	3,423	52.9	2,107	48.0	2,355	48.0
Caretaker of Newborn	719	5.1	458	5.9	261	4.1	350	8.0	467	9.5
Upper tier	4,857	33.8	2,593	33.0	2,264	34.7	1,474	33.6	1,594	32.5
Quarter of Resident Parent's Entry										
4th quarter of 1997	7,922	55.2	4,419	56.2	3,503	54.0	2,251	56.2	2,488	55.6
1st quarter of 1998	5,319	37.1	2,767	35.2	2,552	39.3	1,458	34.7	1,604	34.3
2nd quarter of 1998	1,102	7.7	672	8.6	430	6.7	678	9.2	819	10.1

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]Measured for the twelve months prior to October 1, 1997.

[b]There was no child with a known birthdate who was under 18 and listed in resident parent's CARES household at W-2 entry; or, child was not born within 7 months of W-2 entry or has not yet been found to legally be the child of nonresident parent.

[c]Measured as of October 1, 1997.

Table TR5.4
Initial Characteristics of Nonresident Fathers in the Survey Population and the Survey Samples at Time 1 and Time 2 (Weighted Percentages)

| | Time 1 | | | | Time 2 | | | |
| | Survey Population | | Survey Sample | | Survey Population | | Survey Sample | |
	N	%	N	%	N	%	N	%
Total Cases	4,387		1,936		4,911		2,130	
Age								
16–17	20	0.6%	14	0.9%	33	0.9%	22	1.3%
18–25	1,401	34.5	621	35.0	1,638	35.8	717	36.1
26–30	1,096	24.0	489	24.4	1,198	23.4	519	23.6
31 or older	1,839	40.3	802	39.3	2,009	39.3	859	38.5
Unknown	31	0.6	10	0.4	33	0.6	13	0.6
Race								
White	685	16.8	326	16.1	772	16.8	361	16.2
African American	1,795	40.8	774	41.5	2,093	42.5	882	42.7
Hispanic	202	4.8	95	5.1	247	5.3	108	5.4
Native American	73	1.7	32	1.7	83	1.8	35	1.7
Asian	30	0.7	7	0.4	31	0.7	7	0.3
Unknown	1,602	35.1	702	35.3	1,685	33.0	737	33.8
Employment History[a]								
No UI-covered employment	1,222	26.7	522	26.0	1,374	27.1	589	26.9
1–4 quarters	1,063	25.0	459	24.3	1,203	25.0	505	23.9
5–7 quarters	914	20.9	418	21.7	1,030	21.0	452	21.5
All 8 quarters	996	23.2	454	24.2	1,084	22.6	490	23.7
Unknown/missing SSN	192	4.2	83	3.9	220	4.3	94	4.1

	Time 1				Time 2			
	Survey Population		Survey Sample		Survey Population		Survey Sample	
	N	%	N	%	N	%	N	%
Earnings History[a]								
$0	1,222	26.7	522	26.0	1,374	27.1	589	26.9
$1–$5,000	1,645	39.0	718	38.5	1,865	39.3	789	38.2
$5,001–$15,000	861	19.6	405	21.3	946	19.2	441	20.9
$15,001 or more	467	10.5	208	10.4	506	10.1	217	10.0
Unknown/missing SSN	192	4.2	83	3.9	220	4.3	94	4.1
Focal Child's Parentage								
Legal father, unknown how	7	0.1	4	0.2	14	0.3	5	0.2
Paternity established	3,668	82.7	1,602	83.4	4,127	83.1	1,772	83.8
Father by marriage	712	17.2	330	16.4	770	16.6	353	16.0
Number of Children with Resident Parent								
No child at W-2 entry	31	0.9	15	0.6	48	1.2	23	0.9
One	2,793	59.5	1,247	60.6	3,155	60.2	1,387	61.7
Two	999	24.3	448	24.6	1,093	23.8	476	23.7
Three or more	564	15.3	226	14.2	615	14.8	244	13.8
Age of Youngest Child with Resident Parent								
Unborn	57	1.5	33	1.9	71	1.7	44	2.2
0–2	1,234	32.1	619	36.5	1,413	32.6	747	39.2
3–5	1,096	24.5	509	26.4	1,125	22.5	524	24.8
6–12	1,407	28.6	652	29.5	1,465	26.6	685	28.3
12–18	294	5.8	123	5.8	313	5.5	130	5.5
No child with known birthdate[b]	299	7.5	0	0.0	524	11.1	0	0.0

	Time 1				Time 2			
	Survey Population		Survey Sample		Survey Population		Survey Sample	
	N	%	N	%	N	%	N	%
Number of Legal Fathers on Resident Parent's Case								
No legal father at W-2 entry	446	12.1	209	12.1	741	17.4	329	17.0
One	2,781	71.5	1,240	72.3	2,976	67.7	1,310	68.8
Two or more	1,160	16.4	487	15.5	1,194	15.0	491	14.2
Child Support Order with Resident Parent[c]								
No order	1,465	34.0	653	33.0	1,896	39.1	817	37.6
Has order	2,922	66.0	1,283	67.0	3,015	60.9	1,313	62.4
Child Support Paid to Resident Parent[a]								
No child support paid	2,859	65.5	1,231	63.9	3,332	68.1	1,412	66.5
$1–$999	771	17.5	347	18.1	801	16.3	354	16.7
$1,000 or more	757	17.0	358	18.0	778	15.6	364	16.8
Education of Resident Parent								
Less than high school	2,155	48.3	911	47.9	2,440	48.9	1,018	48.5
High school	1,732	40.1	798	41.0	1,925	39.8	866	40.4
More than high school	500	11.6	227	11.1	546	11.3	246	11.1
Location of Resident Parent								
Milwaukee County	3,133	70.9	1,324	72.2	3,488	70.7	1,460	72.5
Other urban counties	783	18.2	341	16.0	897	18.4	374	15.8
Rural counties and tribes	471	11.0	271	11.9	526	10.9	296	11.8
Research Group of Resident Parent								
Control	2,169	49.2	966	49.0	2,448	49.7	1,068	49.5
Experimental	2,218	50.8	970	51.0	2,463	50.3	1,062	50.5
Neither	0	0.0	0	0.0	0	0.0	0	0.0

Table TR5.4, continued

| | Time 1 | | | | Time 2 | | | |
| | Survey Population | | Survey Sample | | Survey Population | | Survey Sample | |
	N	%	N	%	N	%	N	%
Case Type of Resident Parent								
AFDC	2,894	69.7	1,072	71.0	3,151	67.9	1,131	68.8
W-2	1,493	30.3	864	29.0	1,760	32.1	999	31.2
Initial W-2 Assignment of Resident Parent								
W-2 Transition	456	10.3	196	10.2	495	10.0	208	9.9
Community Service Job	2,107	47.7	811	48.2	2,355	47.7	892	48.2
Caretaker of Newborn	350	7.5	158	7.1	467	9.0	209	8.6
Upper tier	1,474	34.4	771	34.5	1,594	33.3	821	33.3
Quarter of Resident Parent's Entry								
4th quarter of 1997	2,251	56.2	937	56.0	2,488	55.6	1,011	55.4
1st quarter of 1998	1,458	34.7	632	35.2	1,604	34.3	684	34.9
2nd quarter of 1998	678	9.2	367	8.8	819	10.1	435	9.7

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]In the twelve months prior to October 1, 1997.

[b]There was no child with a known birthdate who was under 18 and listed in resident parent's CARES household at W-2 entry; or, child was not born within 7 months of W-2 entry or has not yet been found to legally be the child of nonresident parent.

[c]As of October 1, 1997.

Survey Content

The research objectives outlined in the evaluation plan (Institute for Research on Poverty, 1998) guided the content of the Survey of Wisconsin Works Families. Questionnaire development had three specific aims: (a) to collect data on constructs that were needed to test hypotheses for the evaluation of the child support policy and that were not available from administrative sources or were incompletely or poorly measured in administrative sources; (b) to collect data that would allow us to validate measures from administrative data or to check other known or knowable characteristics about mothers' or fathers' participation in the experiment or in W-2; and (c) to collect data that would support analyses of other aspects of W-2 or of the experiences of a low-income population more generally. We developed the survey instruments using standard measures that would permit comparisons of mothers' and fathers' reports as well as comparisons with national studies or surveys in other states.

Although administrative records provide much of the data needed to address questions outlined in the evaluation plan, the survey augments these records in important ways. It provides measures of independent and dependent variables that are not available in administrative records (e.g., child well-being, parental contact, and conflict between parents). It provides the opportunity to assess the extent to which participants in the experimental and control groups were aware of the requirements and procedures of the treatment to which they were assigned. It also serves as a source of information about participants' knowledge of the W-2 program generally and of the rules that govern the availability of W-2 services. Finally, it provides some ability to assess independently the completeness of the administrative records on which the evaluation largely depends.

Table TR5.5 summarizes the content of the survey instrument. We asked mothers about their experiences with the Wisconsin Works program at Time 1 and Time 2 as well as their attitudes toward the program, contact with a W-2 caseworker, and attitudes toward the caseworker. For respondents who were participating in a W-2 assignment at the time of the interview, these questions elicited a description of the main activities that were performed in the assignment. Since the administrative data only include tier location, the survey data will offer a better understanding of the W-2 assignments and the kinds of jobs for which they might prepare participants. We also asked mothers about their knowledge of W-2 rules, including the existence and length of time limits. We asked mothers and fathers about their knowledge of the child support policy and how the rules concerning a full or partial pass-through of child support affected them or would affect them under various circumstances.

Measures of economic resources included questions about family income. The mothers' instrument asked about use of public assistance (Food Stamps, SSI), but the fathers' instrument did not. At Time 2, we added questions to both instruments about help received in the form of cash assistance from family and friends. All four surveys included comparable measures of economic hardship (e.g., difficulty making payments for rent, telephone, utilities), help received from family or friends to pay household bills, and the kind and frequency of help received from private charities or community groups. Questions about formal child support paid or received permit comparisons between self-reports and administrative data, and measures of the kind and value of informal child support supplement administrative records, which do not capture these transfers by fathers.

The child care sequence was designed to meet several objectives: (a) to identify the constellation of care providers that are available to mothers for all the young children in her household; (b) to measure the cost of child care and the use of W-2 or other government programs to help defray these costs; (c) to ascertain the main child care provider for the focal child, the quality and stability of this care, and whether

Table TR5.5
Summary of the Content of the Survey of Wisconsin Works Families

Measurement Construct	Mothers' Questionnaire	Fathers' Questionnaire
Experience with Wisconsin Works		
W-2 services (e.g., bus passes, job search, training programs)	X	
Attitudes about W-2	X	
Frequency of contact with W-2 caseworker	X	
Attitudes about W-2 caseworker	X	
Knowledge of W-2 rules and time limits	X	
Knowledge of child support policy	X	X
Main activities in W-2 assignment	X	
Economic Resources		
Employment, earnings, work stability	X	X
Training programs (Time 2 only)	X	X
Health insurance coverage (Time 2 only)	X	X
Use of public assistance (e.g., AFDC, W-2, SSI)	X	
Use of food assistance (Food Stamps, WIC)	X	
Family income	X	X
Economic hardship, assets and debts, food insecurity	X	X
Assistance from friends, family, private charities	X	X
Receive/pay formal child support, amount received/paid	X	X
Receive/provide informal support (e.g., gifts, money, expenses)	X	X
Total amount informal support received/provided	X	X
Child Care		
Sources and cost of child care	X	
Child care by focal child's father or by father's family	X	X
Main child care provider for focal child	X	
Quality of child care, preferred child care arrangement	X	
Child care problems interfere with work, school	X	
Focal Child's Education		
Expected educational attainment	X	X
Grade in school	X	
Grade retention, performance in school, absences from school	X	
Parental involvement in school (e.g., PTA, teacher meetings)	X	
Parental involvement with child (e.g., homework, games)	X	X

Measurement Construct	Mothers' Questionnaire	Fathers' Questionnaire
Focal Child's Health		
Health status, limitations	X	X
Regular health care provider	X	
Doctor, dental visits for routine care, visits for illness/injury	X	
Health at birth (premature, low weight)	X	
Health insurance (including provision by father)	X	X
Focal Child's Behavior Problems		
Suspended or expelled from school	X	
Smoke tobacco, drink alcohol	X	
Father Contact with Focal Child		
Frequency of contact	X	X
Activities with child	X	X
Involvement in decision-making	X	X
Contact between Parents		
Frequency of contact	X	X
Areas and intensity of conflict	X	X
Parental assessment of self and of other parent	X	X
Paternity Establishment		
Sources of paternity establishment		X
Age of child at paternity establishment		X
Social Networks (Time 2 Only)		
Help given/received from family or friends	X	X
Number of close friends, frequency of contact	X	X
Proxy Reports about Other Parent		
Age, education	X	X
Employment and income	X	X
City and state of residence during reference year	X	X
Household and Demographic Characteristics		
Household composition	X	X
Coresidence with focal child's other parent	X	X
Educational attainment	X	X
Social background (parents' education, two-parent household)	X	X
Date of birth	X	X
Race and ethnicity	X	X
Health status, limitations	X	X

this is the mother's preferred arrangement; and (d) to determine whether mothers have problems with child care that make it difficult to go to work or school or participate in a training program. Child well-being measures included questions about child care, focal child's education, focal child's health, and behavior problems among focal children age 10 or older.

The survey collected information about family relationships that is unavailable in administrative records. Mothers and fathers were asked to report on the frequency and type of contact that fathers had with their children as well as contact and conflict between parents. As described in the evaluation plan, father contact and family relationships are outcomes of interest in themselves and also may be important factors in understanding the effects of the Child Support Demonstration on fathers' employment and child support payments.

At Time 2, we added questions about help and social support that mothers and fathers receive from, and provide to, family and friends. We also asked about the size of their social support network (number of friends), whether any close friends lived nearby, and the frequency of contact with friends. These questions provide additional information about informal sources of support that were missing from Time 1, which focused on formal support and government services.

Because we anticipated difficulty in locating sample members, especially fathers, we included a short section asking each participant about the demographic characteristics and economic resources of the other parent. We did this to maximize the number of couples about which we would have at least basic demographic information.

Finally, we collected information on household composition and standard demographic items. The household roster makes it possible to identify the size and age structure of the current household (in addition to the age and sex of biological or adopted children), to construct the age and gender composition of sibships, and, in the mother's version, to assess stability of household composition. Measures of current and past coresidence of the parents of the focal child were critical to several hypotheses in the evaluation plan (e.g., transfer of informal resources, quality of family relationships).

The content of the Survey of Wisconsin Works Families makes it possible to examine a wide range of questions about the experiences of low-income mothers and fathers during a period of welfare reform. The use of standard measures makes it possible to compare experiences of mothers and fathers in Wisconsin with those in national studies or with evaluations of welfare reforms in other states.

Data Collection

We conducted interviews by telephone and in person, using computer-assisted telephone- and personal-interviewing (CATI and CAPI) technology. At Time 1, data were collected from mothers between February 22, 1999, and July 31, 1999, and from fathers between April 23, 1999, and July 31, 1999. At Time 2, we interviewed mothers from February 3, 2000, to July 15, 2000, and fathers from March 22, 2000, to July 31, 2000.[9] Both data-collection periods were extended four to six weeks from their originally proposed end dates to allow more time to locate sample members and to conduct in-person interviews. The University of Wisconsin Survey Center was the contractor for the fieldwork.

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[9]In-person interviewing efforts began approximately one month after the initial fielding dates. At Time 1, personal interviewing of mothers began on March 22, 1999, and of fathers on May 3, 1999. Corresponding dates for Time 2 were February 20, 2000, and April 17, 2000.

Dual Mode of Administration and Sample Management

We conducted telephone and in-person interviews simultaneously throughout the Time 1 and Time 2 field periods, but we attempted to reach as many respondents as possible by telephone. All telephone interviews were conducted centrally in the contractor's telephone laboratory at the University of Wisconsin–Madison. As a result, telephone interviews were less expensive, expedited data processing, and could be more easily monitored and supervised to ensure data quality. We anticipated that a significant proportion of sample members could not easily be contacted by telephone. Among low-income populations, rates of nontelephone households are higher, telephone service is interrupted more often, and residential mobility occurs more frequently. Our own tracing efforts provided evidence consistent with these patterns. Just prior to the beginning of Time 1 fieldwork, we had telephone numbers for almost all mothers, but for only 60 percent of the fathers. Among all those for whom we had telephone numbers, early tracing efforts revealed that 20 to 25 percent of the telephones were disconnected, and another 8 percent of mothers and 20 percent of fathers could no longer be reached at the number that was called.[10]

Because the telephone and in-person efforts were being conducted at the same time, we developed decision rules to guide the flow of the sample. Cases for which we did not have telephone numbers were assigned to CAPI interviews immediately. Thereafter, coversheets in the telephone lab were reviewed on a weekly basis and reassigned to a personal interviewer if they met one or more of the following conditions: (a) a "privacy manager" was reached more than two times;[11] (b) the call reached an answering machine ten to fifteen times or the call was not answered on ten to fifteen separate attempts; (c) the respondent was reached and agreed to a date and time to be called back but subsequently broke these appointments three to five times; (d) the respondent was reached at a cellular telephone or pager, did not have another telephone at which he or she could be reached, and did not wish to be interviewed by cell phone; or (e) the respondent stated that he or she would call to complete the interview, did not do so after two weeks had elapsed, and efforts to contact the respondent again were unsuccessful after three to five attempts.[12] In addition, a small number of telephone refusals were reassigned to a personal interviewer if the notes from the interaction suggested that face-to-face contact might be successful.

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[10]Tracing efforts are described in more detail below.

[11]The "privacy manager" service was most common in the Milwaukee area. Individuals who elect to receive this feature in their telephone service can block calls that are not on a pre-identified list of callers. Ineligible callers can leave a recorded message. Since some respondents elected to receive our calls after we initially were blocked by a privacy manager, cases were not reassigned to CAPI unless they were blocked on more than two separate attempts.

[12]The last group involved cases where the respondent did not have a permanent telephone but retrieved messages at the household of a friend or relative.

CAPI Zones

We conducted telephone interviews with persons regardless of their state or county of residence at the time of the survey.[13] However, efforts to interview respondents in person were restricted to particular regions in Wisconsin. The majority of the W-2 population—and of the survey sample—was located in and near the Milwaukee area, and a smaller proportion of cases resided in the less densely populated counties in northern Wisconsin or in rural areas. It was neither cost efficient nor feasible for personal interviewers to pursue small numbers of cases in these sparsely populated areas, especially given the short field period of 10 to 12 weeks for in-person efforts.

We fielded personal interviewers in Wisconsin cities and metropolitan areas where there were at least ten cases (mothers and fathers combined) that could not be reached by telephone. In practice, the application of this rule concentrated personal interviewers in the central and southwestern corridors of the state, especially the Milwaukee metropolitan area (Milwaukee, Racine, and Kenosha counties), and another cluster of cases in and around Madison (Dane County) and Janesville (Rock County). The neighboring counties of Green, Jefferson, Walworth, Waukesha, Washington, and Ozaukee also received consistent attention by CAPI staff throughout the field period. Later in the field period, after the telephone contacts proved unsuccessful and the outstanding cases were reviewed, additional metropolitan areas became eligible for in-person efforts. These included Appleton, Fond du Lac, Green Bay, and Eau Claire, as well as the triangular regions outlined by LaCrosse, Sparta, and Trempealeau and by Baraboo, Portage, and Poynette. Notable exceptions to this rule were communities located within Indian reservations (e.g., Neopit, Keshena, Shawano). Our research indicated that gaining access to these regions would require permission from the tribal council, a process that could have taken several months.

"Full-" and "Partial-Effort" Replicates

The original survey sample of 3,000 resident mothers was subdivided into independent replicates of 100 cases each. Cases were randomly assigned so that each replicate was a representative subsample, to help control achieved sample size and minimize the effects of instrument errors or other problems discovered after interviewing began. The fathers' survey sample also was subdivided into replicates, and fathers were assigned to the same replicate number as the corresponding resident mother and focal child. Fathers' replicates generally comprised fewer than 100 cases, because the sample was limited to legal fathers. Replicate assignments remained the same at Time 1 and Time 2.

We used the replicate structure to subdivide the fathers' sample into two representative subsamples, only one of which was eligible for CAPI effort. All mothers in the survey sample were eligible for in-person interviews if their address was located in a CAPI zone, but only a subsample of fathers was subject to the more intensive effort associated with in-person tracing and face-to-face interviews. One-third of the fathers' sample was eligible for telephone *and* in-person interviews (replicates 1 through 10), composing a subsample subject to "full effort." The remaining two-thirds of the sample (replicates 11 through 30) were designated "partial effort" and could only be interviewed by telephone. Fathers in these replicates for whom we did not have a telephone number or could not be reached by telephone were not assigned to a personal interviewer for in-person tracing or interviewing, even if they lived in a CAPI zone.

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[13]By definition, mothers in the study, as participants in W-2, were residents of Wisconsin at some point during the period of the evaluation. The overwhelming majority were living in the state at the time of the survey, but some mothers had moved out of the state and a slightly larger number of fathers lived outside Wisconsin. At Time 1, over 95 percent of mothers and 92 percent of fathers who completed interviews were living in Wisconsin, although the proportion of Wisconsin residents is probably lower among nonrespondents.

We had two main objectives in subdividing the fathers' sample. First, we wanted to maximize our response rate among at least a representative subsample of fathers, if not the entire sample. Even though we did not have sufficient resources to pursue in-person interviews with all the fathers who could not be reached by telephone, we could focus our resources on approximately one-third of the sample. (The full-effort replicates included 677 cases at Time 1 and 736 at Time 2.)

Second, we wanted to acquire information that would help us understand likely nonrespondents in the telephone-only (partial-effort) subsample. A frequently used approach for understanding unit nonresponse involves employing more intensive tracing techniques among a subsample of survey nonrespondents at the conclusion of the study, perhaps using an abbreviated instrument or one designed to shed light on the characteristics of likely nonrespondents. Our strategy involved a similar exercise, but one that was conducted simultaneously by applying equivalent levels of telephone effort across the two subsamples for cases that would otherwise be eligible for CAPI based on their geographic location. Coversheets were reviewed blind with respect to subsample designation. Fathers with call records and addresses that were determined to be eligible for reassignment to a personal interviewer were pulled from the telephone laboratory if they were in a partial-effort replicate. No additional call attempts were made for these cases. Thus, we sacrificed overall number of completed interviews—i.e., the additional interviews that might have been completed in replicates 11 through 30 if telephone attempts had continued—in favor of a more focused allocation of resources that might inform our understanding of nonresponse.[14]

Interviewer Characteristics

At Time 1, 91 individuals conducted interviews with sample members. Seventy-two of these interviewed by telephone and 19 performed interviews in person.[15] Telephone interviewers were generally about 22 years old and had one to six months experience conducting standardized interviews. Thirty percent of the staff had one or more years of experience. Women comprised 71 percent of the telephone interviewers. The personal interviewing staff was older, more experienced, and more predominantly women—all but two of the personal interviewers were women. They ranged in age from 22 to 48, with an average age of 37 years, and their prior interviewing experience ranged from less than one year to 35 years (the mean was five years).[16]

At Time 2, 70 telephone interviewers and 14 personal interviewers worked on the study.[17] The typical Time 2 telephone interviewer was a woman about 21 years old and had slightly less than one year of interviewing experience. Again, all but two of the personal interviewers were women. They were generally about 41 years old and had about seven years of interviewing experience.

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[14]Technical Report 6 provides information on how this subsampling strategy is used to address unit nonresponse in the fathers' survey.

[15]Seven of the telephone interviewers also conducted personal interviews late in the field period, when effort focused on difficult-to-locate sample members.

[16]Three personal interviewers did not provide their age or date of birth.

[17]Five telephone interviewers also conducted face-to-face interviews late in the field period.

Interviewer Training

       Interviewers were trained in small groups of 20 to 30, and sometimes as few as 10. Training sessions were led by the survey contractor's project manager and IRP's survey manager.[18] Formal training sessions at Time 1 consisted of two half-day sessions that briefed interviewers on the purpose and goals of the project, how the results of the study would be used, the nature of the sample, and our previous contacts with the sample through notification letters and tracing interviews (described below). Key terms and concepts also were reviewed.

       Interviewers "walked through" the questionnaire by taking turns reading questions aloud with either the project or survey manager acting as respondent. As interviewers acquired familiarity with the instrument, the "respondent" used this opportunity to reinforce good interviewing practices, often by acting as a reluctant or difficult respondent who gave vague or ambiguous answers. This created opportunities for interviewers to practice asking questions (and recording answers) verbatim, using neutral probes to clarify incomplete or ambiguous responses, executing interviewer instructions or on-screen directives, and developing their skills with difficult questions or concepts. Experienced telephone interviewers or supervisors also participated by leading role-playing sessions, reviewing good interviewing practices, and assisting individual interviewers during the instrument review to ensure that they did not fall behind.

       The second half of formal training used exercises to practice "question and answer" scripts and techniques for refusal conversions; i.e., gaining cooperation from respondents who initially refused. Guidelines for eliciting cooperation from reluctant respondents were reviewed, and interviewers practiced obtaining contact information for the sample member when the listed telephone number reached a relative or friend. Additional time was spent reviewing the concepts and technical issues involved in entering data in two particularly complex sections of the instrument—the household roster and formal child support payments.

       After completing the formal training session, all interviewers paired up to practice the questionnaire using sets of respondent characteristics outlined by the training staff. The respondent profiles were designed to ensure that the interviewers became skilled with the entire instrument, even though some questions or sets of questions might actually arise less frequently. These narratives also were used by supervisory staff to conduct "certification interviews," which involved a supervisor or designated trainer (senior interviewer) acting as respondent to assess an interviewer's skill with the instrument. All phases of good interviewing practice were reviewed during this process—reading questions exactly as worded, recording answers verbatim, probing neutrally, using on-screen directives appropriately—as was facility with the instrument itself. Interviewers began calling sample members only after successfully completing three certification interviews.

       The mothers' sample was fielded several weeks before that of the fathers, so all interviewers were thoroughly trained and certified on the mothers' instrument first. Additional training sessions were held when the fathers' sample was fielded. The organized training sessions were used to review the fathers' instrument, particularly the few areas where that instrument differed from the mothers', as well as to participate in role-playing exercises for gaining cooperation from fathers. All interviewers were required to

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[18]All interviewers, telephone and in-person, completed general interviewer training sessions administered by the survey contractor prior to the beginning of this study. In addition, all telephone interviewers were required to have some interview experience on another project before they were trained to work on the Survey of Wisconsin Works Families.

conduct additional practice interviews with a partner, but there was not a second certification process specific to the fathers' instrument.

Training sessions for Time 2 were similar in both content and structure. All but a small number of interviewers had worked on the study at Time 1 and were familiar with its goals and the general content of the interview. During half-day formal training sessions, we briefly reviewed the background and objectives of the study. Most of the training session involved practicing the questionnaire, role-playing questions and answers and refusal conversions, and entering data on more complex screens. Interviewers were given a set of scenarios to conduct practice interviews informally with a partner. All interviewers were required to successfully complete three certification interviews before they began calling respondents.

Using the experience we gained at Time 1, we provided more supplemental training at Time 2. Additional training modules were administered at various times throughout the second field period. These sessions focused on using neutral probes, obtaining detailed information on occupation, asking questions in the household roster, and gaining cooperation from fathers.

Training for personal interviewers included the same material covered in telephone training, but the formal training sessions were two days long and more time was spent practicing the questionnaire. In addition, two field supervisors with extensive personal interviewing experience led components of the training that focused on tracing sample members in the field, eliciting cooperation face-to-face, and general interviewing practices. Technical personnel from the survey contractor provided instruction on the use and care of the laptop computers, as well as procedures for downloading data from completed interviews.

All personal interviewers were required to successfully complete three certification interviews before they began contacting sample members. Each new interviewer was paired with a more experienced interviewer who served as a mentor and provided additional training. New interviewers accompanied experienced interviewers to observe interviews (and to be observed interviewing) for one to two days before they began contacting sample members on their own.

Because the vast majority of in-person interviewing was conducted in Milwaukee and nearby counties, the survey contractor maintained a field office in Milwaukee throughout the field period. Interviewers were required to meet with the field coordinator once a week to review their caseload and to deliver data from completed interviews. One field supervisor was generally present as well, and she used these meetings to provide additional training tailored to each interviewer depending on the nature of his or her caseload and the issues that had arisen that week.

To help ensure data of high quality, telephone interviewers were monitored on a regular basis by a shift supervisor. Interviewers were monitored for 15 minutes at random each week, and a complete interview was monitored once every four weeks. The work of personal interviewers was examined by the field supervisors and the field coordinator. We attempted to conduct verification interviews[19] using an abbreviated interview schedule for 10 percent of the cases performed by new or less experienced CAPI staff and 5 percent of the cases completed by experienced CAPI staff.

Mode and Length of Completed Interviews

The majority of respondents at both time periods were interviewed by telephone. At Time 1, 70 percent of respondent mothers and 84 percent of respondent fathers were interviewed by telephone. At

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[19]These interviews involve re-asking a small number of factual questions (e.g., age, education) to verify that the original interviewer elicited correct answers.

Time 2, these percentages dropped slightly, to 64 and 81 percent. The higher proportion of telephone interviews with fathers—or, conversely, the much smaller percentage of face-to-face interviews—reflects the fact that only one-third of the fathers' sample was eligible for in-person interviews. However, even among this full-effort subsample, two-thirds of the completed interviews were administered by telephone. A higher proportion of interviews were conducted face-to-face with fathers at Time 2, for several reasons: (a) the full-effort subsample, like the sample as a whole, was larger at Time 2 because of the addition of newly identified fathers; (b) the length of the CAPI field period was slightly longer than at Time 1; and (c) the sample was managed more efficiently at Time 2 and produced a more consistent flow of cases to CAPI interviewers.

Interviews with mothers lasted about 45 minutes on average at Time 1 and Time 2, and those with fathers were about 40 minutes long at Time 1 and 37 minutes at Time 2. The time differential is not surprising, because the fathers' instrument was less complex and shorter than the mothers' version. Questions about W-2 program participation and child care arrangements were not asked of fathers, and material covering income and the focal child's health and education was less detailed. Interviews conducted face-to-face were not significantly longer than telephone interviews, but there was greater variability in their length (standard deviations of 4 to 7 minutes greater than for telephone interviews).

Strategies to Reduce Nonresponse: Tracing, Incentives, and Prenotification Letters

Previous studies of low-income populations and separated families suggested that locating sample members would be a significant challenge. Studies such as the Parents' Fare Share evaluation, state-sponsored studies of persons leaving welfare programs, and IRP studies of parents who live apart consistently report difficulty in locating large proportions of their samples (Abt Associates, 1997; Bartfeld 1991; Cantor and Cunningham, 1999; Weiss and Bailar, 1999; Wisconsin Department of Workforce Development, 1998). The survey population is likely to include many who are difficult to locate because they live with relatives and do not have a telephone listed under their name, because they have an unlisted number, because of frequent moves, or because they do not have a telephone or do not maintain telephone service continuously. As described earlier, we conducted interviews by telephone and in person to ensure coverage of sample members in households without telephones. Efforts to locate mothers and fathers in the survey sample and to encourage them to participate began several months before data collection and continued throughout both field periods. They included the establishment of a special tracing staff, preproduction (i.e., before the field period began) tracing interviews, prenotification letters, "promised" as well as prepaid incentives, and the incorporation of locating questions in the survey instrument itself, all described below.

<u>Designated Tracing Staff</u>
In June 1998, when the first survey sample cases were selected, the survey contractor established a small group of staff whose sole purpose was to trace, and very often re-trace, members of the sample. Their task was to obtain address and telephone numbers of mothers and fathers in the survey sample by searching electronic databases, using updated information from the sample frame, or by contacting third parties identified during the preproduction tracing interviews.

The sample frame (CARES and KIDS) provided initial address and telephone data, but this information was sometimes incorrect or incomplete, especially among fathers. The tracing staff used identifying information in the sample frame (name, date of birth, and social security number) to search for more current addresses and telephone numbers in electronic databases. These included Directory

Assistance, Internet-based information sources and cross-listing directories, CD-ROMs that are updated every three months and contain compilation of telephone white pages as well as address information gathered from subscription services, and credit bureau databases that provide address and telephone information. In addition, IRP provided "address refreshes" each month. These electronic files provided updated data for cases in which the administrative record showed a change since the previous month in any fields that contained locating or identifying data—address, telephone number, social security number, sample member's name, sample member's date of birth, focal child's name, or focal child's date of birth.

IRP, with the cooperation of the state's Bureau of Child Support and other state agencies, assisted the tracing efforts by searching other administrative data sources as well. Survey cases that yielded no leads and were considered "dead-ends" midway through the field period were returned to IRP. Staff from IRP or state agencies searched records from the Department of Transportation and the New Hires database[20] for location information on these cases. At Time 2, we obtained records on individuals in Wisconsin state prisons from the Department of Corrections to help locate sample members who were incarcerated. Although we did not conduct interviews with persons in jails or prisons, these data were useful in identifying sample members who were incarcerated (and would be for the duration of the study), so that tracing resources could be allocated more efficiently.

Preproduction Tracing Interviews

Following a protocol designed for the evaluation of Parents' Fair Share (Abt Associates, 1997), we conducted brief telephone interviews with mothers and fathers during the months leading up to the first survey. The objectives of this brief interview were (a) to confirm that the address and telephone information we had for the respondent was correct; (b) to collect the correct address if our information was incorrect or incomplete; (c) to obtain the name, telephone number, and address of up to two friends or family members who would know how to reach the respondent if he or she moved or changed telephone numbers within the next several months; and (d) to remind the respondent about the purpose of the study, how he or she had been selected, and that we would call again in a few months to conduct an interview.

We completed preproduction tracing interviews with 45.4 percent of the mothers for whom we had telephone numbers (86.8 percent of the sample at that time). Completion rates were lower among fathers (29.1 percent). We had telephone numbers for a much smaller proportion of fathers (40.7 percent), but the fathers' sample received slightly less effort for a shorter period of time. Attention to the tracing interviews was greatest during late summer and fall 1998, as tracing activities were gearing up and prenotification letters (described below) were being mailed. Fewer personnel resources were available later in the fall, when we were preparing and debugging the survey instrument and training interviewers for the pretest interviews. The tracing interview protocol proved less useful for the fathers' sample, for at least two reasons. First, that sample was not finalized until early 1999, when paternity cases adjudicated as of December 31, 1998, could be identified. By this time, the CATI pretest and production phase of the project was beginning and tracing interviews were no longer being conducted. Second, we had telephone numbers for a much smaller fraction of the fathers' sample. Those cases for which we did have telephone numbers

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[20]The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 required the Secretary of Health and Human Services to develop the National Directory of New Hires, a database of information on all newly hired employees, quarterly wage reports, and unemployment insurance claims, in the country. The national new hire reporting program retains a state-based system for employers to report new hires. Once new hire information is entered into the State Directory of New Hires, states have two days to match this information to their child support caseloads and transmit an income withholding order to an employer.

received full effort, and the maximum number of call attempts, by tracing interviewers. The designated tracing staff, using an electronic database and other resources, worked on a larger share of the fathers' sample during this time as they searched for valid addresses and telephone numbers.

Tracing Conducted by Interviewers

Interviewers performed additional tracing activities as they attempted to contact the respondent or while conducting the interview. The efforts of in-person interviewers were critical to finding many respondents. If the respondent was not available at the address listed on the coversheet, personal interviewers were instructed to contact neighbors, the office manager of a rental property, or other possible leads to obtain a current address or telephone number for the respondent or someone who would know how to reach the respondent. The most diligent interviewers followed leads as tenuous as an indication that the respondent usually visited a nearby store or used a particular day care center to locate and eventually interview the mother or father. Interviewer business cards and letters in sealed envelopes left at the residence were used extensively to encourage respondents to participate in the study by contacting the interviewer or calling a toll-free number that was connected to the central telephone laboratory. Personal interviewers frequently included in the letters handwritten notes containing their cell phone numbers or reminding respondents of an interview appointment.

Telephone interviewers were trained to inquire about a current telephone or address for a respondent if a call attempt reached the incorrect household. This procedure included verifying the telephone number that was dialed as well as the address listed on the coversheet. Frequently, the telephone number and address did not correspond to the same location, and when an address was not determined to be wrong (even if the telephone number was incorrect), cases could be reassigned to CAPI more efficiently.

Finally, the survey instrument itself was designed to help locate members of the sample. At the completion of the interview, each respondent was asked for location information about the other parent of the focal child. We explained that in another part of the study we would like to contact the child's other parent and ask him or her to participate. The respondent was asked to provide contact information for the other parent or for someone who might know how to reach the other parent. Interviewers were instructed to record even scant information (e.g., "he is living in Arizona" or "I don't know the address but it's a yellow house near the intersection of 4th and Main"). Very often, these fragments helped tracing staff confirm or disconfirm a possible address or made it possible for personal interviewers to track down the correct household. At Time 1, 30.5 percent of mothers provided telephone numbers for the father in the sample and 43.9 percent gave some address information.[21] Somewhat higher proportions of fathers provided similar information about the mother—43.8 percent and 44.9 percent responded with telephone or address data, respectively.

Incentives

Survey participants received both prepaid and "promised" incentives at Time 1 and Time 2. The original survey design included incentives that would be paid after completing an interview. We expected that financial incentives would be very cost-effective, because in their absence the cost of locating and persuading respondents would be higher than the cost of the incentives. We decided to include prepaid incentives when we learned from other surveys of their effectiveness among similar populations and when the challenges of locating respondents, especially fathers, became more apparent.

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[21]We asked mothers for location information about the father only if the father was in the sample.

Survey participants were paid $15 after completing an interview at Time 1 and $25 after completing an interview at Time 2. Prenotification letters (see below) also included a one-dollar bill at Time 1 and a two-dollar bill at Time 2. Sample members were informed that they would receive a check for $15 ($25 at Time 2) after they completed an interview.

The amount of the incentive was the same for mothers and fathers, and we did not employ a strategy of "differential incentives" in which persons who were more difficult to locate or more difficult to interview would be offered a larger incentive. We believed that differential incentives were intrinsically unfair, might cause resentment that would harm efforts for follow-up interviews, or might encourage less cooperative behavior among sample members either in our own panel design or when contacted to participate in other studies. In particular, we expected that a significant proportion of mothers and fathers in the survey sample had at least some contact with each other. If information about differential incentives was shared by the two parties, it might foster resentment towards the study and its sponsor and possibly generate conflict between the couple.

We used prepaid incentives in the form of telephone calling cards that provided the recipient with 15 minutes of long distance telephone calls to any place in the United States. All the cards were valid when mailed; they did not require any action on the part of the recipient to activate them. At Time 1, we implemented this strategy on a small scale in an effort to achieve our response rate targets. We mailed approximately 250 calling cards to mothers and fathers for whom we did not have telephone numbers or could not reach by telephone and whose addresses were outside designated CAPI zones. The calling cards were enclosed with a letter encouraging the sample member to participate in the study and call a toll-free number to be interviewed. The cards had a generic "thank you" message on them.

At Time 2, we mailed telephone calling cards to all members of the sample. Again, the cards provided 15 minutes of long distance telephone calls to any place in the United States. The face of the card included the name of the survey and its logo as well as the words "Thank You" and the toll-free number of the telephone laboratory. The calling cards were mailed to mothers and fathers about four to six weeks after the beginning of each field period. Since some sample members would already have completed an interview while we would still be attempting to contact others, we enclosed the calling card in a letter thanking them for their help with the study. If they had not yet completed an interview, we encouraged them to call a toll-free telephone number to arrange to be interviewed.

Prenotification Letters

As preparation for the interviews at Time 1, we sent sample members three letters in advance, explaining the purpose of the study, how he or she was chosen for the interview, how their answers to the survey questions would be used, and assuring confidentiality and the voluntary nature of their participation. Each letter included what we believed to be the respondent's current address and telephone number and an address form and business reply envelope to confirm the information or to correct or complete the address and telephone number if any part was wrong or missing. Respondents could also call a toll-free number to provide correct or to rectify incomplete contact information. The letters included a one-dollar bill, promised $15 upon completion of the interview, and were signed by the principal investigators. The first letter was sent about three months before we began interviewing, the second was sent four to six weeks before, and the last letter was sent no more than one week before interviewing began.[22] By January 27, 1999, just a few

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[22]Some respondents received two letters instead of three because they were selected into the sample later—e.g., fathers who became eligible for the sample after we developed a final list of fathers for whom we could identify paternity as of December 31, 1998.

weeks before interviewing started, 39 percent of mothers and 21 percent of the fathers had returned the address forms.

The third letter also included a red refrigerator magnet, in the shape of the state of Wisconsin. It listed the name of the survey contractor and a toll-free telephone number, and encouraged the respondent to call us if he or she had not been contacted by March 1, 1999. A fourth letter containing the telephone calling card was mailed to a subset of mothers and fathers whom we had not been able to reach by telephone.

At Time 2, we also mailed mothers and fathers three letters. Each explained the purpose of the study, how he or she was chosen for the interview, how the results of the study would be used, and assuring confidentiality. Each letter included an address correction form, a business reply envelope, and a two-dollar bill, with a promise of a check for $25 upon completion of the interview. The first letter was sent approximately three months before we began interviewing, the second was sent 4–6 weeks before interviewing, and the last letter was sent no more than one week before interviewing began.

The first letter also included a newsletter that summarized highlights of what we had learned from preliminary analyses of the data we collected at Time 1. Separate newsletters were prepared based on the data collected from mothers and from fathers.

We again enclosed a red refrigerator magnet in the third letter. We had discovered at Time 1 that the magnet was an effective memory aid. Respondents recalled the magnet even when they had forgotten about the previous notification letters or the dollar bills. Personal interviewers carried the magnets and found them a very recognizable symbol of the survey, and telephone interviewers could refer to them effectively to help jog respondents' memories about previous contact with the study. We used the same magnet design at Time 2, altering the amount of the cash incentive noted on the face of the magnet and the date to call us if they had not spoken with an interviewer.

A fourth letter, which included the telephone calling card described above, was sent 4–6 weeks after fieldwork began.

Outcomes of Survey Fieldwork

Final Disposition of Cases

Tables TR5.6 and TR5.7 show the final disposition of cases at Time 1 and Time 2 for the original sample of 3,000. Data for the fathers show final outcomes for the full sample as well as the subsamples that received "full" and "partial" effort. (Appendix Tables TR5.1 through TR5.4 report final dispositions at Time 1 and Time 2 for mothers and fathers by experimental-control status.)

Tables TR5.6–7 contain two sections. The first or upper section lists the outcomes for cases that were eligible for the survey. The second or lower section lists categories of cases that were determined not to be eligible for the survey. Cases were ruled "out-of-scope," meaning ineligible, when there was new evidence from the sample frame (CARES and KIDS) indicating they were not part of the sample population. A mother, a father, or both the mother and the father could become out-of-scope when

1.   Errors identified in the sample frame or changes in the sample frame indicated that the mother never entered W-2 and thus was not exposed to the Child Support Demonstration (case was considered out-of-scope and both parents were deleted from the respective survey population and survey sample, see row labeled "Not in research population").

Table TR5.6
Final Disposition of Time 1 Survey Sample

Disposition	Mothers N	Mothers %	Fathers N	Fathers %	Full Effort N	Full Effort %	Partial Effort N	Partial Effort %
					Fathers, by Replicate Structure[a]			
Total Cases	3,000		3,000		1,000		2,000	
In-Scope (Eligible) Cases	2,876		1,926		673		1,253	
Interviewed								
Completed	2,362	82.1	643	33.4	289	42.9	354	28.3
Partially completed	54	1.9	61	3.2	19	2.8	42	3.4
Contacted but Not Interviewed								
Refusals	94	3.3	112	5.8	43	6.4	69	5.5
Persistently unavailable	44	1.5	64	3.3	28	4.2	36	2.9
No longer at address/phone	33	1.1	73	3.8	14	2.1	59	4.7
Located but Not Contacted								
Messages only/no address or phone	35	1.2	63	3.3	28	4.2	35	2.8
Answering machine/no answer	55	1.9	90	4.7	37	5.5	53	4.2
Not Located								
No location information[b]	18	0.6	185	9.6	19	2.8	166	13.2
Bad telephone number and/or address[c]	119	4.1	421	21.9	115	17.1	306	24.4
Other Reasons for No Interview								
Language barrier	34	1.2	19	1.0	7	1.0	12	1.0
Too ill/disabled to participate	3	0.1	6	0.3	4	0.6	2	0.2
Incarcerated	22	0.8	171	8.9	65	9.7	106	8.5
Not fielded[d]	1	0.0	8	0.4	2	0.3	6	0.5
Not pursued in error[e]	2	0.1	5	0.3	0	0.0	5	0.4
Other nonresponse[f]	0	0.0	5	0.3	3	0.4	2	0.2

| Disposition | Mothers | | Fathers | | Fathers, By Replicate Structure[a] | | | |
| | | | | | Full Effort | | Partial Effort | |
	N	%	N	%	N	%	N	%
Out-of-Scope (Ineligible) Cases	124		1,074		327		747	
Not in research population	100	80.6	100	9.3	34	10.4	66	8.8
W-2 entry date after 7/8/1998	8	6.5	8	0.7	1	0.3	7	0.9
CARES confidential case	6	4.8	6	0.6	3	0.9	3	0.4
Selected focal child not resident parent's child[g]	3	2.4	2	0.2	1	0.3	1	0.1
Nonresident parent in good-cause case 12/31/1998	0	0.0	5	0.5	2	0.6	3	0.4
Nonresident parent was minor 1/1/1999	0	0.0	5	0.5	2	0.6	3	0.4
No legal father identified/not in sample	0	0.0	912	84.9	276	84.4	636	85.1
Deceased								
Resident parent died before 12/31/1998	2	1.6	2	0.2	0	0.0	2	0.3
Resident parent reported dead at interview	2	1.6	0	0.0	0	0.0	0	0.0
Nonresident parent died before 12/31/1998	0	0.0	21	2.0	3	0.9	18	2.4
Nonresident parent reported dead at interview	0	0.0	10	0.9	4	1.2	6	0.8
Focal child died before 12/31/1998	3	2.4	3	0.3	1	0.3	2	0.3

[a]Fathers in survey replicates 1–10 were eligible for telephone and in-person interviews. Fathers in replicates 11–30 were eligible for telephone interviews only; hence "full effort" and "partial effort."

[b]Cases not attempted because we had no address information or address was a post office box, or person was outside the zone for in-person interviews.

[c]Includes some cases where the address was assumed to be good but was outside the zone for in-person interviews.

[d]Cases not included in the fieldwork because we believed they were ineligible at the time of the survey.

[e]Cases not pursued by interviewers because they were incorrectly believed to be ineligible.

[f]Among the father's sample, includes 3 cases in which the respondent claimed not to be the focal child's father and 2 cases in which we did not pursue an interview with the father because the mother expressed fear for her safety or the safety of her children.

[g]Mothers' data includes 1 case in which the respondent identified herself as the child's grandmother, but this relationship was not confirmed by CARES.

Final Disposition of Time 2 Survey Sample

Disposition	Mothers		Fathers		Fathers, By Replicate Structure[a]			
					Full Effort		Partial Effort	
	N	%	N	%	N	%	N	%
Total Cases	3,000		3,000		1,000		2,000	
In-Scope (Eligible) Cases	2,871		2,123		735		1,388	
Interviewed								
Completed	2,354	82.0	696	32.8	340	46.3	356	25.6
Partially completed	20	0.7	18	0.8	5	0.7	13	0.9
Contacted but Not Interviewed								
Refusals	82	2.9	89	4.2	36	4.9	53	3.8
Persistently unavailable	39	1.4	123	5.8	27	3.7	96	6.9
No longer at address/phone	9	0.3	25	1.2	11	1.5	14	1.0
Located but Not Contacted								
Messages only/no address or phone	48	1.7	62	2.9	34	4.6	28	2.0
Answering machine/no answer	27	0.9	123	5.8	19	2.6	104	7.5
Not Located								
No location information[b]	39	1.4	334	15.7	32	4.4	302	21.8
Bad telephone number and/or address[c]	178	6.2	439	20.7	126	17.1	313	22.6
Other Reasons for No Interview								
Language barrier	27	0.9	15	0.7	5	0.7	10	0.7
Too ill/disabled to participate	1	0.0	3	0.1	2	0.3	1	0.1
Incarcerated	29	1.0	168	7.9	82	11.2	86	6.2
Not fielded[d]	13	0.5	18	0.8	10	1.4	8	0.6
Not pursued in error[e]	0	0.0	4	0.2	3	0.4	1	0.1
Fielded with error[f]	5	0.2	1	0.0	1	0.1	0	0.0
Other nonresponse[g]	0	0.0	5	0.2	2	0.3	3	0.2

| | Mothers | | Fathers | | Fathers, By Replicate Structure[a] | | | |
| | | | | | Full Effort | | Partial Effort | |
Disposition	N	%	N	%	N	%	N	%
Out-of-Scope (Ineligible) Cases	129		877		265		612	
Not in research population	100	77.5	100	11.4	34	12.8	66	10.8
W-2 entry date after 7/8/1998	8	6.2	8	0.9	1	0.4	7	1.1
CARES confidential case	6	4.7	6	0.7	3	1.1	3	0.5
Selected focal child not resident parent's child[h]	3	2.3	2	0.2	1	0.4	1	0.2
Nonresident parent in good-cause case 12/31/1998	0	0.0	6	0.7	2	0.8	4	0.7
Nonresident parent was minor 1/1/1999	0	0.0	1	0.1	0	0.0	1	0.2
No legal father identified/not in sample	0	0.0	715	81.5	216	81.5	499	81.5
Deceased								
Resident parent died before 12/31/1998	2	1.6	2	0.2	0	0.0	2	0.3
Resident parent died before 12/31/1999	4	3.1	4	0.5	2	0.8	2	0.3
Resident parent reported dead at interview	1	0.8	0	0.0	0	0.0	0	0.0
Nonresident parent died before 12/31/1998	0	0.0	0	0.0	0	0.0	0	0.0
Nonresident parent died before 12/31/1999	0	0.0	21	2.4	3	1.1	18	2.9
Nonresident parent reported dead at interview	0	0.0	7	0.8	1	0.4	6	1.0
Focal child died before 12/31/1998	3	2.3	3	0.3	1	0.4	2	0.3
Focal child died before 12/31/1999	2	1.6	2	0.2	1	0.4	1	0.2

[a]Fathers in survey replicates 1–10 were eligible for telephone and in-person interviews. Fathers in replicates 11–30 were eligible for telephone interviews only; hence "full effort" and "partial effort."

[b]Cases not attempted because we had no information or address was a post office box, or person was outside the zone for in-person interviews.

[c]Includes some cases where the address was assumed to be good but was outside the zone for in-person interviews.

[d]Cases not included in the fieldwork because we believed they were ineligible at the time of the survey.

[e]Cases not pursued by interviewers because they were incorrectly believed to be ineligible.

[f]Cases in which a different focal child was inadvertently selected at Time 2.

[g]Among the fathers' sample, includes 1 case in which the respondent claimed not to be the focal child's father and 4 cases in which we did not pursue an interview with the father because the mother expressed fear for her safety or the safety of her children.

[h]Mothers' data includes 2 cases in which the respondent identified herself as a relation other than biological or adoptive mother to the focal child, but this relationship was not confirmed by CARES.

2.   There was an error in the W-2 entry date and, contrary to our original belief, the case entered W-2 after July 8, 1998 (case was considered out-of-scope and both parents were deleted from the respective survey population and survey sample).

3.   The mother was not the biological or adopted mother of the child but a grandmother or other relative (case was considered out-of-scope and both parents were deleted from the respective survey population and survey sample).

4.   The focal child died before December 31, 1998 (Time 1) or before December 31, 1999 (Time 2) (case was considered out-of-scope and both parents were deleted from the respective survey population and survey sample).

5.   Errors or changes in the sample frame indicated that the father was not the legal father of the focal child. (The W-2 case was considered in-scope for the survey sample population, but there was no eligible father for the case.)[23]

6.   The individual was reported dead at the time of the survey. (The individual mother or father was considered out-of-scope for the corresponding survey sample but the surviving parent remained eligible and in-scope.)

All other cases were considered in-scope and eligible for the survey.[24] Aside from 20 to 30 percent of the 3,000 cases at Time 1 and Time 2 for which a legal father was not identified, errors or changes in CARES and KIDS that removed cases from the sample population were the largest source of ineligible cases. A total of 100 cases were eliminated from the original survey sample because they were found to be ineligible. Small numbers of cases became out-of-scope because they entered W-2 after July 8, 1998, a good-cause exemption was identified, or a parent or the focal child died. Six cases originally selected were removed from the survey population because they were designated as "confidential" cases in the CARES system.[25]

The upper section of Table TR5.6 shows that we completed interviews with 82.1 percent of mothers who were eligible at Time 1. We were less successful among fathers, completing interviews with only one-third of the 1,926 cases that were eligible. Partial interviews represent a small fraction of survey outcomes. Most of the partial interviews ended early in the instrument—after the individual respondent was identified but before a household roster was collected—although a small number completed almost one-half or more of the interview. Efforts to contact the respondent and complete the interview were unsuccessful.

Table TR5.6 also provides information on the main sources of nonresponse (i.e., failure to gain an interview). Refusal rates are respectably low among mothers and fathers, ranging from 3 to 6 percent. This

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[23]These tables show the cases, among the original 3,000, where there was not a legal father for the focal child. They do not show separate categories for cases in which we originally selected a father and later determined that he was not the legal father or cases in which we did not select a father and subsequently identified a paternity that had been adjudicated.

[24]Evidence used to determine that a case was out-of-scope derived almost entirely from CARES and KIDS. These changes or errors in the administrative data were sometimes identified long after we selected the sample and began fieldwork. As a result, we completed interviews with sample members who were later designated as out-of-scope. At Time 1, we interviewed 83 mothers and 52 fathers who were out-of-scope; at Time 2, 73 mothers and 32 fathers were not included in the survey population. These cases are excluded from the analyses.

[25]Technical Report 1 and Technical Report 2 provide detailed information on the numbers of cases excluded from the research and survey populations and reasons for the exclusions.

figure rises to about 10 percent among mothers and 20 percent among fathers if we include cases involving partial interviews, persistent unavailability, broken appointments, or unanswered messages as polite forms of refusal. It is likely that some, but certainly not all, of these cases represent a passive decline to participate. A more important source of nonresponse, especially among fathers, was our inability to locate the respondent. Over 30 percent of fathers could not be interviewed at Time 1 because we did not have a valid address or telephone number. This figure drops to 20 percent among the subsample of fathers who were eligible for full effort (in-person and telephone interviews), but remains a significant source of nonresponse.

A small fraction of mothers and fathers could not be interviewed at Time 1 because they were too ill, because of fielding errors,[26] or language barriers. We prepared only an English-language instrument and instructed interviewers not to translate the questionnaire, in part or in whole, into another language. A few Spanish-speaking interviewers were used to talk to people not in the sample who answered the phone or the door and who did not speak English, in order to make contact with sample members. A small number of fathers were not interviewed because they claimed that they were not the father of the focal child or because the mother requested that we not contact the father because she feared for her safety or the safety of her children.

Almost 9 percent of fathers were not interviewed because we located them in prison and they remained there throughout the field period. These fathers were part of the survey population and eligible for the survey, but we chose not to conduct interviews in prison. Our choice was governed by restrictions for conducting research with prisoners and by our belief that substantial portions of the survey instrument would be inapplicable for imprisoned fathers. A thorough understanding of these fathers' situations and their experiences with their children required a different survey instrument that could not be developed and fielded in the time available.

The distribution of final dispositions at Time 2 shows a similar pattern (Table TR5.7). We completed interviews with 82 percent of mothers and about one-third of fathers. We were more successful among fathers in the full-effort replicates at Time 2, completing interviews with 46.3 percent of them, but we fared less well in the partial-effort replicates (25.6 percent). Refusal rates decreased at Time 2 for mothers and fathers: even the most comprehensive definition of refusal yields 7 and 15 percent of mothers and fathers, respectively. In contrast, slightly larger proportions of mothers and fathers could not be located for the second survey. At Time 1, we could not locate about 5 percent of mothers and 31 percent of fathers; these figures rose to almost 8 and 36 percent at Time 2.

Response Rates

Table TR5.8 reports response rates for mothers, fathers, and couples at Time 1 and Time 2. We report response rates for Time 1 and Time 2 as cross-sectional surveys as well as a panel response rate—i.e., a panel composed of persons who completed both interviews. Response rates are computed as the number of completed interviews divided by the total number of eligible cases. Specifically, a response rate (RR) is computed as

$$RR = I / (I + P + R + NC + O)$$

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[26]Cases that at the time of the survey were thought to be ineligible and were later found to be eligible.

where

       I = Complete interview

       P = Partial interview

       R = Refusal

       NC = Noncontact

       O = Other noninterview

"Noncontact" includes persons who were located but with whom we could not make contact as well as persons who could not be located. "Other noninterview" includes cases in which the person was too ill to be interviewed, could not be interviewed in English, was incarcerated, was eligible but not fielded, was not pursued in error, or was fielded with errors. Partial interviews are not included in the numerator, and data from partial interviews are not analyzed in the evaluation, because they were small in number and most ended too early in the instrument to provide useful data across research domains.

Cases are omitted from the denominator if they are ruled ineligible or "out-of-scope," as described in the preceding section. Individual mothers and fathers also are excluded from the denominator if they were reported dead at the time of the survey, even if this information was not confirmed in CARES or KIDS. Other than a report of death, we make the conservative assumption that all nonlocated and noncontacted cases were eligible for the survey (in-scope) unless an error or change in CARES or KIDS ruled them ineligible.

We consistently achieved high response rates for the mothers' sample, completing interviews with 82 percent of mothers at Time 1 and Time 2 and 73 percent of the panel at both time periods. Among all fathers in the sample, we completed interviews with about one-third at Time 1 and Time 2 and 22 percent in the panel. Completion rates for fathers in the subsample eligible for telephone and in-person interviews were higher (43 and 46 percent), but the panel component represents only 32 percent of nonresident fathers in the sample population. We completed interviews with about 30 percent of couples at Time 1 and Time 2, but less than 20 percent in the panel. The low response rate among fathers depresses the rate of completions among couples, though there are some cases in which we interviewed the father but not the mother. Response rates computed at Time 1, Time 2, and as a panel differ slightly by experimental-control status, but they do not follow a consistent pattern over time or across samples and no differences are statistically significant.

Although the response rates for the fathers are lower than those often reported by surveys of the general population, they compare favorably with other studies of separated families. The Child Development Supplement of the Panel Study of Income Dynamics completed interviews with 19.8 percent of the fathers who lived apart from the children in its sample. The resident parent (or "primary caregiver") would not provide information about the father in almost one-third of the cases. Among those cases where the father was identified—a set of cases with roughly comparable location information available in our study—interviews were completed with 28.5 percent of the fathers (Hofferth et al., 1997). This figure is similar to ours of 33.4 and 32.8 percent. The Parents' Fair Share (PFS) study, one of the few other studies that attempted to interview low-income nonresident fathers, achieved much higher response rates (ranging from 74 to 82 percent across different sites and intake periods). However, the PFS sample and study design differ markedly from the Survey of Wisconsin Works Families and contribute, in ways that cannot be easily quantified, to its success. For example, PFS focused specifically on fathers during sample design and selection. It recruited fathers into the study after their participation in a court hearing about child support

Table TR5.8
Response Rates for Mothers, Fathers, and Couples at Time 1 and Time 2 (Percentages)

	All	Experimental Group	Control Group	E-C Difference	P-value
Mothers					
Time 1	82.1%	83.2%	81.1%	2.2%	0.1
Time 2	82.0	81.8	82.2	-0.5	0.8
T1 and T2 Panel	72.6	72.8	72.5	0.3	0.8
Fathers (All)					
Time 1	33.4	33.0	33.8	-0.9	0.7
Time 2	32.8	33.6	32.0	1.5	0.5
T1 and T2 Panel	22.3	22.7	21.8	1.0	0.6
Fathers (Full Effort)[b]					
Time 1	42.9	44.2	41.8	2.4	0.5
Time 2	46.3	47.4	45.2	2.3	0.5
T1 and T2 Panel	31.5	31.2	31.9	-0.7	0.8
Fathers (Partial Effort)[b]					
Time 1	28.3	27.2	29.3	-2.1	0.4
Time 2	25.7	26.6	24.6	2.0	0.4
T1 and T2 Panel	17.3	18.4	16.1	2.4	0.3
Couples					
Time 1	29.8	29.6	30.1	-0.5	0.8
Time 2	29.0	29.9	28.1	1.8	0.4
T1 and T2 Panel	18.3	18.8	17.9	0.9	0.6

[a]Response rates are computed as the number of completed interviews divided by the total number of eligible cases.
[b]Fathers in survey replicates 1 through 10 were eligible for telephone or in-person interviews, or "full effort."
Fathers in survey replicates 11 through 30 were eligible only for telephone interviews, or "partial effort."

and after a referral from a local child support enforcement agency. In addition, the PFS program involved services provided directly to fathers (e.g., job search, skills training, peer support) (Abt Associates, 1997). These characteristics of the design and program intervention should have increased the level of contact with fathers over the study period and made it much easier to locate and interview fathers. In contrast, the sample design for the Survey of Wisconsin Works Families focuses on the resident mother, her entry into the W-2 program, and her eligibility for child support. We sampled fathers indirectly, through their attachment to a W-2 case and subsequent identification of their paternity of a focal child. The child support pass-through policy itself is probably only remotely associated with a father's recognition of the survey, and he does not reap any direct benefit from the policy under evaluation.

Characteristics of the Target Survey Samples and the Achieved Samples

Tables TR5.9 and TR5.10 show descriptive statistics of mothers and fathers in the Time 1 and Time 2 survey samples—all mothers and fathers who were eligible for interviews—and the achieved samples—the mothers and fathers with whom we completed interviews. Comparing characteristics of these different groups allows us to make an initial assessment of how well the respondents reflect the survey populations from which they were selected.[27]

We examine two types of achieved samples: all mothers and fathers who were in-scope and completed interviews, and the analysis sample, the subset of cases in which the mother was interviewed and met our definition of "resident parent" at the time of the interview and the father was interviewed and met our definition of "nonresident parent" at the time of the interview.[28] The mother was considered to be the resident parent of the focal child if, based on her survey responses, the child lived with her at least six months during the reference year or "usually" lived with her.[29] The father was included in the analysis sample as a nonresident parent unless he and the focal child lived together, apart from the mother, at least six months during the reference year. (Fathers are included in the analysis survey sample if mother-father-child lived together during the reference year.) The few cases in which the focal child was reported dead at the time of the interview also were excluded from the analysis sample. The analysis sample is thus the sample of survey participants used to test hypotheses outlined in the evaluation plan and discussed in Volume I.

The first three columns of Table TR5.9 show characteristics at W-2 entry of all mothers eligible for interviews at Time 1 (the survey sample), of all mothers who completed interviews (in-scope respondents), and of mothers who completed interviews and were resident parents of a focal child during 1998 (the analysis sample). The survey and achieved samples at Time 1 and Time 2 share similar characteristics. Achieved samples had slightly higher proportions of residents from Milwaukee County at the expense of other urban counties, and Hispanics and Native Americans were less likely to be represented than whites and African Americans. Respondents included a slightly higher proportion of mothers who had child support orders established at W-2 entry, and they were more likely to have paternity established for at

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[27]See Technical Report 6 for analyses that compare respondents and nonrespondents.

[28]Although the sample design excluded cases in which someone other than the mother was the resident parent at W-2 entry, physical placement of the focal child may have changed after the sample was selected.

[29]The use of "usual residence" to define resident parent status for mothers was meant to cover situations in which the focal child was very young and may not have been born until after July 1998. In practice, a small number of cases were defined as a resident parent based on "usual residence," but this included a few situations in which the child was several years old and had not lived with the mother for six months during the reference year.

Table TR5.9
Initial Characteristics of Mothers in the Survey Samples and Achieved Samples at Time 1 and Time 2 (Weighted Percentages)

	Time 1						Time 2					
	Survey Sample[a]		In-Scope Respondents		Survey Analysis Sample		Survey Sample[b]		In-Scope Respondents		Survey Analysis Sample	
	N	%	N	%	N	%	N	%	N	%	N	%
Total Cases	2,884		2,362		2,295		2,873		2,354		2,242	
Age												
16–17	1	0.0	1	0.0	1	0.0	1	0.0	0	0.0	0	0.0
18–25	1,425	48.9	1,164	49.0	1,138	49.0	1,423	49.1	1,168	49.4	1,128	50.1
26–30	597	20.8	505	21.4	489	21.4	596	20.9	485	20.5	456	20.2
31 or older	860	30.2	692	29.6	667	29.6	853	30.0	701	30.1	658	29.7
Race												
White	834	25.3	708	26.3	681	26.0	827	25.2	703	26.1	652	25.3
African American	1,682	62.0	1,396	62.9	1,364	63.2	1,678	62.0	1,404	63.3	1,354	64.0
Hispanic	190	6.9	133	5.8	129	5.8	190	6.9	129	5.6	123	5.7
Native American	70	2.1	49	1.9	47	1.8	70	2.1	44	1.7	41	1.7
Asian	27	1.0	10	0.4	9	0.4	27	1.0	10	0.4	9	0.4
Other	1	0.0	1	0.1	1	0.1	1	0.0	0	0.0	0	0.0
Unknown	80	2.7	65	2.7	64	2.7	80	2.7	64	2.8	63	2.9
Education												
Less than high school	1,449	52.6	1,167	51.9	1,128	51.7	1,447	52.7	1,157	51.4	1,082	50.6
High school	1,131	37.9	938	38.4	917	38.7	1,126	37.8	940	38.9	909	39.5
More than high school	304	9.5	257	9.7	250	9.7	300	9.4	257	9.7	251	9.9
Language												
English speaker	2,826	97.7	2,343	99.1	2,276	99.0	2,815	97.7	2,334	99.0	2,223	99.1
Non-English-speaker	58	2.3	19	0.9	19	1.0	58	2.3	20	1.0	19	1.0

	Time 1						Time 2					
	Survey Sample[a]		In-Scope Respondents		Survey Analysis Sample		Survey Sample[b]		In-Scope Respondents		Survey Analysis Sample	
	N	%	N	%	N	%	N	%	N	%	N	%
Residential Location												
Milwaukee County	2,030	75.6	1,676	76.0	1,638	76.4	2,026	75.7	1,681	76.5	1,620	77.4
Other urban counties	509	15.3	398	14.8	378	14.5	503	15.2	404	14.9	370	14.3
Rural counties and tribes	345	9.1	288	9.2	279	9.1	344	9.1	269	8.6	252	8.4
Employment History[c]												
No UI-covered employment	523	20.1	409	19.5	403	19.8	522	20.1	387	18.5	368	18.6
1–4 quarters	1,111	42.3	900	42.0	871	41.9	1,108	42.4	903	42.3	854	42.1
5–7 quarters	807	25.9	671	26.2	653	26.2	804	25.8	688	26.9	664	27.1
All 8 quarters	443	11.7	382	12.2	368	12.2	439	11.7	376	12.3	356	12.3
Earnings History[c]												
$0	523	20.1	409	19.5	403	19.8	522	20.1	387	18.5	368	18.6
$1–$5,000	1,863	67.0	1,519	66.8	1,465	66.3	1,857	67.1	1,535	67.7	1,456	67.4
$5,001–$15,000	461	12.1	400	12.8	394	13.0	458	12.1	397	12.9	385	13.1
$15,001 or more	37	0.8	34	0.9	33	0.9	36	0.8	35	0.9	33	0.9
AFDC Receipt[c]												
None	616	13.1	488	12.6	477	12.7	612	13.1	490	12.8	467	12.8
1–18 months	1,012	33.1	831	32.8	805	32.7	1,009	33.1	829	32.8	786	32.5
19–24 months	1,256	53.9	1,043	54.7	1,013	54.6	1,252	53.9	1,035	54.5	989	54.7
Number of Children												
None	35	0.7	29	0.7	29	0.7	35	0.7	28	0.7	28	0.7
One	1,036	33.9	843	33.7	835	34.4	1,030	33.9	844	34.0	821	34.7
Two	823	28.3	678	28.5	661	28.4	819	28.2	687	28.8	662	29.1
Three or more	990	37.1	812	37.1	770	36.5	989	37.2	795	36.5	731	35.5

	Time 1						Time 2					
	Survey Sample[a]		In-Scope Respondents		Survey Analysis Sample		Survey Sample[b]		In-Scope Respondents		Survey Analysis Sample	
	N	%	N	%	N	%	N	%	N	%	N	%
Age of Youngest Child												
Unborn	311	9.5	253	9.4	246	9.4	310	9.5	249	9.3	233	9.2
0–2	1,395	49.0	1,156	49.9	1,124	49.9	1,389	49.0	1,131	48.7	1,085	49.0
3–5	505	17.8	410	17.5	403	17.7	504	17.8	418	18.0	403	18.3
6–12	556	19.3	451	19.1	433	18.9	553	19.2	457	19.4	429	19.0
12–18	117	4.4	92	4.1	89	4.1	117	4.4	99	4.6	92	4.5
Focal Child's Parentage												
Legal father, unknown how	5	0.2	2	0.1	2	0.1	5	0.2	5	0.2	4	0.2
Nonmarital child	2,515	88.5	2,060	88.6	2,003	88.6	2,505	88.6	2,053	88.6	1,963	88.9
Marital child	364	11.3	300	11.4	290	11.3	363	11.3	296	11.2	275	10.9
Number of Legal Fathers												
No legal father	892	29.2	699	28.1	682	28.1	887	29.2	681	27.4	653	27.5
One	1,469	51.9	1,214	51.9	1,181	52.1	1,464	51.9	1,223	52.7	1,159	52.6
Two or more	523	18.9	449	20.0	432	19.8	522	18.9	450	19.9	430	20.0
Child Support Order[d]												
No order	1,329	43.4	1,039	41.4	1,011	41.5	1,324	43.5	1,022	41.1	970	40.8
Has order	1,555	56.6	1,323	58.6	1,284	58.5	1,549	56.5	1,332	58.9	1,272	59.2
Child Support Paid by All Nonresident Parents[c]												
$0	1,928	66.2	1,543	64.8	1,501	65.0	1,921	66.3	1,534	64.6	1,471	64.9
$1–$999	450	16.5	385	17.3	371	17.1	446	16.4	384	17.3	354	16.8
$1,000 or more	506	17.3	434	17.9	423	18.0	506	17.3	436	18.2	417	18.3

	Time 1						Time 2					
	Survey Sample[a]		In-Scope Respondents		Survey Analysis Sample		Survey Sample[b]		In-Scope Respondents		Survey Analysis Sample	
	N	%	N	%	N	%	N	%	N	%	N	%
Research Group Assignment												
Control	1,438	49.5	1,163	48.9	1,121	48.4	1,434	49.6	1,179	50.0	1,113	49.7
Experimental	1,446	50.5	1,199	51.1	1,174	51.6	1,439	50.5	1,175	50.0	1,129	50.3
Case Type												
AFDC	1,485	70.2	1,224	70.5	1,185	70.4	1,478	70.2	1,216	70.4	1,165	70.7
W-2	1,399	29.8	1,138	29.5	1,110	29.7	1,395	29.8	1,138	29.6	1,077	29.3
Initial W-2 Assignment												
W-2 Transition	264	8.9	210	8.5	201	8.3	262	8.8	201	8.2	185	7.9
Community Service Job	1,277	51.3	1,043	51.4	1,014	51.4	1,275	51.4	1,052	51.9	1,005	52.2
Caretaker of Newborn	307	8.9	251	8.8	243	8.9	304	8.8	244	8.5	230	8.4
Upper tier	1,036	31.0	858	31.3	837	31.4	1,032	31.0	857	31.4	822	31.5
Quarter of Entry												
4th quarter of 1997	1,321	54.2	1,071	53.4	1,037	53.2	1,316	54.2	1,071	53.8	1,014	53.4
1st quarter of 1998	946	36.4	795	37.4	776	37.6	942	36.4	783	36.9	757	37.4
2nd quarter of 1998	617	9.4	496	9.2	482	9.2	615	9.4	500	9.3	471	9.2

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]Of the 2,884 mothers in the Time 1 survey sample, 2,876 were deemed in-scope. The sample of 2,884 included two cases in which the resident mother was reported dead at interview and one case in which the sample member claimed to be the focal child's grandmother. In addition, 5 cases in the Time 1 survey sample were never fielded because either the mother or the focal child died before December 31, 1998.

[b]The Time 2 survey sample excludes 11 cases listed in the Time 1 survey sample: 6 cases in which the mother died before December 31, 1999, and 5 cases in which the focal child died before December 31, 1999.

[c]In the twelve months prior to October 1, 1997.

[d]As of October 1, 1997.

Table TR5.10
Initial Characteristics of Fathers in the Survey Samples and Achieved Samples at Time 1 and Time 2 (Weighted Percentages)

	Time 1						Time 2					
	Survey Sample		In-Scope Respondents		Survey Analysis Sample		Survey Sample		In-Scope Respondents		Survey Analysis Sample	
	N	%	N	%	N	%	N	%	N	%	N	%
Total Cases	1,936		643		575		2,130		696		608	
Age												
16–17	14	0.9	5	1.0	5	1.1	22	1.2	5	0.8	5	0.9
18–25	621	35.0	205	34.7	180	33.8	717	36.1	222	35.6	200	36.1
26–30	489	24.4	160	24.2	145	24.5	519	23.6	154	21.7	133	21.8
31 or older	802	39.3	272	40.1	244	40.5	859	38.5	313	41.9	269	41.1
Unknown	10	0.4	1	0.1	1	0.1	13	0.7	2	0.1	1	0.1
Race												
White	326	16.1	154	22.3	142	22.9	361	16.2	170	23.3	149	23.6
African American	774	41.5	226	37.0	199	36.4	882	42.7	246	36.2	224	37.6
Hispanic	95	5.1	21	3.1	18	3.0	108	5.4	22	3.1	19	3.1
Native American	32	1.7	11	1.9	9	1.8	35	1.7	10	1.6	8	1.5
Asian	7	0.4	0	0.0	0	0.0	7	0.3	0	0.0	0	0.0
Unknown	702	35.3	231	35.7	207	35.9	737	33.8	248	35.8	208	34.2
Employment History[a]												
No UI-covered employment	522	26.0	99	14.2	89	14.3	589	26.9	129	18.2	116	18.6
1–4 quarters	459	24.3	130	21.2	119	21.5	505	23.9	157	22.6	142	23.5
5–7 quarters	418	21.7	170	26.1	153	26.3	452	21.5	174	26.1	154	26.1
All 8 quarters	454	24.2	223	35.4	196	34.8	490	23.7	217	30.8	184	30.1
Unknown/missing SSN	83	3.9	21	3.2	18	3.1	94	4.1	19	2.3	12	1.6

	Time 1						Time 2					
	Survey Sample		In-Scope Respondents		Survey Analysis Sample		Survey Sample		In-Scope Respondents		Survey Analysis Sample	
	N	%	N	%	N	%	N	%	N	%	N	%
Earnings History[a]												
$0	522	26.0	99	14.2	89	14.3	589	26.9	129	18.2	116	18.6
$1–$5,000	718	38.5	229	37.7	208	38.1	789	38.2	255	38.9	227	39.3
$5,001–$15,000	405	21.3	190	29.1	165	27.9	441	20.9	199	28.2	176	28.1
$15,001 or more	208	10.4	104	16.0	95	16.7	217	10.0	94	12.4	77	12.4
Unknown/missing SSN	83	3.9	21	3.2	18	3.1	94	4.1	19	2.3	12	1.6
Focal Child's Parentage												
Legal father, unknown how	4	0.2	2	0.2	2	0.2	5	0.2	2	0.2	2	0.2
Paternity established	1,602	83.4	508	81.5	459	82.1	1,772	83.8	555	82.3	496	83.9
Father by marriage	330	16.4	133	18.3	114	17.7	353	16.0	139	17.5	110	15.9
Number of Children with Resident Parent												
None	15	0.6	10	1.3	10	1.5	23	0.9	14	1.7	14	2.0
One	1,247	60.6	408	61.1	373	62.6	1,387	61.7	437	60.0	385	60.5
Two	448	24.6	162	26.3	140	25.4	476	23.7	169	25.9	148	25.8
Three or more	226	14.2	63	11.2	52	10.5	244	13.8	76	12.5	61	11.8
Age of Youngest Child with Resident Parent												
Unborn	33	1.9	13	2.2	12	2.3	44	2.2	19	3.3	19	3.8
0–2	619	36.5	225	38.6	207	39.6	747	39.2	244	38.7	219	39.1
3–5	509	26.4	158	25.0	135	23.6	524	24.8	175	25.8	155	26.1
6–12	652	29.5	208	28.8	186	29.0	685	28.3	213	26.5	177	25.2
12–18	123	5.8	39	5.3	35	5.6	130	5.5	45	5.7	38	5.9
Number of Legal Fathers on Resident Parent's Case												
None	209	12.1	79	13.3	77	14.4	329	17.0	115	17.9	110	19.4
One	1,240	72.3	416	73.4	369	73.0	1,310	68.8	424	68.8	358	67.0
Two or more	487	15.5	148	13.3	129	12.6	491	14.2	157	13.3	140	13.6

	Time 1						Time 2					
	Survey Sample		In-Scope Respondents		Survey Analysis Sample		Survey Sample		In-Scope Respondents		Survey Analysis Sample	
	N	%	N	%	N	%	N	%	N	%	N	%
Child Support Order with Resident Parent[b]												
No order	653	33.0	217	31.8	193	31.7	817	37.6	254	35.1	219	34.8
Has order	1,283	67.0	426	68.2	382	68.3	1,313	62.4	442	64.9	389	65.3
Child Support Paid to Resident Parent[a]												
$0	1,231	63.9	327	51.8	302	52.9	1,412	66.5	395	58.0	348	57.8
$1–$999	347	18.1	146	22.4	121	21.2	354	16.7	136	19.9	118	20.2
$1,000 or more	358	18.0	170	25.9	152	25.9	364	16.8	165	22.1	142	22.0
Education of Resident Parent												
Less than high school	911	47.9	286	45.5	254	45.5	1,018	48.5	317	47.6	275	47.6
High school	798	41.0	274	42.2	247	42.7	866	40.4	284	40.4	250	40.6
More than high school	227	11.1	83	12.3	74	11.9	246	11.1	95	12.0	83	11.8
Location of Resident Parent												
Milwaukee County	1,324	72.2	390	64.6	345	64.4	1,460	72.5	426	65.9	375	66.1
Other urban counties	341	16.0	121	17.7	106	17.3	374	15.8	135	17.7	115	17.6
Rural counties and tribes	271	11.9	132	17.7	124	18.4	296	11.8	135	16.4	118	16.4
Research Group of Resident Parent												
Control	966	49.0	325	50.4	292	50.3	1,068	49.5	341	49.2	295	48.6
Experimental	970	51.0	318	49.6	283	49.7	1,062	50.5	355	50.8	313	51.4
Case Type of Resident Parent												
AFDC	1,072	71.0	324	66.2	287	65.5	1,131	68.8	358	67.4	315	67.9
W-2	864	29.0	319	33.8	288	34.5	999	31.2	338	32.6	293	32.1

	Time 1						Time 2					
	Survey Sample		In-Scope Respondents		Survey Analysis Sample		Survey Sample		In-Scope Respondents		Survey Analysis Sample	
	N	%	N	%	N	%	N	%	N	%	N	%
Initial W-2 Assignment of Resident Parent												
W-2 Transition	196	10.2	71	11.9	62	11.5	208	9.9	79	12.1	64	11.4
Community Service Job	811	48.2	237	43.3	217	44.4	892	48.2	255	43.4	227	43.5
Caretaker of Newborn	158	7.1	66	9.2	60	9.2	209	8.6	82	10.5	72	10.7
Upper tier	771	34.5	269	35.7	236	34.9	821	33.3	280	34.0	245	34.4
Quarter of Resident Parent's Entry												
4th quarter of 1997	937	56.0	310	56.2	279	56.5	1,011	55.4	341	57.2	298	58.1
1st quarter of 1998	632	35.2	214	35.3	189	35.2	684	34.9	214	33.1	183	32.0
2nd quarter of 1998	367	8.8	119	8.5	107	8.3	435	9.7	141	9.8	127	10.0

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]In the twelve months prior to October 1, 1997.
[b]As of October 1, 1997.

least one child, but were somewhat less likely to receive child support. Since interviews were conducted only in English, it is not surprising that almost all respondents (99 percent) were listed as English speakers in the administrative data. There are almost no differences between the sample of all respondents and the analysis samples that exclude nonresident mothers.

Differences between the survey and achieved samples for fathers at Time 1 and Time 2 are greater than among mothers (Table TR5.10). Compared with the survey samples as a whole, the achieved samples of all respondents at Time 1 and Time 2 appear to represent a more advantaged group. Respondents included a higher proportion of fathers who were white and relatively fewer African Americans or Hispanics; over one-third of respondents were employed for all eight quarters prior to W-2 entry (compared with 24 percent in the target sample), with corresponding differences in earnings; and they were more likely to pay child support and to pay at least $1,000 a year. Fathers in the achieved samples were somewhat more likely to be fathers by marriage than by paternity establishment, and their partners were less likely to have multiple legal fathers identified on the W-2 case record. The partners of fathers who responded also had more years of schooling, tended to be new entrants to W-2, and lived outside of Milwaukee at W-2 entry. At Time 2, respondents tended to be somewhat older than the sample as a whole and were more likely to have a child support order established with the resident parent of the focal child at W-2 entry.

The analysis samples exclude 68 and 88 fathers at Time 1 and Time 2, respectively, who it was learned were the resident parents of the focal child during the reference year. The exclusion of these fathers does not exacerbate, and sometimes lessens, the differences between the analysis and survey samples. The analysis sample includes a slightly higher proportion of men who were fathers by paternity, yielding a distribution of parentage that more closely mirrors the sample as a whole. The analysis sample also includes a higher proportion of newly identified paternities—i.e., cases in which there was not a legal father identified when the resident parent entered W-2.[30]

Characteristics of Respondents by Mode of Interview

Tables TR5.11 and TR5.12 show characteristics of mothers and fathers by the mode of interview. Mothers who completed interviews in person share several characteristics of a more disadvantaged population. At both Time 1 and Time 2, mothers who were interviewed in person had fewer years of schooling, less stable patterns of employment and lower earnings, and larger families. These mothers also had a longer history of AFDC receipt prior to entering W-2: over 60 percent of them had 19-24 months of AFDC receipt in the two-year period before entering W-2 as compared with about one-half of women who completed interviews by telephone. Mothers interviewed in person were more likely to have a child support order at W-2 entry, and a slightly larger share of women interviewed by telephone received payments of $1,000 or more. The focal children of mothers interviewed in person were more likely to be nonmarital births, and a somewhat larger proportion of these women had more than one legal nonresident father identified on their W-2 case records.

Reflecting the distribution of W-2 cases and the concentration of in-person interviewing efforts, over 85 percent of women who completed interviews in person were living in Milwaukee at W-2 entry. About 10 percent were living in other urban counties and less than 5 percent resided in rural areas. In addition, women interviewed in person were much more likely to be African American and less likely to be

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[30]While it seems counterintuitive that the survey of nonresident fathers includes cases in which there is "no legal father," recall that these characteristics are measured at W-2 entry. Thus, cases in which a father was selected into the survey sample and the case record reports no legal father at W-2 entry reflects a recently identified paternity.

Table TR5.11
Initial Characteristics of Mothers, by Mode of Interview at Time 1 and Time 2 (Weighted Percentages)

	Time 1						Time 2					
	All Respondents		By Telephone		In Person		All Respondents		By Telephone		In Person	
	N	%	N	%	N	%	N	%	N	%	N	%
Total Respondents	2,362		1,640		722		2,354		1,498		856	
Length of Interview (Minutes)												
Mean (standard deviation)	46.5		47.1		45.2		45.8		45.6		46.1	
	(12.6)		(11.9)		(14.0)		(13.5)		(10.7)		(17.0)	
Age												
16–17	1	0.0	0	0.0	1	0.1	0	0.0	0	0.0	0	0.0
18–25	1,164	49.0	799	48.4	365	50.2	1,168	49.4	712	47.9	456	51.8
26–30	505	21.4	355	22.2	150	19.8	485	20.5	309	19.7	176	21.9
31 or older	692	29.6	486	29.5	206	29.9	701	30.1	477	32.4	224	26.3
Race												
White	708	26.3	595	32.1	113	14.2	703	26.1	546	32.6	157	15.9
African American	1,396	62.9	864	57.0	532	75.0	1,404	63.3	797	56.9	607	73.4
Hispanic	133	5.8	88	5.5	45	6.4	129	5.6	77	5.3	52	6.2
Native American	49	1.9	38	2.1	11	1.4	44	1.7	35	2.2	9	1.0
Asian	10	0.4	9	0.6	1	0.2	10	0.4	7	0.5	3	0.3
Other	1	0.1	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	65	2.7	45	2.6	20	2.8	64	2.8	36	2.5	28	3.2
Education												
Less than high school	1,167	51.9	741	47.6	426	60.7	1,157	51.4	649	44.8	508	61.9
High school	938	38.4	690	40.8	248	33.7	940	38.9	661	44.0	279	30.8
More than high school	257	9.7	209	11.6	48	5.6	257	9.7	188	11.3	69	7.3

	Time 1						Time 2					
	All Respondents		By Telephone		In-Person		All Respondents		By Telephone		In-Person	
	N	%	N	%	N	%	N	%	N	%	N	%
Language												
English speaker	2,343	99.1	1,628	99.2	715	98.9	2,334	99.0	1,487	99.1	847	98.9
Non-English-speaker	19	0.9	12	0.8	7	1.1	20	1.0	11	0.9	9	1.1
Residential Location												
Milwaukee County	1,676	76.0	1,065	70.6	611	87.2	1,681	76.5	986	71.2	695	85.1
Other urban counties	398	14.8	313	16.9	85	10.4	404	14.9	282	16.7	122	12.1
Rural counties and tribes	288	9.2	262	12.5	26	2.4	269	8.6	230	12.1	39	2.9
Employment History[a]												
No UI-covered employment	409	19.5	274	18.8	135	21.0	387	18.5	240	18.2	147	19.0
1–4 quarters	900	42.0	609	41.3	291	43.6	903	42.3	535	39.7	368	46.6
5–7 quarters	671	26.2	477	27.0	194	24.5	688	26.9	454	28.1	234	25.0
All 8 quarters	382	12.2	280	12.9	102	10.9	376	12.3	269	14.0	107	9.4
Earnings History[a]												
$0	409	19.5	274	18.8	135	21.0	387	18.5	240	18.2	147	19.0
$1–$5,000	1,519	66.8	1,044	66.4	475	67.6	1,535	67.7	946	65.8	589	70.7
$5,001–$15,000	400	12.8	297	13.9	103	10.6	397	12.9	289	15.0	108	9.6
$15,001 or more	34	0.9	25	0.9	9	0.8	35	0.9	23	1.0	12	0.8
AFDC Receipt												
None	488	12.6	389	14.7	99	8.2	490	12.8	341	14.3	149	10.3
1–18 months	831	32.8	597	34.8	234	28.5	829	32.8	569	36.0	260	27.6
19–24 months	1,043	54.7	654	50.5	389	63.3	1,035	54.5	588	49.7	447	62.0

	Time 1						Time 2					
	All Respondents		By Telephone		In-Person		All Respondents		By Telephone		In-Person	
	N	%	N	%	N	%	N	%	N	%	N	%
Number of Children												
None	29	0.7	22	0.8	7	0.5	28	0.7	19	0.8	9	0.5
One	843	33.7	647	37.7	196	25.5	844	34.0	568	37.0	276	29.4
Two	678	28.5	468	28.6	210	28.2	687	28.8	455	30.2	232	26.6
Three or more	812	37.1	503	32.9	309	45.9	795	36.5	456	32.1	339	43.5
Age of Youngest Child												
Unborn	253	9.4	183	9.8	70	8.5	249	9.3	151	8.8	98	10.1
0–2	1,156	49.9	808	49.8	348	50.3	1,131	48.7	715	48.7	416	48.7
3–5	410	17.5	280	17.4	130	17.8	418	18.0	264	17.6	154	18.6
6–12	451	19.1	299	18.7	152	20.0	457	19.4	298	19.7	159	19.0
12–18	92	4.1	70	4.4	22	3.5	99	4.6	70	5.2	29	3.7
Focal Child's Parentage												
Legal father, unknown how	2	0.1	2	0.1	0	0.0	5	0.2	3	0.2	2	0.2
Nonmarital child	2,060	88.6	1,397	86.6	663	92.6	2,053	88.6	1,271	86.4	782	92.1
Marital child	300	11.4	241	13.3	59	7.4	296	11.2	224	13.4	72	7.7
Number of Legal Fathers												
None	699	28.1	499	28.9	200	26.6	681	27.4	444	28.4	237	25.9
One	1,214	51.9	845	52.3	369	51.2	1,223	52.7	783	53.4	440	51.5
Two or more	449	20.0	296	18.8	153	22.3	450	19.9	271	18.2	179	22.5
Child Support Order[b]												
No order	1,039	41.4	744	42.9	295	38.4	1,022	41.1	656	41.7	366	40.1
Has order	1,323	58.6	896	57.1	427	61.6	1,332	58.9	842	58.3	490	59.9

	Time 1						Time 2					
	All Respondents		By Telephone		In-Person		All Respondents		By Telephone		In-Person	
	N	%	N	%	N	%	N	%	N	%	N	%
Child Support Paid by All Nonresident Parents[a]												
$0	1,543	64.8	1,063	64.5	480	65.4	1,534	64.6	958	63.7	576	65.8
$1–$999	385	17.3	257	16.5	128	18.7	384	17.3	236	16.6	148	18.4
$1,000 or more	434	17.9	320	18.9	114	15.8	436	18.2	304	19.7	132	15.8
Research Group												
Control	1,163	48.9	813	49.5	350	47.6	1,179	50.0	749	50.2	430	49.7
Experimental	1,199	51.1	827	50.5	372	52.4	1,175	50.0	749	49.8	426	50.3
Case Type												
AFDC	1,224	70.5	800	67.9	424	75.9	1,216	70.4	721	67.2	495	75.4
W-2	1,138	29.5	840	32.1	298	24.1	1,138	29.6	777	32.8	361	24.6
Initial W-2 Assignment												
W-2 Transition	210	8.5	168	9.8	42	5.6	201	8.2	137	8.9	64	7.1
Community Service Job	1,043	51.4	656	46.9	387	60.6	1,052	51.9	603	47.2	449	59.4
Caretaker of Newborn	251	8.8	188	9.7	63	7.0	244	8.5	160	8.9	84	7.9
Upper tier	858	31.3	628	33.5	230	26.8	857	31.4	598	35.1	259	25.6
Quarter of Entry												
4th quarter of 1997	1,071	53.4	747	54.5	324	51.2	1,071	53.8	681	54.6	390	52.4
1st quarter of 1998	795	37.4	530	36.0	265	40.4	783	36.9	484	35.5	299	39.1
2nd quarter of 1998	496	9.2	363	9.6	133	8.4	500	9.3	333	9.9	167	8.5

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]In the twelve months prior to October 1, 1997.
[b]As of October 1, 1997.

Table TR5.12
Initial Characteristics of Fathers, by Mode of Interview at Time 1 and Time 2 (Weighted Percentages)

	Time 1						Time 2					
	All Respondents		By Telephone		In-Person		All Respondents		By Telephone		In-Person	
	N	%	N	%	N	%	N	%	N	%	N	%
Total Respondents	643		537		106		696		561		135	
Length of Interview (Minutes)												
Mean (standard deviation)	39.5		39.3		40.8		37.0		37.7		34.3	
	(13.8)		(12.8)		(18.5)		(14.7)		(14.0)		(17.1)	
Age												
16–17	5	1.0	5	1.2	0	0.0	5	0.8	3	0.6	2	1.7
18–25	205	34.7	164	33.0	41	42.7	222	35.6	170	34.0	52	41.6
26–30	160	24.2	138	25.0	22	20.0	154	21.7	123	20.8	31	24.7
31 or older	272	40.1	229	40.7	43	37.3	313	41.9	263	44.5	50	32.0
Unknown	1	0.1	1	0.1	0	0.0	2	0.1	2	0.1	0	0.0
Race												
White	154	22.3	151	26.4	3	2.0	170	23.3	156	27.0	14	9.5
African American	226	37.0	169	33.2	57	56.2	246	36.2	180	32.4	66	50.6
Hispanic	21	3.1	15	2.2	6	7.6	22	3.1	19	3.2	3	2.7
Native American	11	1.9	10	2.0	1	1.1	10	1.6	9	1.7	1	1.4
Unknown	231	35.7	192	36.2	39	33.1	248	35.8	197	35.8	51	35.9
Employment History[a]												
No UI-covered employment	99	14.2	84	14.3	15	13.7	129	18.2	106	18.3	23	17.7
1–4 quarters	130	21.2	103	20.1	27	27.1	157	22.6	118	21.6	39	26.2
5–7 quarters	170	26.1	142	25.9	28	27.1	174	26.1	140	25.8	34	27.3
All 8 quarters	223	35.4	194	37.4	29	25.4	217	30.8	180	31.7	37	27.4
Unknown/missing SSN	21	3.2	14	2.5	7	6.7	19	2.3	17	2.6	2	1.4

	Time 1						Time 2					
	All Respondents		By Telephone		In-Person		All Respondents		By Telephone		In-Person	
	N	%	N	%	N	%	N	%	N	%	N	%
Earnings History[a]												
$0	99	14.2	84	14.3	15	13.7	129	18.2	106	18.3	23	17.7
$1–$5,000	229	37.7	189	36.8	40	42.2	255	38.9	194	37.2	61	45.6
$5,001–$15,000	190	29.1	156	28.6	34	31.3	199	28.2	160	28.1	39	28.5
$15,001 or more	104	16.0	94	17.9	10	6.1	94	12.4	84	13.9	10	6.8
Unknown/missing SSN	21	3.2	14	2.5	7	6.7	19	2.3	17	2.6	2	1.4
Focal Child's Parentage												
Legal father, unknown how	2	0.2	2	0.2	0	0.0	2	0.2	2	0.2	0	0.0
Paternity established	508	81.5	409	79.0	99	93.9	555	82.3	436	80.4	119	89.3
Father by marriage	133	18.3	126	20.8	7	6.1	139	17.5	123	19.3	16	10.7
Number of Children with Resident Parent												
None	10	1.3	10	1.6	0	0.0	14	1.7	14	2.2	0	0.0
One	408	61.1	341	61.7	67	58.4	437	60.0	350	59.7	87	61.2
Two	162	26.3	132	25.1	30	32.4	169	25.9	137	25.1	32	28.6
Three or more	63	11.2	54	11.6	9	9.3	76	12.5	60	13.0	16	10.3
Age of Youngest Child with Resident Parent												
Unborn	13	2.2	12	2.5	1	0.8	19	3.3	17	3.6	2	2.0
0–2	225	38.6	190	38.2	35	40.9	244	38.7	189	36.8	55	45.9
3–5	158	25.0	131	25.2	27	24.0	175	25.8	137	25.5	38	26.9
6–12	208	28.8	173	28.9	35	28.4	213	26.5	177	27.4	36	23.0
12–18	39	5.3	31	5.2	8	6.0	45	5.7	41	6.7	4	2.2
Number of Legal Fathers on Resident Parent's Case												
None	79	13.3	72	14.2	7	9.0	115	17.9	88	17.0	27	21.4
One	416	73.4	346	72.8	70	76.5	424	68.8	345	69.5	79	66.2
Two or more	148	13.3	119	13.1	29	14.6	157	13.3	128	13.5	29	12.5

	Time 1						Time 2					
	All Respondents		By Telephone		In-Person		All Respondents		By Telephone		In-Person	
	N	%	N	%	N	%	N	%	N	%	N	%
Child Support Order with Resident Parent[b]												
No order	217	31.8	195	33.4	22	23.7	254	35.1	206	35.3	48	34.4
Has order	426	68.2	342	66.6	84	76.3	442	64.9	355	64.7	87	65.6
Child Support Paid to Resident Parent[a]												
No child support paid	327	51.8	270	50.6	57	57.8	395	58.0	304	55.4	91	68.0
$1–$999	146	22.4	113	20.7	33	30.7	136	19.9	110	20.3	26	18.3
$1,000 or more	170	25.9	154	28.7	16	11.5	165	22.1	147	24.3	18	13.7
Education of Resident Parent												
Less than high school	286	45.5	218	41.5	68	65.3	317	47.6	245	45.6	72	54.8
High school	274	42.2	245	45.5	29	26.0	284	40.4	234	41.3	50	37.0
More than high school	83	12.3	74	13.1	9	8.7	95	12.0	82	13.0	13	8.2
Location of Resident Parent												
Milwaukee County	390	64.6	297	60.0	93	87.6	426	65.9	313	60.3	113	87.0
Other urban counties	121	17.7	112	19.4	9	9.1	135	17.7	119	19.9	16	9.5
Rural counties and tribes	132	17.7	128	20.6	4	3.3	135	16.4	129	19.8	6	3.5
Research Group of Resident Parent												
Control	325	50.4	262	48.0	63	62.1	341	49.2	271	48.0	70	53.5
Experimental	318	49.6	275	52.0	43	38.0	355	50.8	290	52.0	65	46.6
Case Type of Resident Parent												
AFDC	324	66.2	259	64.5	65	74.5	358	67.4	280	66.4	78	71.1
W-2	319	33.8	278	35.5	41	25.5	338	32.6	281	33.6	57	28.9

Table TR5.12, continued

	Time 1						Time 2					
	All Respondents		By Telephone		In-Person		All Respondents		By Telephone		In-Person	
	N	%	N	%	N	%	N	%	N	%	N	%
Initial W-2 Assignment of Resident Parent												
W-2 Transition	71	11.9	60	11.9	11	11.7	79	12.1	74	14.3	5	4.1
Community Service Job	237	43.3	187	41.1	50	54.1	255	43.4	187	39.8	68	57.0
Caretaker of Newborn	66	9.2	61	10.4	5	3.2	82	10.5	69	10.9	13	8.7
Upper tier	269	35.7	229	36.6	40	31.0	280	34.0	231	35.0	49	30.3
Quarter of Resident Parent's Entry												
4th quarter of 1997	310	56.2	266	58.2	44	46.2	341	57.2	285	60.2	56	45.5
1st quarter of 1998	214	35.3	170	33.1	44	45.9	214	33.1	158	29.6	56	46.3
2nd quarter of 1998	119	8.5	101	8.6	18	7.9	141	9.8	118	10.2	23	8.2

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]In the twelve months prior to October 1, 1997.
[b]As of October 1, 1997.

white: at Time 1 and Time 2 about three-quarters of these mothers were African American and only about 15 percent were white. In contrast, nearly one-third of telephone respondents were white and less than 60 percent were African American.

The distribution of fathers' characteristics shows similar differences by mode of interview (Table TR5.12). Fathers who participated in person were slightly younger, were much more likely to be fathers by paternity, and tended to have younger children, especially at Time 2. There are no remarkable differences in the establishment of a child support order at W-2 entry, but fathers interviewed in person were less likely to be paying child support or tended to pay lower amounts. The partners of these fathers also had less schooling, were more likely to be living in Milwaukee at W-2 entry, and a larger share entered W-2 by transitioning from AFDC rather than as a new entrant. Finally, fathers who completed interviews in person had less stable employment patterns and lower earnings. About one-third of fathers interviewed by phone were employed for all eight quarters prior to the resident parent's entry into W-2, and almost one-fifth earned more than $15,000.

Characteristics of Respondents, by Time of Participation

Analyses in Volume I report on survey respondents at Time 1 or at Time 2, but these data may represent different individuals, since some sample members responded only at Time 1 and others only at Time 2. Comparisons across these data represent, to some extent, changes in the composition of respondents. The analyses in this section assess differences among mothers and fathers who participated in only one survey and those who participated in both (the panel).

Table TR5.13 shows characteristics of mothers in the Time 1 survey sample, all Time 1 respondents, all Time 2 respondents, mothers who responded only at Time 1, only at Time 2, or at both Time 1 and Time 2. Because the mothers' survey samples at Time 1 and Time 2 are essentially identical, only the Time 1 target survey sample is shown.[31] The main differences between Time 1 and Time 2 respondents reflect changes in survey participation rather than the composition of the survey samples. Mothers who participated in only one survey, whether Time 1 or Time 2, differ from those in the survey sample as a whole in several characteristics. They were more likely to be African American or Hispanic and less likely to be white. A higher proportion of one-time-only participants had less than a high school education, had been employed less steadily prior to entering W-2, and had younger children. Since we were generally successful in completing interviews with sample members if they could be located, it is not surprising that mothers who participated in only one survey share characteristics that decreased the chances that we would find them. These included the absence of a child support order, the lack of any child support receipt from a nonresident father, and, at least at Time 1, no legal fathers established for any of the children on their W-2 case record. In addition, one-time-only participants were among those more apt to leave W-2 more quickly or to receive a cash grant for a relatively shorter period of time—i.e., new entrants to W-2 with no history or only a brief history of AFDC receipt. Contact information from CARES and KIDS was one of the most effective tracing tools, but these records were less likely to be updated with valid addresses, telephone numbers, or other useful data (e.g., corrected dates of birth) if the mother did not have a child support order, was not receiving child support payments, or was not receiving cash assistance from W-2.

In addition, Time-1-only respondents include a smaller share of mothers who lived in Milwaukee at W-2 entry and a larger proportion of women assigned to the experimental treatment. Women participating

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[31]The Time 2 survey sample excludes 11 cases listed in the Time 1 sample: 6 cases in which the mother had died before December 31, 1999, and 5 cases in which the focal child had died.

Table TR5.13
Initial Characteristics of Mothers Who Participated in Only One Survey or in Both Surveys (Weighted Percentages)

| | Time 1 | | | | | | Time 2 | | | | | |
| | Survey Sample | | All Respondents | | Only at Time 1 | | All Respondents | | Only at Time 2 | | Times 1 and 2 | |
	N	%	N	%	N	%	N	%	N	%	N	%
Total Cases	2,884		2,362		277		2,354		269		2,085	
Age												
16–17	1	0.0	1	0.0	1	0.3	0	0.0	0	0.0	0	0.0
18–25	1,425	48.9	1,164	49.0	141	48.9	1,168	49.4	145	52.9	1,023	49.0
26–30	597	20.8	505	21.4	61	23.5	485	20.5	41	16.0	444	21.1
31 or older	860	30.2	692	29.6	74	27.3	701	30.1	83	31.2	618	29.9
Race												
White	834	25.3	708	26.3	73	22.9	703	26.1	68	21.4	635	26.7
African American	1,682	62.0	1,396	62.9	163	63.1	1,404	63.3	171	66.4	1,233	62.9
Hispanic	190	6.9	133	5.8	21	7.7	129	5.6	17	6.3	112	5.6
Native American	70	2.1	49	1.9	12	3.9	44	1.7	7	2.9	37	1.6
Asian	27	1.0	10	0.4	1	0.4	10	0.4	0	0.0	10	0.5
Other	1	0.0	1	0.1	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	80	2.7	65	2.7	7	2.0	64	2.8	6	3.0	58	2.8
Education												
Less than high school	1,449	52.6	1,167	51.9	155	58.6	1,157	51.4	145	54.4	1,012	51.0
High school	1,131	37.9	938	38.4	101	34.5	940	38.9	103	38.1	837	39.0
More than high school	304	9.5	257	9.7	21	7.0	257	9.7	21	7.4	236	10.0
Language												
English speaker	2,826	97.7	2,343	99.1	271	97.2	2,334	99.0	262	96.8	2,072	99.3
Non-English-speaker	58	2.3	19	0.9	6	2.8	20	1.0	7	3.2	13	0.7

	Time 1						Time 2					
	Survey Sample		All Respondents		Only at Time 1		All Respondents		Only at Time 2		Times 1 and 2	
	N	%	N	%	N	%	N	%	N	%	N	%
Residential Location												
Milwaukee County	2,030	75.6	1,676	76.0	189	72.9	1,681	76.5	194	77.2	1,487	76.5
Other urban counties	509	15.3	398	14.8	44	14.0	404	14.9	50	15.0	354	14.9
Rural counties and tribes	345	9.1	288	9.2	44	13.2	269	8.6	25	7.8	244	8.6
Employment History[a]												
No UI-covered employment	523	20.1	409	19.5	61	23.8	387	18.5	39	15.0	348	19.0
1–4 quarters	1,111	42.3	900	42.0	118	46.8	903	42.3	121	49.7	782	41.4
5–7 quarters	807	25.9	671	26.2	54	17.7	688	26.9	71	23.4	617	27.3
All 8 quarters	443	11.7	382	12.2	44	11.7	376	12.3	38	11.9	338	12.3
Earnings History[a]												
$0	523	20.1	409	19.5	61	23.8	387	18.5	39	15.0	348	19.0
$1–$5,000	1,863	67.0	1,519	66.8	174	65.5	1,535	67.7	190	73.3	1,345	67.0
$5,001–$15,000	461	12.1	400	12.8	40	10.3	397	12.9	37	11.0	360	13.1
$15,001 or more	37	0.8	34	0.9	2	0.4	35	0.9	3	0.7	32	0.9
AFDC Receipt[a]												
None	616	13.1	488	12.6	64	14.3	490	12.8	66	16.2	424	12.3
1–18 months	1,012	33.1	831	32.8	97	34.8	829	32.8	95	34.6	734	32.5
19–24 months	1,256	53.9	1,043	54.7	116	50.9	1,035	54.5	108	49.3	927	55.1
Number of Children												
None	35	0.7	29	0.7	5	0.8	28	0.7	4	0.6	24	0.7
One	1,036	33.9	843	33.7	99	33.1	844	34.0	100	35.9	744	33.8
Two	823	28.3	678	28.5	70	24.9	687	28.8	79	27.5	608	29.0
Three or more	990	37.1	812	37.1	103	41.3	795	36.5	86	36.0	709	36.6

| | Time 1 | | | | | | Time 2 | | | | | | |
| | Survey Sample | | All Respondents | | Only at Time 1 | | All Respondents | | Only at Time 2 | | Times 1 and 2 | |
	N	%	N	%	N	%	N	%	N	%	N	%
Age of Youngest Child												
Unborn	311	9.5	253	9.4	40	13.5	249	9.3	36	13.2	213	8.9
0–2	1,395	49.0	1,156	49.9	146	54.6	1,131	48.7	121	43.8	1,010	49.3
3–5	505	17.8	410	17.5	34	11.3	418	18.0	42	15.3	376	18.3
6–12	556	19.3	451	19.1	50	18.2	457	19.4	56	20.8	401	19.2
12–18	117	4.4	92	4.1	7	2.5	99	4.6	14	6.9	85	4.3
Focal Child's Parentage												
Legal father, unknown how	5	0.2	2	0.1	0	0.0	5	0.2	3	1.0	2	0.1
Nonmarital child	2,515	88.5	2,060	88.6	244	89.6	2,053	88.6	237	90.0	1,816	88.4
Marital child	364	11.3	300	11.4	33	10.4	296	11.2	29	9.0	267	11.5
Number of Legal Fathers												
None	892	29.2	699	28.1	102	34.9	681	27.4	84	29.1	597	27.2
One	1,469	51.9	1,214	51.9	131	47.9	1,223	52.7	140	54.4	1,083	52.5
Two or more	523	18.9	449	20.0	44	17.2	450	19.9	45	16.5	405	20.3
Child Support Order[b]												
No order	1,329	43.4	1,039	41.4	147	48.5	1,022	41.1	130	45.5	892	40.5
Has order	1,555	56.6	1,323	58.6	130	51.5	1,332	58.9	139	54.5	1,193	59.5
Child Support Paid by All Nonresident Parents[a]												
$0	1,928	66.2	1,543	64.8	198	71.0	1,534	64.6	189	68.8	1,345	64.0
$1–$999	450	16.5	385	17.3	38	14.5	384	17.3	37	14.6	347	17.6
$1,000 or more	506	17.3	434	17.9	41	14.5	436	18.2	43	16.5	393	18.4
Research Group												
Control	1,438	49.5	1,163	48.9	124	42.3	1,179	50.0	140	52.1	1,039	49.7
Experimental	1,446	50.5	1,199	51.1	153	57.7	1,175	50.0	129	47.9	1,046	50.3

Table TR5.13, continued

| | Time 1 | | | | | | Time 2 | | | | | |
| | Survey Sample | | All Respondents | | Only at Time 1 | | All Respondents | | Only at Time 2 | | Times 1 and 2 | |
	N	%	N	%	N	%	N	%	N	%	N	%
Case Type												
AFDC	1,485	70.2	1,224	70.5	138	68.4	1,216	70.4	130	67.0	1,086	70.8
W-2	1,399	29.8	1,138	29.5	139	31.6	1,138	29.6	139	33.1	999	29.2
Initial W-2 Assignment												
W-2 Transition	264	8.9	210	8.5	26	8.9	201	8.2	17	6.5	184	8.4
Community Service Job	1,277	51.3	1,043	51.4	122	51.0	1,052	51.9	131	55.9	921	51.4
Caretaker of Newborn	307	8.9	251	8.8	32	10.2	244	8.5	25	6.8	219	8.7
Upper tier	1,036	31.0	858	31.3	97	30.0	857	31.4	96	30.8	761	31.5
Quarter of Entry												
4th quarter of 1997	1,321	54.2	1,071	53.4	123	51.2	1,071	53.8	123	54.4	948	53.7
1st quarter of 1998	946	36.4	795	37.4	98	39.9	783	36.9	86	35.5	697	37.1
2nd quarter of 1998	617	9.4	496	9.2	56	8.9	500	9.3	60	10.1	440	9.2

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]In the twelve months prior to October 1, 1997.
[b]As of October 1, 1997.

only at Time 2 tended to be somewhat younger than the target sample, and over one-half were under age 25 at W-2 entry.

In contrast, resident mothers who participated at Time 1 and Time 2, while differing much less markedly from the survey sample, have characteristics that suggest greater residential stability, the resources to maintain uninterrupted telephone service, and an increased likelihood of obtaining updated information in CARES or KIDS. These include more years of schooling, at least one legal father identified on the W-2 case record, a child support order at W-2 entry, and a history of at least some child support receipt prior to entering W-2. The panel data also include only a small fraction of mothers who were listed as non-English-speakers on the administrative record.

Unlike the mothers' samples, the fathers' survey sample at Time 2 included 201 new cases that were not part of the survey sample at Time 1. These are cases in which we were able to identify the establishment of a legal father for a focal child between January 1, 1998, and December 31, 1999.[32] Thus, characteristics of fathers who responded only at Time 2 may reflect compositional differences in the survey sample as well as our ability to locate and elicit cooperation from sample members.

Table TR5.14 compares the characteristics of fathers in the Time 1 survey sample and fathers who were added to the sample at Time 2. The addition of these newly identified fathers affected the composition of the sample at Time 2 by making it younger, including a larger proportion of fathers who were African American or Hispanic, and increasing the share of fathers with minimal economic resources as well as the number without a child support order or not paying child support. Almost one-third of fathers added to the sample at Time 2 did not have any employment in UI-covered jobs or report any UI earnings during the eight quarters prior to October 1, 1997. Their families were smaller and had younger children, over two-thirds having a child under age 3. The partners of the 201 fathers added to the sample had fewer years of schooling, were slightly more likely to live in Milwaukee at W-2 entry, and were disproportionately new entrants to W-2.

Compared to all respondents at either Time 1 or Time 2, fathers who participated in only one survey (Table TR5.15) comprised a larger share of African American fathers, had younger families, and were less likely to pay child support to the resident parent. The partners of these fathers were somewhat more likely to be living in Milwaukee upon entry to W-2 and less likely to have families with more than one legally identified father. The partners of fathers who responded only at Time 1 also were more likely to be assigned to the control group.

Like the mothers represented in the panel data, fathers who participated at Time 1 and Time 2 share characteristics that suggest a more stable population with more economic resources or with ties to the child support system that make it easier to locate them. Fathers in the panel tended to be older, had more stable employment histories and higher earnings, were more likely to be the father of the focal child by marriage rather than paternity, and relatively fewer of them were African American or Hispanic. Although these men were no more or less likely to have a child support order for the resident parent, a larger proportion of them were paying child support. Only about one-third of fathers in the Time 1 survey sample were paying child support prior to W-2 entry, as compared to one-half of fathers represented in the panel data. In addition, the partners of these fathers had more years of schooling, tended to live outside of Milwaukee, and were new entrants to W-2.

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[32]A net increase of 194 cases in the Time 2 survey sample occurred because 5 cases in the Time 1 sample were determined to be out-of-scope and not part of the survey population.

Table TR5.14
Initial Characteristics of Fathers in the Time 1 Survey Sample and Those Who Became
Eligible for the Survey at Time 2 (Weighted Percentages)

	Time 1 Survey Sample		Fathers Added to the Survey Sample at Time 2		Time 2 Survey Sample	
	N	%	N	%	N	%
Total Cases	1,936		201		2,130	
Age						
16–17	14	0.9	8	3.8	22	1.3
18–25	621	35.0	99	47.9	717	36.1
26–30	489	24.4	31	15.1	519	23.6
31 or older	802	39.3	60	30.5	859	38.5
Unknown	10	0.4	3	2.6	13	0.6
Race						
White	326	16.1	36	17.0	361	16.2
African American	774	41.5	112	55.6	882	42.7
Hispanic	95	5.1	13	7.2	108	5.4
Native American	32	1.7	3	2.0	35	1.7
Asian	7	0.4	0	0.0	7	0.3
Unknown	702	35.3	37	18.2	737	33.8
Employment History[a]						
No UI-covered employment	522	26.0	68	35.4	589	26.9
1–4 quarters	459	24.3	48	21.0	505	23.9
5–7 quarters	418	21.7	37	20.1	452	21.5
All 8 quarters	454	24.2	36	17.6	490	23.7
Unknown/missing SSN	83	3.9	12	5.8	94	4.1
Earnings History[a]						
$0	522	26.0	68	35.4	589	26.9
$1–$5,000	718	38.5	76	37.1	789	38.2
$5,001–$15,000	405	21.3	36	16.4	441	20.9
$15,001 or more	208	10.4	9	5.3	217	10.0
Unknown/missing SSN	83	3.9	12	5.8	94	4.1
Focal Child's Parentage						
Legal father, unknown how	4	0.2	1	0.5	5	0.2
Paternity established	1,602	83.4	177	88.2	1,772	83.8
Father by marriage	330	16.4	23	11.3	353	16.0
Number of Children with Resident Parent						
None	15	0.6	8	3.1	23	0.9
One	1,247	60.6	144	71.4	1,387	61.7
Two	448	24.6	30	15.3	476	23.7
Three or more	226	14.2	19	10.2	244	13.8

	Time 1 Survey Sample		Fathers Added to the Survey Sample at Time 2		Time 2 Survey Sample	
	N	%	N	%	N	%
Age of Youngest Child with Resident Parent						
Unborn	33	1.9	11	5.0	44	2.2
0–2	619	36.5	131	65.9	747	39.2
3–5	509	26.4	16	9.6	524	24.8
6–12	652	29.5	35	16.8	685	28.3
12–18	123	5.8	8	2.7	130	5.5
Number of Legal Fathers on Resident Parent's Case						
None	209	12.1	122	64.4	329	17.0
One	1,240	72.3	72	33.8	1,310	68.8
Two or more	487	15.5	7	1.8	491	14.2
Child Support Order with Resident Parent[b]						
No order	653	33.0	166	81.3	817	37.6
Has order	1,283	67.0	35	18.7	1,313	62.4
Child Support Paid to Resident Parent[a]						
$0	1,231	63.9	185	90.9	1,412	66.5
$1–$999	347	18.1	9	4.8	354	16.7
$1,000 or more	358	18.0	7	4.3	364	16.8
Education of Resident Parent						
Less than high school	911	47.9	110	54.0	1,018	48.5
High school	798	41.0	72	35.5	866	40.4
More than high school	227	11.1	19	10.5	246	11.1
Location of Resident Parent						
Milwaukee County	1,324	72.2	140	74.5	1,460	72.5
Other urban counties	341	16.0	36	15.1	374	15.8
Rural counties and tribes	271	11.9	25	10.4	296	11.8
Research Group of Resident Parent						
Control	966	49.0	105	52.7	1,068	49.5
Experimental	970	51.0	96	47.3	1,062	50.5
Case Type of Resident Parent						
AFDC	1,072	71.0	64	48.3	1,131	68.8
W-2	864	29.0	137	51.7	999	31.2

Table TR5.14, continued

	Time 1 Survey Sample		Fathers Added to the Survey Sample at Time 2		Time 2 Survey Sample	
	N	%	N	%	N	%
Initial W-2 Assignment of Resident Parent						
W-2 Transition	196	10.2	12	6.3	208	9.9
Community Service Job	811	48.2	85	49.3	892	48.2
Caretaker of Newborn	158	7.1	51	22.2	209	8.6
Upper tier	771	34.5	53	22.1	821	33.3
Quarter of Resident Parent's Entry						
4th quarter of 1997	937	56.0	76	48.4	1,011	55.4
1st quarter of 1998	632	35.2	57	33.4	684	34.9
2nd quarter of 1998	367	8.8	68	18.2	435	9.7

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]In the twelve months prior to October 1, 1997.
[b]As of October 1, 1997.

Table TR5.15
Initial Characteristics of Fathers Who Participated in Only One Survey or in Both Surveys (Weighted Percentages)

| | Time 1 | | | | | | Time 2 | | | | | | | |
| | Survey Sample | | All Respondents | | Only at Time 1 | | Survey Sample | | All Respondents | | Only at Time 2 | | Times 1 and 2 | |
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total Cases	1,936		643		217		2,130		696		270		426	
Age														
16–17	14	0.9	5	1.0	2	1.5	22	1.2	5	0.8	2	0.9	3	0.8
18–25	621	35.0	205	34.7	76	35.8	717	36.1	222	35.6	93	37.9	129	34.0
26–30	489	24.4	160	24.2	64	26.8	519	23.6	154	21.7	58	19.9	96	22.8
31 or older	802	39.3	272	40.1	75	35.8	859	38.5	313	41.9	116	41.2	197	42.3
Unknown	10	0.4	1	0.1	0	0.0	13	0.7	2	0.1	1	0.1	1	0.1
Race														
White	326	16.1	154	22.3	37	15.6	361	16.2	170	23.3	53	19.5	117	25.8
African American	774	41.5	226	37.0	90	43.8	882	42.7	246	36.2	110	40.3	136	33.6
Hispanic	95	5.1	21	3.1	10	4.2	108	5.4	22	3.1	11	3.9	11	2.6
Native American	32	1.7	11	1.9	5	2.5	35	1.7	10	1.6	4	1.7	6	1.6
Asian	7	0.4	0	0.0	0	0.0	7	0.3	0	0.0	0	0.0	0	0.0
Unknown	702	35.3	231	35.7	75	34.0	737	33.8	248	35.8	92	34.7	156	36.5
Employment History[a]														
No UI-covered employment	522	26.0	99	14.2	30	13.5	589	26.9	129	18.2	60	23.9	69	14.5
1–4 quarters	459	24.3	130	21.2	53	26.1	505	23.9	157	22.6	80	28.5	77	18.8
5–7 quarters	418	21.7	170	26.1	55	22.4	452	21.5	174	26.1	59	23.3	115	28.0
All 8 quarters	454	24.2	223	35.4	67	32.2	490	23.7	217	30.8	61	21.2	156	36.9
Unknown/missing SSN	83	3.9	21	3.2	12	5.8	94	4.1	19	2.3	10	3.2	9	1.8

| | Time 1 | | | | | | Time 2 | | | | | | | |
| | Survey Sample | | All Respondents | | Only at Time 1 | | Survey Sample | | All Respondents | | Only at Time 2 | | Times 1 and 2 | |
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Earnings History[a]														
$0	522	26.0	99	14.2	30	13.5	589	26.9	129	18.2	60	23.9	69	14.5
$1–$5,000	718	38.5	229	37.7	87	38.8	789	38.2	255	38.9	113	41.8	142	37.1
$5,001–$15,000	405	21.3	190	29.1	58	26.4	441	20.9	199	28.2	67	24.7	132	30.4
$15,001 or more	208	10.4	104	16.0	30	15.5	217	10.0	94	12.4	20	6.5	74	16.2
Unknown/missing SSN	83	3.9	21	3.2	12	5.8	94	4.1	19	2.3	10	3.2	9	1.8
Focal Child's Parentage														
Legal father, unknown how	4	0.2	2	0.2	0	0.0	5	0.2	2	0.2	0	0.0	2	0.3
Paternity established	1,602	83.4	508	81.5	178	82.5	1,772	83.8	555	82.3	225	84.3	330	81.0
Father by marriage	330	16.4	133	18.3	39	17.5	353	16.0	139	17.5	45	15.7	94	18.7
Number of Children with Resident Parent														
None	15	0.6	10	1.3	1	0.3	23	0.9	14	1.7	5	1.5	9	1.9
One	1,247	60.6	408	61.1	140	60.8	1,387	61.7	437	60.0	169	58.0	268	61.3
Two	448	24.6	162	26.3	55	26.5	476	23.7	169	25.9	62	25.3	107	26.2
Three or more	226	14.2	63	11.2	21	12.4	244	13.8	76	12.5	34	15.3	42	10.6
Age of Youngest Child with Resident Parent														
Unborn	33	1.9	13	2.2	5	2.0	44	2.2	19	3.3	11	4.8	8	2.3
0–2	619	36.5	225	38.6	80	40.9	747	39.2	244	38.7	99	40.6	145	37.5
3–5	509	26.4	158	25.0	50	23.5	524	24.8	175	25.8	67	25.9	108	25.7
6–12	652	29.5	208	28.8	68	27.5	685	28.3	213	26.5	73	21.7	140	29.5
12–18	123	5.8	39	5.3	14	6.1	130	5.5	45	5.7	20	7.0	25	5.0

| | Time 1 | | | | | | Time 2 | | | | | | | |
| | Survey Sample | | All Respondents | | Only at Time 1 | | Survey Sample | | All Respondents | | Only at Time 2 | | Times 1 and 2 | |
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Number of Legal Fathers on Resident Parent's Case														
None	209	12.1	79	13.3	26	12.9	329	17.0	115	17.9	62	24.7	53	13.5
One	1,240	72.3	416	73.4	148	75.7	1,310	68.8	424	68.8	156	63.5	268	72.2
Two or more	487	15.5	148	13.3	43	11.4	491	14.2	157	13.3	52	11.8	105	14.3
Child Support Order with Resident Parent[b]														
No order	653	33.0	217	31.8	77	31.2	817	37.6	254	35.1	114	39.8	140	32.1
Has order	1,283	67.0	426	68.2	140	68.8	1,313	62.4	442	64.9	156	60.2	286	67.9
Child Support Paid to Resident Parent[a]														
$0	1,231	63.9	327	51.8	124	57.0	1,412	66.5	395	58.0	192	71.8	203	49.1
$1–$999	347	18.1	146	22.4	48	20.7	354	16.7	136	19.9	38	14.8	98	23.2
$1,000 or more	358	18.0	170	25.9	45	22.2	364	16.8	165	22.1	40	13.4	125	27.7
Education of Resident Parent														
Less than high school	911	47.9	286	45.5	100	48.4	1,018	48.5	317	47.6	131	53.1	186	44.0
High school	798	41.0	274	42.2	91	40.7	866	40.4	284	40.4	101	36.5	183	43.0
More than high school	227	11.1	83	12.3	26	11.0	246	11.1	95	12.0	38	10.4	57	13.0
Location of Resident Parent														
Milwaukee County	1,324	72.2	390	64.6	148	69.1	1,460	72.5	426	65.9	184	71.3	242	62.3
Other urban counties	341	16.0	121	17.7	36	16.7	374	15.8	135	17.7	50	17.1	85	18.2
Rural counties and tribes	271	11.9	132	17.7	33	14.2	296	11.8	135	16.4	36	11.6	99	19.5
Research Group of Resident Parent														
Control	966	49.0	325	50.4	117	52.2	1,068	49.5	341	49.2	133	48.7	208	49.5
Experimental	970	51.0	318	49.6	100	47.8	1,062	50.5	355	50.8	137	51.3	218	50.5

Table TR5.15, continued

| | Time 1 | | | | | | Time 2 | | | | | | | |
| | Survey Sample | | All Respondents | | Only at Time 1 | | Survey Sample | | All Respondents | | Only at Time 2 | | Times 1 and 2 | |
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Case Type of Resident Parent														
AFDC	1,072	71.0	324	66.2	111	67.0	1,131	68.8	358	67.4	145	69.9	213	65.8
W-2	864	29.0	319	33.8	106	33.0	999	31.2	338	32.6	125	30.1	213	34.2
Initial W-2 Assignment of Resident Parent														
W-2 Transition	196	10.2	71	11.9	18	8.3	208	9.9	79	12.1	26	9.6	53	13.8
Community Service Job	811	48.2	237	43.3	91	48.0	892	48.2	255	43.4	109	47.2	146	40.9
Caretaker of Newborn	158	7.1	66	9.2	14	6.0	209	8.6	82	10.5	30	9.9	52	10.8
Upper tier	771	34.5	269	35.7	94	37.8	821	33.3	280	34.0	105	33.2	175	34.6
Quarter of Resident Parent's Entry														
4th quarter of 1997	937	56.0	310	56.2	99	55.2	1,011	55.4	341	57.2	130	57.8	211	56.7
1st quarter of 1998	632	35.2	214	35.3	75	36.5	684	34.9	214	33.1	75	30.6	139	34.7
2nd quarter of 1998	367	8.8	119	8.5	43	8.3	435	9.7	141	9.8	65	11.6	76	8.6

Notes: All characteristics measured at W-2 entry unless otherwise noted. See Technical Report 1 for a definition of W-2 entry.

[a]In the twelve months prior to October 1, 1997.
[b]As of October 1, 1997.

Weighting[33]

Analyses of survey data were weighted to adjust for differential rates of assignment over the study period (see Sample Stratification, earlier in this report), the disproportionate stratification of the sample, and nonresponse bias. Because changes in assignment rates would affect the composition of the sample and alter the probabilities of selection across cases entering W-2 at different times, the final survey sample is weighted to adjust for these differential assignment rates.

The original survey sample of 3,000 resident mothers was stratified disproportionately to ensure sufficient numbers of cases in upper tiers of W-2 and cases that were new to W-2. The survey sampling weights adjust for this stratification so that analyses of survey data can be used to generalize to the whole population. Because the selection of nonresident fathers was also affected by this disproportionate stratification, these weights are also used to adjust the fathers' survey sample. In addition, we only sampled one legal father per W-2 case, even though some cases include more than one legally identified nonresident father. Thus, a father's chances of being included in the survey sample are also affected by the number of children with whom he is identified and the number of other children on the case record. The final sampling weight for the fathers' survey data adjusts for the differential rate of assignment of the resident parent, the disproportionate stratification by case type and initial tier of placement, and the ratio of the number of children of the selected father to the total number of children on the resident mother's W-2 case record.

Weights to correct for nonresponse bias were developed for the mothers' and fathers' survey data and are discussed in Technical Report 6. The final weights used for analyses of survey data are the product of the sampling and nonresponse weights.

Conclusion

The Survey of Wisconsin Works Families was designed to supplement core administrative databases to test hypotheses for evaluation of the Wisconsin Child Support Demonstration. As such, its content and design were governed in large part by the goals of that evaluation: to ascertain the effects of child support policy reform on families participating in W-2 and to collect data that were not available in administrative sources or were incompletely recorded there. Nonetheless, the breadth of the survey's content and the inclusion of mothers *and* fathers in the sample design permit analyses of a wide range of policy-relevant outcomes and make a significant contribution to a small but growing body of data on nonresident fathers and their family experiences.

How well has the survey accomplished its goals? By one standard, it performed as well or better than many other comparable studies. We succeeded in interviewing over 80 percent of the mothers in the sample at Time 1 and Time 2, for an overall panel response rate of 73 percent. The completion rates for fathers, although much lower, are comparable to those achieved in other studies with similar designs and are significantly higher among a representative subsample. Further substantive analyses, and comparisons with nationally representative studies or surveys of low-income populations in other states, are necessary to more fully evaluate the utility of these data.

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[33]Technical Report 4 discusses the construction of sampling weights for the survey and administrative data.

Appendix Table TR5.1
Final Disposition of Mothers' Time 1 Survey Sample, by Experimental/Control Status

Disposition	All Mothers		Experimental Group		Control Group	
	N	%	N	%	N	%
Total Cases	3,000		1,511		1,489	
In-Scope (Eligible) Cases	2,876		1,441		1,435	
Interviewed						
Completed	2,362	82.1	1,199	83.2	1,163	81.0
Partially completed	54	1.9	21	1.5	33	2.3
Contacted but Not Interviewed						
Refusals	94	3.3	44	3.1	50	3.5
Persistently unavailable	44	1.5	22	1.5	22	1.5
No longer at address/phone	33	1.1	14	1.0	19	1.3
Located but Not Contacted						
Messages only/no address or phone	35	1.2	21	1.5	14	1.0
Answering machine/no answer	55	1.9	29	2.0	26	1.8
Not Located						
No location information[a]	18	0.6	9	0.6	9	0.6
Bad telephone number and/or address[b]	119	4.1	53	3.7	66	4.6
Other Reasons for No Interview						
Language barrier	34	1.2	18	1.2	16	1.1
Too ill/disabled to participate	3	0.1	0	0.0	3	0.2
Incarcerated	22	0.8	9	0.6	13	0.9
Not fielded[c]	1	0.0	0	0.0	1	0.1
Not pursued in error[d]	2	0.1	2	0.1	0	0.0
Other nonresponse	0	0.0	0	0.0	0	0.0
Out-of-Scope (Ineligible) Cases	124		70		54	
Not in research population	100	80.6	55	78.6	45	83.3
W-2 entry date after 7/8/1998	8	6.5	5	7.1	3	5.6
CARES confidential case	6	4.8	3	4.3	3	5.6
Selected focal child not resident parent's child[e]	3	2.4	3	4.3	0	0.0
Nonresident parent in good-cause case 12/31/1998	0	0.0	0	0.0	0	0.0
Nonresident parent was minor 1/1/1999	0	0.0	0	0.0	0	0.0
No legal father identified/not in sample	0	0.0	0	0.0	0	0.0

Disposition	All Mothers		Experimental Group		Control Group	
	N	%	N	%	N	%
Deceased						
Resident parent died before 12/31/1998	2	1.6	1	1.4	1	1.9
Resident parent reported dead at interview	2	1.6	1	1.4	1	1.9
Nonresident parent died before 12/31/1998	0	0.0	0	0.0	0	0.0
Nonresident parent reported dead at interview	0	0.0	0	0.0	0	0.0
Focal child died before 12/31/1998	3	2.4	2	2.9	1	1.9

[a]Cases not attempted because we had no information or address was a post office box, or person was outside the zone for in-person interviews.

[b]Includes some cases where the address was assumed to be good but was outside the zone for in-person interviews.

[c]Cases not included in the fieldwork because we believed they were ineligible at the time of the survey.

[d]Cases not pursued by interviewers because they were incorrectly believed to be ineligible.

[e]Includes 1 case in which the respondent identified herself as the child's grandmother but the relationship was not confirmed by CARES.

Appendix Table TR5.2
Final Disposition of Fathers' Time 1 Survey Sample, by Experimental/Control Status

Disposition	All Fathers		Experimental Group		Control Group	
	N	%	N	%	N	%
Total Cases	3,000		1,511		1,489	
In-Scope (Eligible) Cases	1,926		965		961	
Interviewed						
Completed	643	33.4	318	33.0	325	33.8
Partially completed	61	3.2	35	3.6	26	2.7
Contacted but Not Interviewed						
Refusals	112	5.8	57	5.9	55	5.7
Persistently unavailable	64	3.3	32	3.3	32	3.3
No longer at address/phone	73	3.8	35	3.6	38	4.0
Located but Not Contacted						
Messages only/no address or phone	63	3.3	31	3.2	32	3.3
Answering machine/no answer	90	4.7	45	4.7	45	4.7
Not Located						
No location information[a]	185	9.6	103	10.7	82	8.5
Bad telephone number and/or address[b]	421	21.9	201	20.8	220	22.9
Other Reasons for No Interview						
Language barrier	19	1.0	10	1.0	9	0.9
Too ill/disabled to participate	6	0.3	2	0.2	4	0.4
Incarcerated	171	8.9	88	9.1	83	8.6
Not fielded[c]	8	0.4	5	0.5	3	0.3
Not pursued in error[d]	5	0.3	3	0.3	2	0.2
Other nonresponse[e]	5	0.3	0	0.0	5	0.5
Out-of-Scope (Ineligible) Cases	1,074		546		528	
Not in research population	100	9.3	55	10.1	45	8.5
W-2 entry date after 7/8/1998	8	0.7	5	0.9	3	0.6
CARES confidential case	6	0.6	3	0.5	3	0.6
Selected focal child not resident parent's child	2	0.2	2	0.4	0	0.0
Nonresident parent in good-cause case 12/31/1998	5	0.5	2	0.4	3	0.6
Nonresident parent was minor 1/1/1999	5	0.5	3	0.5	2	0.4
No legal father identified/not in sample	912	84.9	456	83.5	456	86.4

Disposition	All Fathers		Experimental Group		Control Group	
	N	%	N	%	N	%
Deceased						
Resident parent died before 12/31/1998	2	0.2	1	0.2	1	0.2
Resident parent reported dead at interview	0	0.0	0	0.0	0	0.0
Nonresident parent died before 12/31/1998	21	2.0	12	2.2	9	1.7
Nonresident parent reported dead at interview	10	0.9	5	0.9	5	0.9
Focal child died before 12/31/1998	3	0.3	2	0.4	1	0.2

[a]Cases not attempted because we had no information or address was a post office box, or person was outside the zone for in-person interviews.

[b]Includes some cases where the address was assumed to be good but was outside the zone for in-person interviews.

[c]Cases not included in the fieldwork because we believed they were ineligible at the time of the survey.

[d]Cases not pursued by interviewers because they were incorrectly believed to be ineligible.

[e]Includes 3 cases in which the respondent claimed not to be the focal child's father, and 2 cases in which we did not pursue an interview with the father because the mother expressed fear for her safety or the safety of her children.

Final Disposition of Mothers' Time 2 Survey Sample, by Experimental/Control Status

Disposition	All Mothers		Experimental Group		Control Group	
	N	%	N	%	N	%
Total Cases	3,000		1,511		1,489	
In-Scope (Eligible) Cases	2,871		1,437		1,434	
Interviewed						
Completed	2,354	82.0	1,175	81.8	1,179	82.2
Partially completed	20	0.7	10	0.7	10	0.7
Contacted but Not Interviewed						
Refusals	82	2.9	30	2.1	52	3.6
Persistently unavailable	39	1.4	16	1.1	23	1.6
No longer at address/phone	9	0.3	5	0.3	4	0.3
Located but Not Contacted						
Messages only/no address or phone	48	1.7	33	2.3	15	1.0
Answering machine/no answer	27	0.9	13	0.9	14	1.0
Not Located						
No location information[a]	39	1.4	18	1.3	21	1.5
Bad telephone number and/or address[b]	178	6.2	92	6.4	86	6.0
Other Reasons for No Interview						
Language barrier	27	0.9	18	1.3	9	0.6
Too ill/disabled to participate	1	0.0	1	0.1	0	0.0
Incarcerated	29	1.0	17	1.2	12	0.8
Not fielded[c]	13	0.5	7	0.5	6	0.4
Not pursued in error[d]	0	0.0	0	0.0	0	0.0
Fielded with error[e]	5	0.2	2	0.1	3	0.2
Other nonresponse	0	0.0	0	0.0	0	0.0
Out-of-Scope (Ineligible) Cases	129		74		55	
Not in research population	100	77.5	55	74.3	45	81.8
W-2 entry date after 7/8/1998	8	6.2	5	6.8	3	5.5
CARES confidential case	6	4.7	3	4.1	3	5.5
Selected focal child not resident parent's child[f]	3	2.3	3	4.1	0	0.0
Nonresident parent in good-cause case 12/31/1998	0	0.0	0	0.0	0	0.0
Nonresident parent was minor 1/1/1999	0	0.0	0	0.0	0	0.0
No legal father identified/not in sample	0	0.0	0	0.0	0	0.0

Disposition	All Mothers		Experimental Group		Control Group	
	N	%	N	%	N	%
Deceased						
Resident parent died before 12/31/1998	2	1.6	1	1.4	1	1.8
Resident parent died before 12/31/1999	4	3.1	2	2.7	2	3.6
Resident parent reported dead at interview	1	0.8	1	1.4	0	0.0
Nonresident parent died before 12/31/1998	0	0.0	0	0.0	0	0.0
Nonresident parent died before 12/31/1999	0	0.0	0	0.0	0	0.0
Nonresident parent reported dead at interview	0	0.0	0	0.0	0	0.0
Focal child died before 12/31/1998	3	2.3	2	2.7	1	1.8
Focal child died before 12/31/1999	2	1.6	2	2.7	0	0.0

[a]Cases not attempted because we had no information or address was a post office box, or person was outside the zone for in-person interviews.

[b]Includes some cases where the address was assumed to be good but was outside the zone for in-person interviews.

[c]Cases not included in the fieldwork because we believed they were ineligible at the time of the survey.

[d]Cases not pursued by interviewers because they were incorrectly believed to be ineligible.

[e]Cases in which a different focal child was inadvertently selected at Time 2.

[f]Includes 1 case in which the respondent identified herself as a relation other than biological or adoptive mother of the focal child, but this was not confirmed by CARES.

Final Disposition of Fathers' Time 2 Survey Sample, by Experimental/Control Status

Disposition	All Fathers N	All Fathers %	Experimental Group N	Experimental Group %	Control Group N	Control Group %
Total Cases	3,000		1,511		1,489	
In-Scope (Eligible) Cases	2,123		1,058		1,065	
Interviewed						
Completed	696	32.8	355	33.6	341	32.0
Partially completed	18	0.8	9	0.9	9	0.8
Contacted but Not Interviewed						
Refusals	89	4.2	44	4.2	45	4.2
Persistently unavailable	123	5.8	61	5.8	62	5.8
No longer at address/phone	25	1.2	11	1.0	14	1.3
Located but Not Contacted						
Messages only/no address or phone	62	2.9	28	2.6	34	3.2
Answering machine/no answer	123	5.8	59	5.6	64	6.0
Not Located						
No location information[a]	334	15.7	166	15.7	168	15.8
Bad telephone number and/or address[b]	439	20.7	220	20.8	219	20.6
Other Reasons for No Interview						
Language barrier	15	0.7	7	0.7	8	0.8
Too ill/disabled to participate	3	0.1	2	0.2	1	0.1
Incarcerated	168	7.9	83	7.8	85	8.0
Not fielded[c]	18	0.8	6	0.6	12	1.1
Not pursued in error[d]	4	0.2	4	0.4	0	0.0
Fielded with error[e]	1	0.0	1	0.1	0	0.0
Other nonresponse[f]	5	0.2	2	0.2	3	0.3
Out-of-Scope (Ineligible) Cases	877		453		424	
Not in research population	100	11.4	55	12.1	45	10.6
W-2 entry date after 7/8/1998	8	0.9	5	1.1	3	0.7
CARES confidential case	6	0.7	3	0.7	3	0.7
Selected focal child not resident parent's child	2	0.2	2	0.4	0	0.0
Nonresident parent in good-cause case 12/31/1998	6	0.7	3	0.7	3	0.7
Nonresident parent was minor 1/1/1999	1	0.1	1	0.2	0	0.0
No legal father identified/not in sample	715	81.5	361	79.7	354	83.5

Disposition	All Fathers		Experimental Group		Control Group	
	N	%	N	%	N	%
Deceased						
Resident parent died before 12/31/1998	2	0.2	1	0.2	1	0.2
Resident parent died before 12/31/1999	4	0.5	2	0.4	2	0.5
Resident parent reported dead at interview	0	0.0	0	0.0	0	0.0
Nonresident parent died before 12/31/1998	0	0.0	0	0.0	0	0.0
Nonresident parent died before 12/31/1999	21	2.4	12	2.6	9	2.1
Nonresident parent reported dead at interview	7	0.8	4	0.9	3	0.7
Focal child died before 12/31/1998	3	0.3	2	0.4	1	0.2
Focal child died before 12/31/1999	2	0.2	2	0.4	0	0.0

[a]Cases not attempted because we had no information or address was a post office box, or person was outside the zone for in-person interviews.

[b]Includes some cases where the address was assumed to be good but was outside the zone for in-person interviews.

[c]Cases not included in the fieldwork because we believed they were ineligible at the time of the survey.

[d]Cases not pursued by interviewers because they were incorrectly believed to be ineligible.

[e]Cases in which a different focal child was inadvertently selected at Time 2.

[f]Includes 1 case in which the respondent claimed not to be the focal child's father, and 4 cases in which we did not pursue an interview with the father because the mother expressed fear for her safety or the safety of her children.

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W-2 Child Support Demonstration Evaluation

Technical Report 6

Nonresponse in the Survey of Wisconsin Works Families

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Nonresponse pervades survey samples of households, and devising methods to handle survey nonresponse continues to receive substantial attention among statisticians and econometricians.[1] Interest centers on whether the data are missing completely at random (MCAR), missing at random (MAR, alternatively known as ignorable nonresponse or selection on observables), or missing nonrandomly (MNR, also known as nonignorable nonresponse or selection on unobservables). The distinction is important because unadjusted estimates of model parameters (e.g., unweighted means or least squares coefficients) are consistent when the data are MCAR; however, if the data are MAR or MNR then some adjustment (e.g., bounds, weights, instruments, or assumptions about the missingness process) is needed for consistent estimation.

The objective of this technical report is twofold. First, as background material we provide a survey of common methods used to address unit nonresponse, making sharp distinctions between data that are MCAR, MAR, and MNR. The methods described are useful in a variety of situations where social scientists confront contaminated data. Second, and more specific to the Child Support Demonstration Evaluation (CSDE), we describe briefly the Survey of Wisconsin Works Families (SWWF), a survey of resident parents (RP) and nonresident parents (NRP) associated with the CSDE, and then estimate models of survey response in order to construct weights for use in the RP and NRP surveys.[2] The weights are designed for use in summary statistics of survey outcomes and in models that assume the nonresponse process is MAR. Researchers may wish to check their weighted model estimates against some more flexible alternatives under the MNR assumption detailed in the next section.

Common Solutions for Survey Nonresponse

To fix ideas we begin with a discussion of unit nonresponse in the context of cross-sectional data, and then extend it to panel data. Our discussion draws heavily from the surveys by Heckman and Robb (1985a,b) and Vella (1998), and the interested reader is directed there for a more complete treatment. The statistical model of interest takes the following form:

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[1] We thank Greg Duncan and Robert Moffitt for helpful comments on an earlier version of this report.

[2] Although item nonresponse may prove to be an issue in the SWWF, a review of methods to deal with this problem is beyond the scope of the current paper. See Madow, Nisselson, and Olkin (1983) and Little and Rubin (1987) for an extensive discussion of item nonresponse.

(1) $y_i^* = x_i' \beta + u_i,$ $i = 1, 2, \ldots, N$

(2) $r_i^* = z_i' \delta + e_i,$ $i = 1, 2, \ldots, N$

(3) $r_i^* > 0 \Rightarrow r_i = 1; \; r_i = 0$ otherwise

(4) $y_i = r_i \times y_i^*,$

where y_i^* is a latent outcome of interest with observed counterpart y_i, r_i^* is an index function for the latent propensity to participate in the survey with r_i the observed participation decision, and x_i and z_i are $K \times 1$ and $M \times 1$ vectors of observed regressors with the assumed properties of $E[u_i \mid x_i] = 0$ and $E[e_i \mid z_i] = 0$.[3] We assume that z_i is available for both respondents and nonrespondents, while we will discuss situations in which x_i is not available for nonrespondents. Left unspecified at this point is the potential stochastic dependence between u_i and z_i as well as between u_i and e_i. This forms the basis of the following sections.

A) Missing Completely at Random, $E[u_i \mid e_i] = 0$ and $E[u_i \mid z_i] = 0$

In the situation in which u_i is stochastically independent of both z_i and e_i the data are said to be missing completely at random (MCAR), or that selection is exogenous. If we specify a probability mechanism for the sample, $Pr(r_i \mid y_i)$, then MCAR implies that $Pr(r_i \mid y_i) = Pr(r_i)$; that is, the sample is unconfounded (Rubin, 1983). This is clearly the best-case scenario when data are missing because estimating the model on the subsample for which $r_i = 1$ yields consistent estimates of the parameters of interest, β, without the need of specifying the missing data process, $Pr(r_i \mid y_i)$, or imposing distributional assumptions on u_i. Unfortunately, MCAR is rarely satisfied in practice, making it necessary to consider alternative formulations.

B) Missing at Random, $E[u_i \mid e_i] = 0$ and $E[u_i \mid z_i] \neq 0$

When we relax the conditional mean independence assumption between z_i and u_i we obtain the situation known as missing at random (MAR), or selection on observables. This approach is common in the statistics literature (e.g., Little and Rubin, 1987; Robins and Rotnitzky, 1995; Rosenbaum and Rubin, 1983), but with the exception of Barnow et al. (1980) and Heckman and Robb (1985a,b) it has received

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[3] Although some extend the participation decision into a sequential model of the probability of locating the sample member followed by the conditional probability of participation given location (e.g., Groves and Couper, 1998; Lin et al., 1999), we focus on the more common binary specification given the very low refusal rate in the SWWF.

little attention among econometricians until the recent work of Fitzgerald et al. (1998), Heckman et al. (1997, 1998, 1999), Hahn (1998), and Hirano et al. (2000). Ignoring this selection mechanism and estimating the model in equation 1 via least squares on the subsample for which $r_i = 1$ yields *inconsistent* estimates of the parameters of interest, β. That is, MAR implies that z_i not only affects the probability of response but it also affects the density of y_i conditional on x_i, or, as suggested by Fitzgerald et al. (1998, p. 260), "z is endogenous to y."

A variety of methods have been proposed in the literature to deal with data that are MAR. Most often these methods are developed for treatment-effects models when data for the control group do not come from a randomized trial. Early efforts at correcting for MAR bias are attributed to Rubin (1977, 1979), who proposed the method of "matching" observations from the nonexperimental comparison group to those in the treatment group on the basis of a covariate, or vector of covariates. In many situations the number of covariates can be quite large, leading to the missing data version of the "curse of dimensionality." To solve the dimensionality problem, Rosenbaum and Rubin (1983) make the common assumption that $E[e_i \mid z_i] = 0$, which implies that the selection model is of the reduced-form variety, in order to write $Pr(r_i = 1 \mid z_i) = 1 - F(-z_i \, \delta)$, where $F(.)$ is a proper cdf. This yields the "propensity score," which in the treatment-effects literature is defined as the probability of assignment to treatment conditional on the pretreatment covariates. Instead of matching on a possibly large vector of covariates, the match occurs on the single probability of assignment. The inverse of the propensity score is then used as a weight for calculating means, variances, and possibly regression parameters.

An analogy to the propensity score applies to the case of unit nonresponse. With unit nonresponse one simply estimates equation 2 for the probability of response with either parametric or nonparametric methods, retains the fitted probabilities, $\hat{p}_i$, and then estimates equation 1 for the subsample for which r_i = 1 via weighted least squares with $\hat{p}_i^{-1}$ as weights. A critical requirement for this approach to work is that the z_i's must be available for both respondents and nonrespondents (Fitzgerald et al., 1998; Wooldridge, 1999). Provided that selection occurs only on observables this approach is very attractive because of its computational convenience. Recent work by Hahn (1998) and Hirano et al. (2000) attempts to improve of the efficiency of the inverse probability weighting method, but for those researchers most concerned about consistency of point estimates, the latter approach is direct and readily available in most statistical packages.

A critical issue in the propensity score approach is proper identification of the probability of response (treatment) as opposed to the parameters in the model of interest. If z_i and x_i contain the same elements, then identification is achieved provided that $F(.)$ is nonlinear, thus ruling out the linear probability model. Identification is likely to be more powerful if there are credible exclusion restrictions

that can be exploited. For example, in the SWWF described below, there are administrative data available prior to the survey for both respondents and nonrespondents. In addition, there are variables specific to the survey instrument that are likely to affect the probability of survey participation but not the outcomes of interest, particularly in the NRP survey. These include, among others, the number of phone calls made to reach survey households and the replicate structure that determines whether the NRP is eligible for in-person interviews.

Wooldridge (1999) provides an eloquent overview and asymptotic theory underlying inverse probability weighting methods of the type described herein. Although his application is to variable probability samples, such as the oversampling of low-income households in the University of Michigan's Panel Study of Income Dynamics, the methods are applicable to situations of unit nonresponse and panel attrition.[4] Specifically, Wooldridge (1999) defines the problem in terms of **weighted M-estimators**, which stands for "maximum likelihood-like estimators" such as maximum likelihood, linear and nonlinear least squares, and quasi-maximum likelihood.

In terms of the notation in equations (1)–(4) above, define the objective function as

(5) $$\sum_{i=1}^{N_r} \hat{p}_i^{-1} q(x_i, y_i, \beta),$$

where N_r refers to the subsample of survey respondents, and $q(.)$ is the objective function to be minimized. In equation 1, $q(x_i, y_i, \beta) = (y_i - x_i \beta)^2$ for scalar x_i. This formulation can readily accommodate other, more complicated models than the linear one in equation 1. For example, suppose that in place of equation 1 we have

(6) $$y_i = m(x_i, \beta) + u_i,$$

where $m(x_i, \beta)$ is some nonlinear function of the parameters, say the Box-Cox transformation, then the objective function is $q(x_i, y_i, \beta) = (y_i - m(x_i \beta))^2$. Alternatively, if $m(x_i, \beta)$ is a model for the median of $y_i|x_i$, then $q(x_i, y_i, \beta) = |(y_i - m(x_i \beta))|$. Finally, the weighted M-estimator can accommodate binary choice models whereby $q(x_i, y_i, \beta) = -(y_i \log(G(x_i \beta)) + (1 - y_i) \log(1 - G(x_i \beta)))$, and where $y_i = 1$ for a "yes" and $G(x_i \beta)$ is the response probability.

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[4] An early use of inverse probability weighted estimators can be found in the choice-based sampling literature of Manski and Lerman (1977), Cosslett (1981), and Hausman and Wise (1981).

Wooldridge (1999) proves that the weighted M-estimator is consistent and asymptotically normally distributed with variance-covariance matrix $\hat{A}^{-1}\hat{B}\hat{A}^{-1}$, i.e.,

$$(7) \quad \left(\sum_{i=1}^{N_r} \hat{p}_i^{-1}\nabla_\beta^2 q_i(\beta)\right)^{-1}\left(\sum_{i=1}^{N_r} \hat{p}_i^{-2}\nabla_\beta q_i(\beta)'\nabla_\beta q_i(\beta)\right)\left(\sum_{i=1}^{N_r} \hat{p}_i^{-1}\nabla_\beta^2 q_i(\beta)\right)^{-1},$$

where ∇_β stands for the gradient of the function with respect to β and ∇_β^2 refers to the second gradient. In the case of OLS, the variance-covariance is given as

$$(8) \quad \left(\sum_{i=1}^{N_r} \hat{p}_i^{-1}x_i'x_i\right)^{-1}\left(\sum_{i=1}^{N_r} \hat{p}_i^{-2}\hat{u}_i^2 x_i'x_i\right)\left(\sum_{i=1}^{N_r} \hat{p}_i^{-1}x_i'x_i\right)^{-1},$$

where $\hat{u}_i = y_i - x_i\hat{\beta}_{wls}$ is the weighted least squares residual. Note the resemblance to the White (1980) heteroskedasticity robust variance-covariance matrix; however, in this case the correction is for variable probability sampling. A slight modification is needed for the case of the binary choice model; see p. 1396 of Wooldridge (1999) for details.

As an alternative to weighted least squares, Barnow et al. (1980) extend the sample selection correction ideas of Heckman (1976) (discussed in the next section) to the case of selection on observables. Specifically, observe that the expected value of y_i given x_i and z_i is

$$(9) \quad E[y_i \mid x_i, z_i] = x_i'\beta + E[u_i \mid z_i],$$

where $E[u_i \mid z_i] \neq 0$ when the data are MAR. Thus, if we specify the joint distribution of u_i and z_i, or the conditional mean of u_i given z_i, then we can parameterize $E[u_i \mid z_i]$ and estimate equation 9 with linear or nonlinear least squares depending on the functional form of $E[u_i \mid z_i]$. For example, one choice is to write $E[u_i \mid z_i] = z_i'\pi$ and to estimate via OLS. This model is identified provided that z_i is not a strict subset of x_i.[5]

C) Nonignorable Nonresponse, $E[u_i \mid e_i] \neq 0$ and $E[u_i \mid z_i] = 0$

The standard in the econometrics literature is to assume that $E[u_i \mid e_i] \neq 0$, which implies that there is selection on unobservables, or that nonresponse is nonignorable (Heckman, 1976, 1979). Similar to the case of MAR, estimation of equation 1 for the subsample of households for which $r_i = 1$ yields biased and inconsistent parameter estimates. Conceptually, the methods designed to handle selection on unobservables are applicable to selection on observables, thus making selection on unobservables the

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[5] Another solution to the MAR problem is to employ the nonparametric bootstrap (Efron, 1994). The bootstrap, while offering improvements over asymptotic confidence intervals, is computationally demanding compared to the methods discussed in the text.

leading case among econometricians. The literature on this form of sample selection bias is massive, and is ably surveyed by Heckman and MaCurdy (1986) and Vella (1998). Unfortunately, no straightforward application of weighted least squares is available in this case, and more complicated methods of bias correction are necessary.[6]

To fix ideas, consider estimation on the subsample of respondents; that is,

(10) $E[y_i \mid x_i, z_i, r_i = 1] = x_i{}' \beta + E[u_i \mid x_i, z_i, r_i = 1] = x_i{}' \beta + E[u_i \mid z_i, r_i = 1]$.

The prototypical solution to the nonrandom sample selection problem is to assume that u_i and e_i are jointly normally distributed. In this case, Heckman (1976) shows that

(11) $E[u_i \mid z_i, r_i = 1] = \dfrac{\sigma_{ue}}{\sigma_e^2} \dfrac{\phi(z_i{}'\delta)}{\Phi(z_i{}'\delta)}$,

where σ_{ue} is the covariance between u and e, σ_e^2 is the variance of e, and $\phi(z_i{}'\delta)$ and $\Phi(z_i{}'\delta)$ are the pdf and cdf of the standard normal distributions, respectively. The ratio of the standard normal pdf and cdf in equation 11 is known as the inverse Mills ratio. By substituting equation 11 into equation 10, estimation can proceed via nonlinear least squares, or one can specify the full model and estimate by maximum likelihood.[7] More commonly, however, a two-step estimation method is employed whereby in the first step a reduced-form probit model of the probability of response is estimated, and in the second step the fitted values of the pdf and cdf replace the true values in the inverse Mills ratio and the model is estimated via OLS. Under the null of no selection on unobservables, $\dfrac{\sigma_{ue}}{\sigma_u^2} = 0$, and the usual OLS standard errors are consistent (although there may be good cause to correct for heteroskedasticity of unknown form à la White, 1980). If the null hypothesis is rejected, then all of the standard errors have to be corrected for the presence of the generated regressor; that is, White standard errors are not enough to purge the standard errors of the bias from the generated regressor (Heckman, 1979; Greene, 1981).

Over the years the two-step "Heckit" procedure has come under assault on a variety of fronts. First is the issue of identification. In some situations the elements of z_i and x_i overlap perfectly, i.e., there

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[6] A possible exception might be the recent work of Rotnitzky and Robins (1997), who claim to develop a weighted estimator for nonignorable nonresponse. However, their formulation is not common and it is not clear whether it corrects for selection on unobservables as typically conceived among econometricians.

[7] Note that if data on (y_i, x_i, z_i) are completely unavailable for nonrespondents, it is still possible to estimate the sample selection model that arises when we substitute equation 11) into equation 10) by NLS. This is simply the truncated version of Heckman's (1976, 1979) original model (Bloom and Killingsworth, 1985).

are no exclusion restrictions. Technically, under joint normality the model is identified off of the nonlinearity in the inverse Mills ratio; however, because the normal distribution is roughly linear over much of its range, identification is weak unless some continuous variables in z_i have enough variation to induce tail behavior. This has led some researchers over the years to invoke exclusion restrictions without much behavioral motivation in order to secure identification. Users of the SWWF are at an advantage here as noted in the previous sections because of access to presample administrative data and survey instrument variables.

The second major area of criticism lies in the assumption of normality and in parametric assumptions in general. The assumption of bivariate normality between u_i and e_i leads to the linear conditional mean in equation 11 above. Lee (1982, 1984) suggests that it is possible to capture deviations from normality *and* linearity by appealing to Edgeworth-type expansions such as the Gram-Charlier series expansion. If we continue to assume for the moment that e_i is distributed standard normal, then Lee (1982, 1984) shows that we can rewrite the sample selection rule in equation 11 as

$$(12) \quad E[u_i \mid z_i, r_i = 1] = \tau_1 \frac{\phi(z_i^{'}\delta)}{\Phi(z_i^{'}\delta)} - \tau_2 \frac{z_i^{'}\delta\phi(z_i^{'}\delta)}{\Phi(z_i^{'}\delta)} + \tau_3\left[(z_i^{'}\delta)^2 - 1\right]\frac{\phi(z_i^{'}\delta)}{\Phi(z_i^{'}\delta)},$$

where τ_1, τ_2, τ_3 are unknown parameters reflecting covariances between the errors terms. The attraction of this approach is that it is computationally convenient because it simply involves higher-order terms of the index function from the first-stage probit, while at the same time allowing for departures from linearity. Indeed, a test of normality is nested within the conditional mean function in equation 12— simply test whether τ_2 or τ_3 differs statistically from zero. Moreover, Lee goes on to show that it is possible to relax the normality assumption in e_i. Specifically, we can replace $z_i^{'}\delta$ in equation 12 with $-J(-z_i^{'}\delta)$, where $J(z_i^{'}\delta) = \Phi^{-1} * F(z_i^{'}\delta)$, Φ^{-1} is the inverse of the normal cdf, and $F(.)$ is the cdf of e_i such as the logistic or the chi-square. The latter is sometimes referred to as the "return to normality" model because the nonnormal distribution function $F(.)$ is transformed back to the normal distribution, greatly simplifying calculation of the conditional mean (Maddala, 1983).[8]

Another early departure from normality is found in the least squares selection correction method of Olsen (1980). He invokes two key assumptions: the distribution of e_i is known, but possibly nonnormal, and u_i is a linear function of e_i. If we further assume that e_i is uniformly distributed then we can rewrite equation 11 as

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[8] The series-expansion approach of Gallant and Nychka (1987) may be preferable to the approach of Lee because it is more nonparametric in principle.

(13) $E[u_i \mid z_i, r_i = 1] = \rho \sigma_e 3^{1/2} (z_i' \delta - 1)$,

where ρ is the correlation coefficient between u_i and e_i. The two-step procedure now requires estimating equation 2 via OLS, i.e., the linear probability estimator, in step one, and then replacing the fitted probabilities in step two and estimating equation 10 by OLS as well. In this case identification is clear— there must be an exclusion restriction imposed or else the model suffers from perfect collinearity. Though some of the fitted probabilities may lie outside the unit circle with the LP estimator, this does not prohibit consistent estimation of the model parameters of interest, i.e., β.

The 1980s witnessed a flurry of sample selection correction models that abandoned the parametric index models altogether (e.g., Cosslett, 1983; Gallant and Nychka, 1987; Powell et al., 1989; Newey et al., 1990). The idea here is to write the conditional mean in equation 11 as a general model of unknown form and to estimate the first step of the two-step procedure nonparametrically or semiparametrically. The second step is then estimated by OLS or some other procedure depending on the correction method adopted (see Vella, 1998, for details). These methods are attractive because of their reduced reliance on parametric assumptions, but they are often computationally demanding in both the estimation and inference stage as the latter frequently is conducted by bootstrapping the t-statistic or confidence interval. As a consequence their adoption in practice is comparatively rare relative to parametric methods. The reliance on parametric methods seems justified in light of the flexibility of the methods of Lee (1982, 1984) that permit deviations from normality and linearity in the conditional mean specifications, while still maintaining computational ease. Moreover, Newey (1999) recently showed that the linear probability method of Olsen (1980) is robust to misspecification of the error distribution. Specifically, he shows that so long as u_i is a linear function of e_i, incorrectly assuming that e_i is uniformly distributed still permits consistent estimation "up to scale." Newey (1999) concludes "that the inconsistency of parametric estimators may be small when the regressor conditions are approximately satisfied…" (p. 129). Unfortunately, this result does not extend to Heckman's (1976) original formulation.

D) Instrumental Variables

A frequently overlooked, yet potentially attractive, approach to the missing data problem is instrumental variables (IV). IV is attractive both because it invokes minimal assumptions, many of which can be readily tested, and because it is computationally convenient (Heckman and Robb, 1985a,b). Suppose we have access to a $L \times 1$ vector of instruments, w_i, satisfying the following properties:

(i) $\quad E[u_i \mid w_i, r_i] = 0$

(ii) $\quad$ rank $E[w_i w_i' \mid r_i = 1] = L$

(iii) $\quad$ rank $E[w_i x_i' \mid r_i = 1] = K$,

where $L \geq K$, then the IV estimator is given as

(14) $\quad \hat{\beta}_{IV} = \left[\left(N_r^{-1} \sum_{i=1}^{N_r} x_i w_i' \right) \left(N_r^{-1} \sum_{i=1}^{N_r} w_i w_i' \right)^{-1} \left(N_r^{-1} \sum_{i=1}^{N_r} w_i x_i' \right) \right]^{-1} \times$

$$\left[\left(N_r^{-1} \sum_{i=1}^{N_r} x_i w_i' \right) \left(N_r^{-1} \sum_{i=1}^{N_r} w_i w_i' \right)^{-1} \left(N_r^{-1} \sum_{i=1}^{N_r} w_i y_i \right) \right].$$

Regardless of the source of stochastic dependence between equations (1) and (2), i.e., selection on observables or selection on unobservables, the IV estimator is consistent for the selected sample.

As is the case with all IV estimators, the key for consistent identification lies in the choice of w_i. Natural candidates include the elements in z_i as well as nonlinear transformations of the z_i, say $g(z_i)$. Clearly, when there is selection on observables, $E[u_i \mid z_i] \neq 0$, rendering the z_i invalid as instruments. However, $g(z_i)$ may still be valid provided that assumptions i–iii are satisfied. Moreover, nonlinear transformations of x_i, $g(x_i)$, may also be candidates. The advantage of IV is that several assumptions are testable—we can use the partial R^2 statistic proposed by Shea (1998), and clarified by Godfrey (1999), to test for the correlation between the vector of instruments (w_i) and the vector of possibly endogenous regressors (x_i); we can use the Hausman (1978) test to test for endogeneity of the x_i's; we can use the Sargan (1957) test, or Hansen (1982) test with Generalized Method of Moments, to test the validity of the overidentifying restrictions when $w_i > x_i$; and we can use the pseudo likelihood ratio test to test the exogeneity of the instruments (Godfrey, 1988). IV does, however, require that we "hang our hat" on a vector of just-identifying instruments that by assumption must satisfy assumptions i–iii, and this vector is increasing in the dimensionality of x_i.

Bounds

Horowitz and Manski (1998) argue that many of the methods described above in sections A–D rest on untenable assumptions. They believe that much of what is necessary to achieve point estimates in the presence of survey nonresponse is untestable; that is, "the only way to identify population parameters

is to make assumptions that determine the distribution of the missing data" (p. 38). Instead, Horowitz and Manski propose a procedure whereby bounds are calculated around the statistic of interest. This method is inherently conservative in that the bounds are often quite wide. Note that the force of their argument is weakened by the recent result of Newey (1999), by the use of nonparametric and semiparametric estimators, as well as by the use of IV, which do not require assumptions about the distribution of the missing data. However, it is instructive to briefly review the method of bounds, with particular emphasis on unit nonresponse such that (y_i, x_i) is missing when $r_i = 0$. We assume throughout that z_i is available for respondents and nonrespondents.

We are interested in estimating the conditional mean $E[y_i \mid x_i \in A] \equiv E[y_i \mid A]$ from equation 1, which can be expressed as

(15) $E[y_i \mid A] = E[y_i \mid A, r_i = 1] * P(r_i = 1 \mid A) + E[y_i \mid A, r_i = 0] * P(z_i = 0 \mid A)$.

The problem with unit nonresponse is that neither $P(r_i = 1 \mid A)$ nor $E[y_i \mid A, r_i = 0]$ is identified. Consequently, Horowitz and Manski (1998) propose bounds on the conditional mean $E[y_i \mid x_i]$ as follows:

(16) $E[y_i \mid A, r_i = 1] * P_e(r_i = 1 \mid A) + D_0 * P_e(r_i = 0 \mid A) \leq E[y_i \mid x_i] \leq$

$E[y_i \mid A, r_i = 1] * P_e(r_i = 1 \mid A) + D_1 * P_e(r_i = 0 \mid A)$,

where $D_0 \equiv \inf_{y \in Y} y$, $D_1 \equiv \sup_{y \in Y} y$, and $P_e(r_i = 1 \mid x_i)$ is known as the effective response probability and $P_e(r_i = 0 \mid A) = 1 - P_e(r_i = 1 \mid A)$ is the effective nonresponse probability. The latter are derived from Bayes Theorem whereby

$$P_e(r_i = 1 \mid A) \equiv \frac{P(A \mid r_i = 1) * P(r_i = 1)}{P(A \mid r_i = 1) * P(r_i = 1) + P(r_i = 0)} .$$

The effective response probability is *at most* equal to the actual probability, and each are constrained to be at most equal to 1. They show that inference is not possible at all when $P(A \mid r_i = 1) = 1$. Horowitz and Manski (1998) provide a number of empirical examples for the calculation of bounds, with the bulk of the data coming from simple summary statistics. In many cases bounds will be uninformative if they are quite wide; however, they should be viewed as a useful specification check on the parametric models, much as alternative functional forms of the conditional mean should be employed for sensitivity analysis.

Panel Data

When panel data are available, several new issues in survey nonresponse surface. Unit nonresponse occurs not only with the initial survey but also in the form of attrition as the panel ages. In some cases, survey participants may miss a wave, but then return in a later period, while in other cases they depart permanently for a variety of reasons such as death, institutionalization, moving, or refusal. Most of the literature focuses on the case of permanent attrition (Verbeek and Nijman, 1992; Vella, 1998), and we will do likewise.

Consider the following modification on the statistical model of interest:

(17) $\quad y_{it}^* = x_{it}'\beta + \alpha_i + u_{it}, \qquad i = 1, 2, \ldots, N; t = 1, \ldots, T_i$

(18) $\quad r_{it}^* = z_{it}'\delta + \gamma_i + e_{it}, \qquad i = 1, 2, \ldots, N; t = 1, \ldots, T_i$

(19) $\quad r_{it}^* > 0 \Rightarrow r_{it} = 1; \; r_{it} = 0 \text{ otherwise}$

(20) $\quad y_{it} = r_{it} \times y_{it}^*,$

where α_i and γ_i represent person-specific and time-invariant latent heterogeneity, and the total length of panel participation, T_i, may also be person-specific. The latent heterogeneity terms are typically treated either as random effects (i.e., uncorrelated with the regressors) or as fixed effects (i.e., correlated with the regressors).

If we define the fixed-effect error term as the deviation from individual time means,

$u_{it}^d = u_{it} - \dfrac{\sum_{s=1}^{T} u_{is} r_{is}}{\sum_{s=1}^{T} u_{is}}$, then consistency of the fixed-effect estimator in the case of selection on

unobservables requires $E[u_{it}^d \mid x_{it}, r_{it}] = 0$; that is, it requires $\sigma_{ue} = 0$. In other words, if the probability of nonresponse is person-specific and time-invariant, then sample selection operates through the fixed heterogeneity and thus can be swept away by the within transformation or by first differencing. This is a powerful result as it does not require a specification of the selection mechanism and is likely to occur in many situations (e.g., Ziliak and Kniesner, 1998). Consistency of the random effects estimator requires a stronger condition—$E[\alpha_i + u_{it} \mid x_{it}, r_{it}] = 0$—which implies that selection cannot operate either through the fixed heterogeneity or the idiosyncratic time-varying error term.

In the event that selection operates through observables, then the inverse probability weighting method discussed above in section B applies. One simply estimates the probability of attrition for each period, $\hat{p}_{it}$, and then weights the data by the inverse probability before estimation by weighted least squares or weighted M-estimation. If, however, selection is on the time-varying unobservables, u_{it}, (and it is not time invariant), then methods similar to the cross-sectional case apply, although they are often derived for the random effects case (Ridder, 1990). Because parametric assumptions are typically invoked in the latter situation, Verbeek and Nijman (1992) discuss several simple variable-addition tests to check for the presence of attrition. These tests involve appending to equation 17 a variable representing the number of periods a person is in the panel, or a variable that equals 1 if the respondent is present in all the periods and 0 otherwise.

Wooldridge (1995) takes a hybrid approach and invokes the correlated random-effects assumption of Chamberlain (1980). In particular, Wooldridge decomposes the fixed heterogeneity in the attrition equation as $\gamma_i = \kappa_0 + \kappa_1 z_{i1} + ... + \kappa_T z_{iT} + \varepsilon_i$, where ε_i is randomly distributed in the population. Substituting into equation 18 yields

(21) $r_{it}^* = z_{it}{'}\delta + \kappa_0 + \kappa_1 z_{i1} + ... + \kappa_T z_{iT} + \varepsilon_i + e_{it}$.

Estimation then proceeds in the usual two-step fashion; in step one estimate the probability of attrition for each period via Probit and construct the inverse Mills ratio, $\hat{\lambda}_{it}$.[9] In step two, estimate the following first difference model for the subsample with $r_{it} = 1$

(22) $\Delta y_{it} = \Delta x_{it}{'}\beta + \rho_2 d2_t \hat{\lambda}_{it} + \rho_3 d3_t \hat{\lambda}_{it} + ... + \rho_T dT_t \hat{\lambda}_{it} + \Delta u_{it}$,

where Δ is the first difference operator, ρ_t, t = 2,…,T are unknown parameters to estimate, and the dt_t, t = 2,…,T are time dummies for each period. Under the null hypothesis of no endogenous attrition, $\rho_t = 0$, and this forms the basis of a joint test. Notice that under H_0 standard errors need to be corrected for heteroskedasticity and serial dependence, whereas if H_0 is rejected, the standard errors must also be corrected for the presence of generated regressors (Wooldridge, 1995).

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[9] Notice that this is analogous to estimating a discrete hazard under the common assumption that the attrition is permanent.

Data

This section describes the design of the Survey of Wisconsin Works Families (SWWF), including strategies we employed to minimize nonresponse. We also discuss data from the fieldwork and from administrative sources that are available for assessing nonresponse and constructing weights.

Survey Design and Completion Rates

The SWWF is a panel study of resident mothers who participated in W-2 and the legal fathers of a randomly selected focal child. A probability sample of 3,000 resident mothers was drawn from the research population after excluding cases subject to the full pass-through but not initially included in the evaluation. The sample was stratified by W-2 status ("transitioned W-2" and "new W-2") and by W-2 tier location (upper and lower).

For each case, we randomly selected a focal child from among the children who were listed on the W-2 case at entry into W-2 and who would be under age 18 on December 31, 1999. The designated focal child remained the same throughout the panel study.[10]

The legal fathers of the randomly selected focal child make up the survey sample of nonresident fathers. Cases were excluded from the fathers' Time 1 sample if paternity was not established by December 31, 1998, or if a "Good Cause" exemption from pursuing paternity or child support had been established or was pending against the father. These definitions generated an original sample of 2,028 fathers.

At Time 2, we fielded samples of 2,950 mothers and 2,225 fathers. The mother and the father became ineligible if the focal child had died since Time 1 or when we identified errors or changes in the sample frame. Fathers became ineligible at Time 2 if a Good Cause exemption had been established since Time 1. Newly identified legal fathers for whom paternity was established between January 1, 1999, and December 31, 1999, were added at Time 2. If a father or mother had died since Time 1, the surviving parent remained eligible for follow-up interview.

We completed interviews with over 80 percent of mothers at Time 1 and Time 2, and the completion rates are consistently high across characteristics of the sample.[11] Table TR6.1 reports mothers' response rates at Time 1 and Time 2 for the overall sample as well as by individual characteristics.

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[10] We later identified five cases in which a different focal child was selected inadvertently at Time 2 and was the focus of that interview. These cases were excluded from analysis.

[11] Response rates are computed as the total number of completed interviews divided by the total number of eligible (in-scope) cases. Partial interviews are not included in the numerator and are not included in data analysis for the *W-2 Child Support Demonstration Evaluation Final Report*. The final number of in-scope cases was smaller than the original sample sizes because of errors or changes in the sample frame.

Table TR6.1
Mothers' Time 1 and Time 2 Response Rates, by Subgroup Characteristics

	Time 1			Time 2		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Total Cases	2,884	2,362	81.9%	2,873	2,354	81.9%
Age of Resident Parent						
16–17	1	1	100.0	1	0	0.0
18–25	1,426	1,164	81.6	1,423	1,168	82.1
26–30	597	505	84.6	596	485	81.4
31 or older	860	692	80.5	853	701	82.2
Race of Resident Parent						
White	834	708	84.9	827	703	85.0
African American	1,682	1,396	83.0	1,678	1,404	83.7
Hispanic	190	133	70.0	190	129	67.9
Native American	70	49	70.0	70	44	62.9
Asian	27	10	37.0	27	10	37.0
Other	1	1	100.0	1	0	0.0
Unknown	80	65	81.3	80	64	80.0
Education of Resident Parent						
Less than high school	1,449	1,167	80.5	1,447	1,157	80.0
High school	1,131	938	82.9	1,126	940	83.5
More than high school	304	257	84.5	300	257	85.7
Language of Resident Parent						
English	2,826	2,343	82.9	2,815	2,334	82.9
Non-English	58	19	32.8	58	20	34.5
Location						
Milwaukee County	2,030	1,676	82.6	2,026	1,681	83.0
Other urban counties	509	398	78.2	503	404	80.3
Rural counties and tribes	345	288	83.5	344	269	78.2
Employment History[a]						
No UI-covered employment	523	409	78.2	522	387	74.1
1–4 quarters	1,111	900	81.0	1,108	903	81.5
5–7 quarters	807	671	83.1	804	688	85.6
All 8 quarters	443	382	86.2	439	376	85.6
Earnings History[a]						
No UI earnings	523	409	78.2	522	387	74.1
$1–$5,000	1,863	1,519	81.5	1,857	1,535	82.7
$5,001–$15,000	461	400	86.8	458	397	86.7
$15,001 or more	37	34	91.9	36	35	97.2

Table TR6.1, continued

	Time 1			Time 2		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
AFDC Receipt[a]						
None	616	488	79.2	612	490	80.1
1–18 months	1,012	831	82.1	1,009	829	82.2
19–24	1,256	1,043	83.0	1,252	1,035	82.7
Number of Children						
None	35	29	82.9	35	28	80.0
One	1,036	843	81.4	1,030	844	81.9
Two	823	678	82.4	819	687	83.9
Three or more	990	812	82.0	989	795	80.4
Age of Youngest Child						
Unborn	311	253	81.4	310	249	80.3
0–2	1,395	1,156	82.9	1,389	1,131	81.4
3–5	505	410	81.2	504	418	82.9
6–12	556	451	81.1	553	457	82.6
13–18	117	92	78.6	117	99	84.6
Focal Child's Parentage						
Legal father, unknown how	5	2	40.0	5	5	100.0
Nonmarital child	2,515	2,060	81.9	2,505	2,053	82.0
Marital child	364	300	82.4	363	296	81.5
Number Legal Fathers						
No legal fathers	892	699	78.4	887	681	76.8
One	1,469	1,214	82.6	1,464	1,223	83.5
Two or more	523	449	85.9	522	450	86.2
Child Support Order[b]						
No child support order	1,329	1,039	78.2	1,324	1,022	77.2
Child support order	1,555	1,323	85.1	1,549	1,332	86.0
Child Support Paid by All Nonresident Parents[a]						
No child support paid	1,928	1,543	80.0	1,921	1,534	79.9
$1–$999	450	385	85.6	446	384	86.1
$1,000 or more	506	434	85.8	506	436	86.2
Arrearages Owed by All Nonresident Parents						
No arrearages owed	1,267	991	78.2	1,262	978	77.5
$1–$500	71	59	83.1	71	57	80.3
$501–$2,000	346	294	85.0	345	289	83.8
$2,001 or more	1,200	1,018	84.8	1,195	1,030	86.2

Table TR6.1, continued

	Time 1			Time 2		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Research Group						
Control	1,438	1,163	80.9	1,434	1,179	82.2
Experimental	1,446	1,199	82.9	1,439	1,175	81.7
Case Type						
AFDC	1,485	1,224	82.4	1,478	1,216	82.3
W-2	1,399	1,138	81.3	1,395	1,138	81.6
Initial W-2 Assignment						
W-2 Transition	264	210	79.5	262	201	76.7
Community Service Job	1,277	1,043	81.7	1,275	1,052	82.5
Caretaker of Newborn	307	251	81.8	304	244	80.3
Upper Tier	1,036	858	82.8	1,032	857	83.0
Quarter of Entry						
4th quarter of 1997	1,321	1,071	81.1	1,316	1,071	81.4
1st quarter of 1998	946	795	84.0	942	783	83.1
2nd quarter of 1998	617	496	80.4	615	500	81.3

Notes: Response rate (RR) = I / (I + P + R + NC + O) where I=completed interview, P=partial interview, R=refusal, NC=noncontact (includes not located), O=other noninterview. Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Measured for the 12 months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

Response rates generally hover near 80 percent and rarely fall below 75 percent. Exceptions include completion rates among non-English speakers, largely because interviews were conducted only in English, and among racial and ethnic groups with higher proportions of non-English speakers (e.g., Hispanics). Although completion rates are consistently high, there is a tendency for those with fewer social or economic resources to be underrepresented relative to more advantaged groups. For example, mothers with less education, less stable employment, and lower earnings were less likely to complete interviews than their counterparts with more resources, even though response rates among the former groups are well above 70 percent. Similarly, we interviewed 77 to 80 percent of mothers who did not have child support orders or who were not receiving child support, but completion rates were closer to 86 percent among those with child support orders or child support receipts. Appendix Tables TR6.1 through TR6.3 report completion rates for other sample breakdowns (e.g., Milwaukee versus outside Milwaukee, by case type) and show similar patterns.

We were less successful in locating and interviewing fathers. As shown in Table TR6.2, we completed interviews with only one-third of the sample (33.2 percent at Time 1 and 32.6 percent at Time 2). Among a subsample of fathers who were eligible for telephone and personal interviews (Table TR6.3), the response rates are noticeably higher—42.7 at Time 1 and 46.2 percent at Time 2.[12] In both the overall sample and the subsample, men with fewer economic resources (less stable employment, lower or no earnings, and lower or no child support payments) were less likely to be interviewed. In contrast, we completed interviews with almost one-half the fathers who were employed during eight quarters prior to the study period and who had a history of paying $1,000 or more of child support to the resident mother during the 12 months prior to the study. Men who were the father of the focal child by marriage also were more likely to be interviewed than fathers involved in paternity cases, and almost one-half of the fathers who were white were interviewed compared with less than 30 percent of fathers who were black. (Appendix Tables TR6.4 through TR6.6 report response rates for other breakdowns of the fathers' sample.)

The low completion rates among the fathers raise concerns that data analyses of survey respondents alone, unadjusted for nonresponse, will yield biased estimates. Nonresponse bias should be less severe in the mothers' sample with an overall high response rate, but nonetheless some subgroups tend to be underrepresented. Data analysis of survey respondents alone, without adjustment for nonresponse, may yield biased estimates for the mothers' sample as well.

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[12] One-third of the fathers' sample, selected at random, were eligible for telephone and personal interviews. The remaining two-thirds were eligible only for telephone interviews. The motivation for subdividing the sample and procedures for executing this field strategy are discussed later in this report.

Table TR6.2
Fathers' Time 1 and Time 2 Response Rates, by Subgroup Characteristics

| | Time 1 | | | Time 2 | | |
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Total Cases	1,936	643	33.2%	2,130	696	32.7%
Age of Nonresident Parent						
16–17	14	5	35.7	22	5	22.7
18–25	621	205	33.0	717	222	31.0
26–30	489	160	32.7	519	154	29.7
31 or older	802	272	33.9	859	313	36.4
Unknown	10	1	10.0	13	2	15.4
Race of Nonresident Parent						
White	326	154	47.2	361	170	47.1
African American	774	226	29.2	882	246	27.9
Hispanic	95	21	22.1	108	22	20.4
Native American	32	11	34.4	35	10	28.6
Asian	7	0	0.0	7	0	0.0
Other	0	0	0.0	0	0	0.0
Unknown	702	231	32.9	737	248	33.6
Employment History[a]						
No UI-covered employment	522	99	19.0	589	129	21.9
1–4 quarters	459	130	28.3	505	157	31.1
5–7 quarters	418	170	40.7	452	174	38.5
All 8 quarters	454	223	49.1	490	217	44.3
Unknown	83	21	25.3	94	19	20.2
Earnings History[a]						
No UI earnings	522	99	19.0	589	129	21.9
$1–$5,000	718	229	31.9	789	255	32.3
$5,001–$15,000	405	190	46.9	441	199	45.1
$15,001 or more	208	104	50.0	217	94	43.3
Unknown	83	21	25.3	94	19	20.2
Parentage of Focal Child						
Legal father, unknown how	4	2	50.0	5	2	40.0
Paternity	1,602	508	31.7	1,772	555	31.3
Marriage	330	133	40.3	353	139	39.4
Number of Children with Resident Parent						
None	15	10	66.7	23	14	60.9
One	1,247	408	32.7	1,387	437	31.5
Two	448	162	36.2	476	169	35.5
Three or more	226	63	27.9	244	76	31.1

Table TR6.2, continued

	Time 1			Time 2		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Age of Youngest Child with Resident Parent						
Unborn	33	13	39.4	44	19	43.2
0–2	619	225	36.3	747	244	32.7
3–5	509	158	31.0	524	175	33.4
6–12	652	208	31.9	685	213	31.1
13–18	123	39	31.7	130	45	34.6
Child Support Order with Resident Parent[b]						
No child support order	653	217	33.2	817	254	31.1
Child support order	1,283	426	33.2	1,313	442	33.7
Child Support Payments to Resident Parent[a]						
No child support payments	1,231	327	26.6	1,412	395	28.0
$1–$999 child support paid	347	146	42.1	354	136	38.4
$1,000 or more child support paid	358	170	47.5	364	165	45.3
Arrearages Owed to State						
No arrearages	580	221	38.1	742	267	36.0
$1–$500 owed	74	28	37.8	76	28	36.8
$501–$2,000	360	123	34.2	373	106	28.4
$2,001 or more	922	271	29.4	939	295	31.4
Survey Replicate						
Full effort replicate	677	354	52.3	736	340	46.2
Partial effort replicate	1,259	289	23.0	1,394	356	25.5

Notes: Response rate (RR) = I / (I + R + R + NC + O) where I=completed interview, P=partial interview, R=refusal, NC=noncontact (includes not located), O=other noninterview. Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Measured for the 12 months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

Disposition	Mothers		Fathers		Fathers, by Replicate Structure[a]			
					Full Effort		Partial Effort	
	N	%	N	%	N	%	N	%
Total Cases	2,884		1,936		677		1,259	
Interviews								
Complete	2,362	81.9	643	33.2	289	42.7	354	28.1
Partial	54	1.9	61	3.2	19	2.8	42	3.3
Contacted/Not Interviewed								
Refusal	94	3.3	112	5.8	43	6.4	69	5.5
Persistently unavailable	44	1.5	64	3.3	28	4.1	36	2.9
No longer at address/phone	33	1.1	73	3.8	14	2.1	59	4.7
Located/No Contact								
Messages only/no address or phone	35	1.2	63	3.3	28	4.1	35	2.8
Answering machine/no answer	55	1.9	90	4.6	37	5.5	53	4.2
Not Located								
No location information[b]	18	0.6	185	9.6	19	2.8	166	13.2
Bad telephone number and/or address[c]	119	4.1	421	21.7	115	17.0	306	24.3
Other Noninterviews								
Language barrier	34	1.2	19	1.0	7	1.0	12	1.0
Too ill/disabled to participate	3	0.1	6	0.3	4	0.6	2	0.2
Incarcerated	22	0.8	171	8.8	65	9.6	106	8.4
Not fielded	6	0.2	8	0.4	2	0.3	6	0.5
Not pursued in error	2	0.1	5	0.3	0	0.0	5	0.4
Other nonresponse[d]	1	0.0	5	0.3	3	0.4	2	0.2
Relocated/reported dead	2	0.1	10	0.5	4	0.6	6	0.5

[a]Fathers in survey replicates 1–10 were eligible for telephone and in–person interviews. Fathers in replicates 11–30 were eligible for telephone interviews only; hence, "full effort" and "partial effort."

[b]Includes cases with a PO Box or outside the in-person interview zone.

[c]Includes some cases where the address was assumed to be good but was outside the zone for in-person interviews.

[d]Includes one case in the mothers' sample in which the respondent claimed not to be the focal child's mother and this information was not confirmed by CARES. Among the fathers' sample, includes (a) three cases in which the respondent claimed not to be the focal child's father and (b) two cases in which we did not pursue an interview with the father because the mother expressed fear for her safety or the safety of her children.

Efforts to Minimize Nonresponse

As documented in Tables TR6.3 and TR6.4, the low response rate among fathers is due largely to difficulties in locating sample members. The final disposition of cases suggests that cooperation, once a respondent is contacted, is quite high. At Time 1, only about 6 percent of fathers refused to participate while almost 40 percent could not be interviewed because of bad addresses, nonworking telephone numbers, or inability to contact the designated respondent. A similar pattern prevails among the mothers' sample even though a much larger number were interviewed: only about 7 percent of the sample could not be located or contacted. The challenges of locating respondents persisted at Time 2 when slightly larger proportions of the sample were never located or could not be contacted (Table TR6.4). Over one-third of fathers were never located and another 9 percent could not be reached for an interview even after a valid address or telephone number was reached. About 10 percent of mothers were not successfully located and contacted, but refusal rates remained relatively low and even declined slightly at Time 2.[13]

We expected to be less successful in locating and interviewing fathers. Tracing efforts prior to the first wave of data collection indicated that fathers were much more difficult to locate than mothers. Location data from the sample frame (address, telephone number) were less often available for fathers and, when present, were more likely to be incorrect. Contact information gleaned from other sources more frequently yielded bad addresses and nonworking or nonexistent telephone numbers for fathers.

We devised several strategies to minimize nonresponse and increase the chances of locating and interviewing sample members. With one exception, these were applied to the mothers' and fathers' samples:

(a)   Advance notification letters were sent to sample members that explained the purpose of the study, requested address confirmation or correction, and included business reply envelopes and a one-dollar bill (at Time 1) or a two-dollar bill (at Time 2).

(b)   Brief tracing interviews were conducted with respondents prior to Time 1 to confirm addresses and telephone numbers and to obtain the name and location information for a contact person.

(c)   Sample members were told that they would receive a check for $15 (at Time 1) and $25 (at Time 2) after they completed the interview.

(d)   At the completion of the interview, each respondent was asked for address and telephone information for the other parent or for someone who may know how to reach the other parent.

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[13] Relatively high rates of incarceration among men also dampened response rates in the fathers' survey. Almost 10 percent of the fathers in the sample were incarcerated for the duration of the study period.

Table TR6.4
Final Disposition of Survey Cases at Time 2

| Disposition | Mothers | | Fathers | | Fathers, by Replicate Structure[a] | | | |
| | | | | | Full Effort | | Partial Effort | |
	N	%	N	%	N	%	N	%
Total Cases	2,873		2,130		736		1,394	
Interviews								
Complete	2,354	81.9	696	32.7	340	46.2	356	25.5
Partial	20	0.7	18	0.8	5	0.7	13	0.9
Contacted/Not Interviewed								
Refusal	82	2.9	89	4.2	36	4.9	53	3.8
Persistently unavailable	39	1.4	123	5.8	27	3.7	96	6.9
No longer at address/phone	9	0.3	25	1.2	11	1.5	14	1.0
Located/No Contact								
Messages only/no address or phone	48	1.7	62	2.9	34	4.6	28	2.0
Answering machine/no answer	27	0.9	123	5.8	19	2.6	104	7.5
Not Located								
No location information[b]	39	1.4	334	15.7	32	4.3	302	21.7
Bad telephone number and/or address[c]	177	6.2	438	20.6	126	17.1	312	22.4
Other Noninterviews								
Language barrier	27	0.9	15	0.7	5	0.7	10	0.7
Too ill/disabled to participate	1	0.0	3	0.1	2	0.3	1	0.1
Incarcerated	29	1.0	168	7.9	82	11.1	86	6.2
Fielded with error	5	0.2	1	0.0	1	0.1	0	0.0
Not fielded	13	0.5	18	0.8	10	1.4	8	0.6
Not pursued in error	0	0.0	5	0.2	3	0.4	2	0.1
Other nonresponse[d]	2	0.1	5	0.2	2	0.3	3	0.2
Relocated/reported dead	1	0.0	7	0.3	1	0.1	6	0.4

[a]Fathers in survey replicates 1–10 were eligible for telephone and in–person interviews. Fathers in replicates 11–30 were eligible for telephone interviews only; hence, "full effort" and "partial effort."

[b]Includes cases with a PO Box or outside the in-person interview zone.

[c]Includes some cases where the address was assumed to be good but was outside the zone for in-person interviews.

[d]Includes two cases in the mothers' sample in which the respondent claimed not to be focal child's mother and this information was not confirmed by CARES. Among the fathers' sample, includes (a) one case in which the respondent claimed not to be the focal and (b) four cases in which we did not pursue an interview with the father because the mother expressed fear for her safety or the safety of her children.

(e)   Telephone calling cards for 15 minutes of long distance calls were mailed to sample members later in the field period as a means of thanking them for their participation or, if they had not been reached, asking them to complete an interview.[14]

(f)   In all our communications with sample members, we encouraged them to call a toll-free number to complete an interview or provide updated address or telephone information.

(g)   Throughout the field period, the survey contractor maintained a special "tracing department" throughout the field to trace and retrace sample members when telephone numbers or addresses proved to be incorrect.[15]

We took an additional step to minimize nonresponse for the fathers' survey. We divided the fathers' sample into two subsamples, only one of which was eligible for the more intensive effort associated with in-person tracing and face-to-face interviews. In contrast, the entire sample of mothers was potentially eligible for in-person interviews. For both samples, in-person interviewing efforts were limited to Wisconsin cities and metropolitan areas where at least ten cases (mothers and fathers combined) could not be reached by telephone. In practice, personal interviewing efforts were heavily concentrated in the central and southwestern corridors of the state, especially the Milwaukee metropolitan area (Milwaukee, Racine, and Kenosha counties), with another cluster of cases in and around Madison (Dane county).

We had two main objectives in subdividing the fathers' sample. First, we wanted to maximize our response rate at least among a representative subsample of fathers, if not the entire sample. We did not have sufficient resources to pursue in-person interviews with all the fathers who could not be reached by telephone, but we could focus our resources on approximately one-third of the sample. The sample of mothers and the sample of fathers previously had been structured into independent subsamples or "replicates" to help control achieved sample size. The mothers' sample was randomly divided into 30 replicates of approximately 100 cases each.[16] Fathers in sample replicates 1 through 10 were eligible for in-person tracing and interviews (N=677 at Time 1 and N=736 at Time 2).

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[14] This strategy was first deployed near the end of the field period at Time 1 when calling cards were sent to several hundred sample members whom we had not interviewed. At Time 2, calling cards were sent to all sample members.

[15] Technical Report 5 provides more information on these tracing procedures.

[16] The final number in a replicate was sometimes less than 100 if a case was determined to be ineligible prior to the field period. Fathers' replicates were always less than 100 because cases in which paternity was not established were excluded.

Second, we wanted to acquire information that would help us understand likely nonrespondents in the telephone-only (or so-called "partial effort") subsample in replicates 11 through 30. That is, we wanted to simulate a more traditional approach of employing more intensive tracing and interviewing techniques among a subsample of survey nonrespondents at the conclusion of a study *but do so simultaneously*. We accomplished this by trying to equalize the level of telephone effort that was used across cases that were eligible for in-person effort (replicate assignment notwithstanding). Briefly, we developed a set of decision rules for reassigning cases from telephone effort to in-person effort (e.g., number of call attempts, privacy managers that blocked calls, etc.). Coversheets for each case in the phone lab were reviewed regularly but blind with respect to replicate number. After determining whether a case should be reassigned to a personal interviewer, the replicate number was consulted. If the case met the rules for reassignment to in-person effort and had a replicate number of 1 through 10, it was assigned to a personal interviewer. If the case was in replicates 11 through 30, but otherwise eligible for in-person effort, it was set aside and received no additional telephone attempts. Thus, we sacrificed overall number of completed interviews—i.e., the additional interviews that might have been completed in replicates 11 through 30 if phone attempts had continued—in favor of a more focused allocation of resources that might inform our understanding of nonresponse.

Data Available to Examine Nonresponse

We are in a unique situation relative to national surveys such as the Panel Study of Income Dynamics or the National Longitudinal Survey in that we have data from administrative records for survey participants and nonparticipants. This will greatly aid in our identification of the survey participation model.

Specifically, data from the administrative records in CARES and KIDS provide measures of individuals' demographic characteristics as well as characteristics of the mother-father pair (age of youngest child, number of children, father by paternity or marriage, and complex family structures). These data also contain information on the amount and history of child support payments. We draw on unemployment insurance (UI) records to construct measures of employment and wages.[17]

Other measures are derived from the survey, the sample frame, or records from the field effort. These include the respondent status of the mother at Time 1 and Time 2 and whether this interview required in-person effort to complete, the father's replicate assignment (i.e., "full effort" vs. "partial effort"), and the number of call attempts or visits. Data on call attempts were coded from individual coversheets and represent the total number of calls (or visits) for a case. They include calls that resulted in

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[17] Technical Report 3 provides a thorough discussion of administrative data sources.

a contact with the respondent (or informant) as well as those that did not, thus reflecting the level of effort (actual calls and retracing) required to reach a sample member.[18] While we have administrative data on education levels and race for resident mothers, the education of the nonresident father was not collected and information on the race of the father is missing for over one-third of the sample and thus is not included.

Construction of Weights for the SWWF

In this section we describe the method employed to construct weights for the resident and nonresident parent surveys. As detailed earlier in this technical report, the weights are appropriate for adjusting summary statistics to more accurately reflect the population moments; however, in the context of correcting for nonresponse bias, they are only appropriate if selection is on observables.

We construct two weights for each of the RP and NRP surveys: one for the first-wave cross section (T1), and one that can be employed for either the second-wave cross section (T2) or for the pooled T1 and T2 cross sections (Ever In). In each case we estimate the probability of survey participation via probit maximum likelihood, and then take the inverse of the fitted probabilities to construct the weight.[19]

NRP Survey Participation

The variables included in the NRP participation equation include a quadratic in the NRP's and RP's earnings at entry into W-2 as reported on the administrative UI earnings records, a quadratic in the NRP's age, a quadratic in the number of phone calls made to reach the NRP, the age of the youngest child in the RP/NRP pair, the number of children between the RP/NRP pair, the number of RPs associated with the NRP in the sample, the number of NRPs associated with the RP, the natural log of child support payments at entry into W-2, and indicator variables for whether the NRP was eligible for full interviewing effort (i.e., in-person interviews), whether the NRP is the paternity father, whether the RP paired with the NRP participated in the RP survey, and whether the RP paired with the NRP had a computer-assisted personal interview (CAPI). At this stage the number of phone calls made at T2 is missing and thus is excluded from the Ever In models. To be included in the sample we require complete data on NRP UI

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[18] We currently have data on calls only for Time 1 of the fathers' survey. We have similar survey-based information for mothers, but it is generally less useful than administrative data for predicting survey participation (e.g., mothers in all survey replicates were eligible for in-person interviews).

[19] We also examined the linear probability model, the logit model, the skewed logit model, and the complementary log-log model without any significant difference in results.

earnings and NRP age.[20] In addition the NRP must be "in scope"; that is, between T1 and T2 over 200 NRPs had legal paternity established and thus are in scope for the T2 survey and not the T1 survey.[21]

In Table TR6.5 we record the probit estimates of the probability of survey participation by NRPs for T1 and Ever In. The results are quite similar across the two specifications. The probability of survey response increases as NRP earnings increase, but at a decreasing rate. In T1, the probability of response follows a similar pattern with respect to the number of phone calls made, suggesting that there are diminishing returns to excessive phone calls. Being in replicates 1–10, and thus eligible for full interviewing effort, has a strong positive effect on participation. Likewise, survey participation is substantially increased as the level of child support payments paid at entry into W-2 increases, and if the RP participates in the survey as well.

On the other hand, paternity fathers are significantly less likely to participate in the survey, particularly in T1. Survey participation is also deterred significantly by the number of children between the RP/NRP pair, by the age of the youngest child, and by the number of NRPs paired with the RP in the sample. In terms of goodness-of-fit, the models predict participation quite well, being correct about 73 percent of the time in T1 and about 95 percent of the time for the Ever In model.

RP Survey Participation

The variables included in the RP participation equation include a quadratic in the RP's and NRP's earnings at entry into W-2 as reported on the administrative unemployment insurance earnings records, a quadratic in the child support payments received at entry into W-2, a quadratic in the amount of arrearages in child support payments the NRP has with the state, the age of the youngest child in the RP/NRP pair, the number of children between the RP/NRP pair, the number of RPs associated with the NRP in the sample, the history of AFDC usage over the 24 months prior to entry into W-2, and indicator variables for whether the RP was an AFDC or W-2 case, whether the RP was in the lower tier of W-2, whether the RP was white or black (other race is excluded category), whether the RP's education was between 9 and 11 years, 12 years, or more than 12 years (less than 9 years is the excluded category), whether the RP resides in Milwaukee County or in a rural county (other urban county is the excluded category), whether the focal child has no legal father, and whether the focal child was born out of

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[20] We are missing Social Security numbers, and thus UI earnings, for about 130 NRPs. In these cases we imputed the missing data with the median value. In addition, the age of the NRP is missing for 12 cases, so again we imputed this with the median age of NRPs.

[21] We conducted an extensive sensitivity analysis with respect to the model specification. For example, instead of the simple quadratic in UI and the log of child support payments, we used a five-part spline to allow finer nonlinearities in the response surface. This had little impact on our model fit and subsequent weights. Indeed, the fit actually worsened slightly and the variance of the weights increased slightly.

Table TR6.5
Probit Model of the Probability of Nonresident Parent (NRP) Survey Participation

Variable	Time 1	Ever In
NRP UI Wage ($1,000s)	0.0728	0.0659
	(0.0178)	(0.0171)
NRP UI Wage Squared	-0.0027	-0.0032
	(0.0011)	(0.0011)
RP UI Wage ($1,000s)	0.0252	-0.0056
	(0.0513)	(0.0488)
RP UI Wage Squared	0.0027	0.0019
	(0.0107)	(0.0107)
NRP Age	-0.0096	-0.0275
	(0.0232)	(0.0242)
NRP Age Squared	0.0001	0.0004
	(0.0003)	(0.0003)
Full (=1 if in replicates 1–10)	0.4371	0.5179
	(0.0640)	(0.0592)
Pfather (=1 if nonresident parent is paternity father)	-0.2475	-0.155
	(0.0865)	(0.0816)
Ncalls (# of calls made)	0.0258	
	(0.0086)	
Ncalls Squared	-0.0007	
	(0.0002)	
Nkids (# of kids for NRP/RP pair)	-0.1021	-0.0859
	(0.0377)	(0.0336)
Age of youngest child for NRP/RP	-0.0229	-0.0361
	(0.0092)	(0.0085)
Momt1r (=1 if RP responded in T1)	0.3624	0.3049
	(0.0924)	(0.0801)
Mcapi1 (=1 if RP's T1 CAPI)	-0.1247	-0.1673
	(0.0738)	(0.0668)
Nmomcase (# RPs paired with NRP)	-0.1643	-0.2239
	(0.2318)	(0.2129)
Lcsbase (log child support payments at entry into W-2)	0.1413	0.0926
	(0.0255)	(0.0245)
Dui (=1 if NRP is missing UI data)	0.0332	0.024
	(0.1348)	(0.1215)
Dag (=1 if NRP is missing age data)	-0.7367	-0.2514
	(0.5162)	(0.3786)
Constant	-1.1136	0.0709
	(0.4810)	(0.4711)
Log L	-1,128.88	-1,388.73
% Correct	72.60%	95.40%
N	1,936	2,130

Note: Standard deviations shown in parentheses.

wedlock. Because only those RPs residing in Milwaukee County were eligible for a CAPI, collinearity prevents us from including this variable along with the indicator for living in Milwaukee. At this stage the number of phone calls made is missing and thus is excluded from the analysis. To be included in the sample the RP must be "in scope"; that is, 2,879 were in scope in T1 but only 2,873 were in scope at T2.[22,23]

In Table TR6.6 we record the probit estimates of the probability of survey participation by RPs for T1 and Ever In. Unlike the results for the NRP model, there are fewer significant coefficients in the RP case, primarily because overall response is relatively high. The results are quite similar to the NRP model across the two specifications, however. The probability of survey response increases linearly in RP earnings, and increases at a decreasing rate with respect to child support receipts. In T1, the probability of response follows a similar increasing then decreasing pattern with respect to the NRP's arrears, but this effect is statistically zero for the Ever In model. In both periods survey participation decreases with the age of the youngest child, but increases among RPs who are white or black compared to Hispanic, Asian, or Native American. Educational differences among RPs has no impact on participation, but residing in Milwaukee relative to other urban counties in Wisconsin increases participation. In terms of goodness-of-fit, the models predict RP participation exceptionally well, being correct 99 percent of the time in each period. This rather inflated estimate is due in part because response rates are over 80 percent among RPs; however, even if we determine a "correct" prediction to be above 0.8 rather than the standard 0.5, the percentage correct is still about 70 percent.

Summary of RP and NRP Weights

In Table TR6.7 we provide simple descriptive statistics for the inverse probability weights for each of the RP and NRP T1 and Ever In models for respondents only. The weights are normalized to sum to the number of respondents in each survey period and thus the mean is by construction equal to 1. As expected, the variance of the NRP weights is substantially higher than the RP weights given the much more severe degree of nonresponse among NRPs. Consequently, the range of weights among RPs is substantially lower and thus we expect little inflation of the variance for weighted outcomes. There is, however, likely to be some variance inflation for NRPs, but given the low response rate the range of about 7 to 1 in T1 and about 4 to 1 in T2 is not excessive.

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[22] We are missing Social Security numbers, and thus UI earnings, for about 130 NRPs. In these cases we imputed the missing data with the median value.

[23] As with the NRP model we conducted an extensive sensitivity analysis with respect to the model specification. For example, instead of the simple quadratic in UI and child support receipts, we used a 5-part spline to allow finer nonlinearities in the response surface. This has little impact on our model fit and subsequent weights.

Table TR6.6
Probit Model of the Probability of RP Survey Participation

Variable	Time 1	Ever In
RP UI Wage ($1,000s)	0.0406	0.0331
	(0.0159)	(0.0253)
RP UI Wage Squared	-0.0004	0.0008
	(0.0008)	(0.0016)
NRP UI Wage ($1,000s)	-0.0088	-0.0074
	(0.0107)	(0.0155)
NRP UI Wage Squared	0.0005	0.0005
	(0.0003)	(0.0005)
NRP UI (=1 if NRP is missing UI data)	-0.1423	-0.2373
	(0.1134)	(0.1409)
Tcsbase (child support receipts at entry into W-2)	0.0865	0.0741
	(0.0587)	(0.0721)
Tcsbase Squared	-0.0173	-0.0131
	(0.0090)	(0.0099)
Arrears	0.0181	0.0099
	(0.0076)	(0.0141)
Arrears Squared	-0.0004	0.0002
	(0.0001)	(0.0004)
Pfather	-0.0237	-0.0006
	(0.0862)	(0.1063)
Nkids (# of kids for NRP/RP pair)	-0.0381	-0.0804
	(0.0250)	(0.0289)
Age of Youngest Child for NRP/RP	-0.0165	-0.0174
	(0.0074)	(0.0089)
Nfathers	0.0331	0.139
	(0.0535)	(0.0733)
AFDC (=1 if old AFDC case)	0.0317	-0.0367
	(0.0721)	(0.0927)
Lower (=1 if lower tier)	0.002	-0.0679
	(0.0614)	(0.0791)
Mwhite (=1 if RP is white)	0.5014	0.744
	(0.0969)	(0.1150)
Mblack (=1 if RP is black)	0.3518	0.6392
	(0.0822)	(0.0941)
Med911 (=1 if RP educ is 9–11)	0.2243	0.0615
	(0.1445)	(0.1699)
Med12 (=1 if RP educ is = 12)	0.0084	0.0136
	(0.0635)	(0.0809)
Med13 (=1 if RP educ is > 12)	0.1017	-0.0057
	(0.1025)	(0.1272)
Milw (=1 if in Milwaukee County)	0.2003	0.2844
	(0.0833)	(0.1009)
Rural (=1 if in rural county)	0.1389	0.0426
	-0.1069	-0.1300
Afdchx (AFDC usage prior to entry into W-2)	0.0055	0.0037
	(0.0042)	(0.0054)

Table TR6.6, continued

Variable	Time 1	Ever In
Kidnodad (=1 if no legal father)	-0.0717	-0.0504
	(0.0704)	(0.0938)
Nmarital (=1 if child out of wedlock)	-0.0325	-0.0602
	(0.0842)	(0.1081)
Constant	0.1842	0.6833
	(0.2127)	(0.2584)
Log L	-1,299.13	-758.99
% Correct	99.90%	99.90%
N	2,879	2,873

Note: Standard deviations shown in parentheses.

Table TR6.7
Summary Statistics on Normalized Survey Weights for Respondents

	Mean	Standard Deviation	Minimum	Maximum
NRP Time 1	1.0	0.4929	0.4117	3.3725
NRP Ever In	1.0	0.3071	0.5750	2.6165
RP Time 1	1.0	0.0998	0.8210	2.1558
RP Ever In	1.0	0.0881	0.9147	1.7890

The survey data also are weighted to adjust for factors that affected sample selection. The sample was stratified by case type (AFDC, new W-2) and tier of initial assignment (upper, lower). Rates of assignment to experimental or control status also varied in ways that affect the probability of selection into the sample over the period during which the research population developed (September 1, 1997, to July 8, 1998). Sampling weights were developed to adjust for these factors, and overall weights for analysis of T1 or T2 were constructed by multiplying the nonresponse weight by the sampling weight. The weights were normalized to the total number of in-scope respondents in each survey.[24]

Weighted and Unweighted Descriptive Statistics

Tables TR6.8 and TR6.9 present unweighted descriptive statistics for resident mothers and nonresident fathers, respectively. The tables include a range of characteristics that can be measured with administrative data available for all survey sample members and show distributions for the entire survey samples at Time 1 and Time 2 as well as for respondents and nonrespondents separately.

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[24] See Technical Report 4 for a discussion of the sampling weights.

Table TR6.8
Characteristics of Mothers in the Time 1 and Time 2 Survey Samples, by Respondent Status (Unweighted)

	Time 1						Time 2					
	Survey Sample		Respondents		NRs		Survey Sample		Respondents		NRs	
	N	%	N	%	N	%	N	%	N	%	N	%
Total Cases	2,884		2,362		517		2,873		2,354		519	
Age of Resident Parent												
16–17	1	0.0	1	0.0	0	0.0	1	0.0	0	0.0	1	0.2
18–25	1,426	49.4	1,164	49.3	261	50.5	1,423	49.5	1,168	49.6	255	49.1
26–30	597	20.7	505	21.4	92	17.8	596	20.7	485	20.6	111	21.4
31 or older	860	29.8	692	29.3	164	31.7	853	29.7	701	29.8	152	29.3
Race of Resident Parent												
White	834	28.9	708	30.0	121	23.4	827	28.8	703	29.9	124	23.9
African American	1,682	58.3	1,396	59.1	286	55.3	1,678	58.4	1,404	59.6	274	52.8
Hispanic	190	6.6	133	5.6	57	11.0	190	6.6	129	5.5	61	11.8
Native American	70	2.4	49	2.1	21	4.1	70	2.4	44	1.9	26	5.0
Asian	27	0.9	10	0.4	17	3.3	27	0.9	10	0.4	17	3.3
Other	1	0.0	1	0.0	0	0.0	1	0.0	0	0.0	1	0.2
Unknown	80	2.8	65	2.8	15	2.9	80	2.8	64	2.7	16	3.1
Education of Resident Parent												
Less than high school	1,449	50.2	1,167	49.4	281	54.4	1,447	50.4	1,157	49.2	290	55.9
High school	1,131	39.2	938	39.7	192	37.1	1,126	39.2	940	39.9	186	35.8
More than high school	304	10.5	257	10.9	44	8.5	300	10.4	257	10.9	43	8.3
Language of Resident Parent												
English	2,826	98.0	2,343	99.2	478	92.5	2,815	98.0	2,334	99.2	481	92.7
Non-English	58	2.0	19	0.8	39	7.5	58	2.0	20	0.8	38	7.3
Location												
Milwaukee County	2,030	70.4	1,676	71.0	353	68.3	2,026	70.5	1,681	71.4	345	66.5
Other urban counties	509	17.6	398	16.9	108	20.9	503	17.5	404	17.2	99	19.1
Rural counties and tribes	345	12.0	288	12.2	56	10.8	344	12.0	269	11.4	75	14.5

	Time 1						Time 2					
	Survey Sample		Respondents		NRs		Survey Sample		Respondents		NRs	
	N	%	N	%	N	%	N	%	N	%	N	%
Employment History[a]												
No UI-covered employment	523	18.1	409	17.3	114	22.1	522	18.2	387	16.4	135	26.0
1–4 quarters	1,111	38.5	900	38.1	210	40.6	1,108	38.6	903	38.4	205	39.5
5–7 quarters	807	28.0	671	28.4	134	25.9	804	28.0	688	29.2	116	22.4
All 8 quarters	443	15.4	382	16.2	59	11.4	439	15.3	376	16.0	63	12.1
Earnings History[a]												
No UI earnings	523	18.1	409	17.3	114	22.1	522	18.2	387	16.4	135	26.0
$1–$5,000	1,863	64.6	1,519	64.3	341	66.0	1,857	64.6	1,535	65.2	322	62.0
$5,001–$15,000	461	16.0	400	16.9	59	11.4	458	15.9	397	16.9	61	11.8
$15,001 or more	37	1.3	34	1.4	3	0.6	36	1.3	35	1.5	1	0.2
AFDC Receipt[a]												
None	616	21.4	488	20.7	126	24.4	612	21.3	490	20.8	122	23.5
1–18 months	1,012	35.1	831	35.2	180	34.8	1,009	35.1	829	35.2	180	34.7
19–24 months	1,256	43.6	1,043	44.2	211	40.8	1,252	43.6	1,035	44.0	217	41.8
Number of Children												
None	35	1.2	29	1.2	6	1.2	35	1.2	28	1.2	7	1.3
One	1,036	35.9	843	35.7	190	36.8	1,030	35.9	844	35.9	186	35.8
Two	823	28.5	678	28.7	143	27.7	819	28.5	687	29.2	132	25.4
Three or more	990	34.3	812	34.4	178	34.4	989	34.4	795	33.8	194	37.4
Age of Youngest Child												
Unborn	311	10.8	253	10.7	58	11.2	310	10.8	249	10.6	61	11.8
0–2	1,395	48.4	1,156	48.9	237	45.8	1,389	48.3	1,131	48.0	258	49.7
3–5	505	17.5	410	17.4	95	18.4	504	17.5	418	17.8	86	16.6
6–12	556	19.3	451	19.1	102	19.7	553	19.2	457	19.4	96	18.5
13–18	117	4.1	92	3.9	25	4.8	117	4.1	99	4.2	18	3.5

	Time 1						Time 2					
	Survey Sample		Respondents		NRs		Survey Sample		Respondents		NRs	
	N	%	N	%	N	%	N	%	N	%	N	%
Focal Child's Parentage												
Legal father, unknown how	5	0.2	2	0.1	3	0.6	5	0.2	5	0.2	0	0.0
Nonmarital child	2,515	87.2	2,060	87.2	451	87.2	2,505	87.2	2,053	87.2	452	87.1
Marital child	364	12.6	300	12.7	63	12.2	363	12.6	296	12.6	67	12.9
Number Legal Fathers												
No legal fathers	892	30.9	699	29.6	191	36.9	887	30.9	681	28.9	206	39.7
One	1,469	50.9	1,214	51.4	252	48.7	1,464	51.0	1,223	52.0	241	46.4
Two or more	523	18.1	449	19.0	74	14.3	522	18.2	450	19.1	72	13.9
Child Support Order[b]												
No child support order	1,329	46.1	1,039	44.0	288	55.7	1,324	46.1	1,022	43.4	302	58.2
Child support order	1,555	53.9	1,323	56.0	229	44.3	1,549	53.9	1,332	56.6	217	41.8
Child Support Paid by All Nonresident Parents[a]												
No child support paid	1,928	66.9	1,543	65.3	382	73.9	1,921	66.9	1,534	65.2	387	74.6
$1–$999	450	15.6	385	16.3	63	12.2	446	15.5	384	16.3	62	11.9
$1,000 or more	506	17.5	434	18.4	72	13.9	506	17.6	436	18.5	70	13.5
Arrearages Owed by All Nonresident Parents												
No arrearages owed	1,267	43.9	991	42.0	274	53.0	1,262	43.9	978	41.5	284	54.7
$1–$500	71	2.5	59	2.5	12	2.3	71	2.5	57	2.4	14	2.7
$501–$2,000	346	12.0	294	12.4	51	9.9	345	12.0	289	12.3	56	10.8
$2,001 or more	1,200	41.6	1,018	43.1	180	34.8	1,195	41.6	1,030	43.8	165	31.8
Research Group												
Control	1,438	49.9	1,163	49.2	273	52.8	1,434	49.9	1,179	50.1	255	49.1
Experimental	1,446	50.1	1,199	50.8	244	47.2	1,439	50.1	1,175	49.9	264	50.9

Table TR6.8, continued

	Time 1						Time 2					
	Survey Sample		Respondents		NRs		Survey Sample		Respondents		NRs	
	N	%	N	%	N	%	N	%	N	%	N	%
Case Type												
AFDC	1,485	51.5	1,224	51.8	258	49.9	1,478	51.4	1,216	51.7	262	50.5
W-2	1,399	48.5	1,138	48.2	259	50.1	1,395	48.6	1,138	48.3	257	49.5
Initial W-2 Assignment												
W-2 Transition	264	9.2	210	8.9	52	10.1	262	9.1	201	8.5	61	11.8
Community Service Job	1,277	44.3	1,043	44.2	234	45.3	1,275	44.4	1,052	44.7	223	43.0
Caretaker of Newborn	307	10.6	251	10.6	54	10.4	304	10.6	244	10.4	60	11.6
Upper Tier	1,036	35.9	858	36.3	177	34.2	1,032	35.9	857	36.4	175	33.7
Quarter of Entry												
4th quarter of 1997	1,321	45.8	1,071	45.3	247	47.8	1,316	45.8	1,071	45.5	245	47.2
1st quarter of 1998	946	32.8	795	33.7	150	29.0	942	32.8	783	33.3	159	30.6
2nd quarter of 1998	617	21.4	496	21.0	120	23.2	615	21.4	500	21.2	115	22.2

Notes: Characteristics are measured at entry into W-2 unless otherwise noted. Nonrespondents exclude five cases that were out of scope and not fielded because either the mother (two cases) or focal child (three cases) died before December 31, 1998.

[a]Measured for the 12 months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

Table TR6.9
Characteristics of Fathers in Time 1 and Time 2 Survey Samples, by Respondent Status (Unweighted)

	Time 1						Time 2					
	Survey Sample		Respondents		NRs		Survey Sample		Respondents		NRs	
	N	%	N	%	N	%	N	%	N	%	N	%
Total Cases	1,936		643		1,293		2,130		696		1,434	
Age of Nonresident Parent												
16–17	14	0.7	5	0.8	9	0.7	22	1.0	5	0.7	17	1.2
18–25	621	32.1	205	31.9	416	32.2	717	33.7	222	31.9	495	34.5
26–30	489	25.3	160	24.9	329	25.4	519	24.4	154	22.1	365	25.5
31 or older	802	41.4	272	42.3	530	41.0	859	40.3	313	45.0	546	38.1
Unknown	10	0.5	1	0.2	9	0.7	13	0.6	2	0.3	11	0.8
Race of Nonresident Parent												
White	326	16.8	154	24.0	172	13.3	361	16.9	170	24.4	191	13.3
African American	774	40.0	226	35.1	548	42.4	882	41.4	246	35.3	636	44.4
Hispanic	95	4.9	21	3.3	74	5.7	108	5.1	22	3.2	86	6.0
Native American	32	1.7	11	1.7	21	1.6	35	1.6	10	1.4	25	1.7
Asian	7	0.4	0	0.0	7	0.5	7	0.3	0	0.0	7	0.5
Other	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	702	36.3	231	35.9	471	36.4	737	34.6	248	35.6	489	34.1
Employment History[a]												
No UI-covered employment	522	27.0	99	15.4	423	32.7	589	27.7	129	18.5	460	32.1
1–4 quarters	459	23.7	130	20.2	329	25.4	505	23.7	157	22.6	348	24.3
5–7 quarters	418	21.6	170	26.4	248	19.2	452	21.2	174	25.0	278	19.4
All 8 quarters	454	23.5	223	34.7	231	17.9	490	23.0	217	31.2	273	19.0
Unknown	83	4.3	21	3.3	62	4.8	94	4.4	19	2.7	75	5.2
Earnings History[a]												
No UI earnings	522	27.0	99	15.4	423	32.7	589	27.7	129	18.5	460	32.1
$1–$5,000	718	37.1	229	35.6	489	37.8	789	37.0	255	36.6	534	37.2
$5,001–$15,000	405	20.9	190	29.5	215	16.6	441	20.7	199	28.6	242	16.9
$15,001 or more	208	10.7	104	16.2	104	8.0	217	10.2	94	13.5	123	8.6
Unknown	83	4.3	21	3.3	62	4.8	94	4.4	19	2.7	75	5.2

	Time 1						Time 2					
	Survey Sample		Respondents		NRs		Survey Sample		Respondents		NRs	
	N	%	N	%	N	%	N	%	N	%	N	%
Parentage of Focal Child												
Legal father, unknown how	4	0.2	2	0.3	2	0.2	5	0.2	2	0.3	3	0.2
Paternity	1,602	82.7	508	79.0	1,094	84.6	1,772	83.2	555	79.7	1,217	84.9
Marriage	330	17.0	133	20.7	197	15.2	353	16.6	139	20.0	214	14.9
Number of Children with Resident Parent												
None	15	0.8	10	1.6	5	0.4	23	1.1	14	2.0	9	0.6
One	1,247	64.4	408	63.5	839	64.9	1,387	65.1	437	62.8	950	66.2
Two	448	23.1	162	25.2	286	22.1	476	22.3	169	24.3	307	21.4
Three or more	226	11.7	63	9.8	163	12.6	244	11.5	76	10.9	168	11.7
Age Youngest Child with Resident Parent												
Unborn	33	1.7	13	2.0	20	1.5	44	2.1	19	2.7	25	1.7
0–2	619	32.0	225	35.0	394	30.5	747	35.1	244	35.1	503	35.1
3–5	509	26.3	158	24.6	351	27.1	524	24.6	175	25.1	349	24.3
6–12	652	33.7	208	32.3	444	34.3	685	32.2	213	30.6	472	32.9
13–18	123	6.4	39	6.1	84	6.5	130	6.1	45	6.5	85	5.9
Child Support Order with Resident Parent[b]												
No child support order	653	33.7	217	33.7	436	33.7	817	38.4	254	36.5	563	39.3
Child support order	1,283	66.3	426	66.3	857	66.3	1,313	61.6	442	63.5	871	60.7
Child Support Payments to Resident Parent[a]												
No child support payments	1,231	63.6	327	50.9	904	69.9	1,412	66.3	395	56.8	1,017	70.9
$1–$999 child support paid	347	17.9	146	22.7	201	15.5	354	16.6	136	19.5	218	15.2
$1,000 or more child support paid	358	18.5	170	26.4	188	14.5	364	17.1	165	23.7	199	13.9
Arrearages Owed to State												
No arrearages	580	30.0	221	34.4	359	27.8	742	34.8	267	38.4	475	33.1
$1–$500 owed	74	3.8	28	4.4	46	3.6	76	3.6	28	4.0	48	3.3
$501–$2,000	360	18.6	123	19.1	237	18.3	373	17.5	106	15.2	267	18.6
$2,001 or more	922	47.6	271	42.1	651	50.3	939	44.1	295	42.4	644	44.9

Table TR6.9, continued

	Time 1						Time 2					
	Survey Sample		Respondents		NRs		Survey Sample		Respondents		NRs	
	N	%	N	%	N	%	N	%	N	%	N	%
Survey Replicate												
Full effort replicate	677	35.0	354	55.1	388	30.0	736	34.6	340	48.9	396	27.6
Partial effort replicate	1,259	65.0	289	44.9	905	70.0	1,394	65.4	356	51.1	1,038	72.4

Notes: Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Measured for the 12 months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

The patterns of results are similar for the two time periods and for mothers and fathers. They mimic the differences in response rates discussed earlier and they tend to be more marked among the fathers' samples. For example, at both Time 1 and Time 2, survey participants tend to overrepresent fathers in the sample who are white and slightly underrepresent fathers who are black or Hispanic. Survey respondents also are more likely to be employed at entry into W-2, to report higher wages, and to have more stable patterns of employment involving fewer quarters without paid employment. More sizeable differences occur when we examine the pattern of child support payments. Although only slightly more than one-third of sample members paid any formal child support to the resident mother in the 12 months prior to October 1, 1997, one-half of survey respondents at Time 1 and 43 percent of respondents at Time 2 had paid child support. Among those who paid formal child support, the magnitude of the differences in the amount of child support paid is somewhat smaller, but survey participants consistently pay larger amounts on average.

Survey respondents differ little, if at all, from the survey sample as a whole on other variables—age, type of parentage (paternity, marriage)—and characteristics of the couple or the family show only negligible differences between the two groups.

Tables TR6.10 and TR6.11 show descriptive statistics on a small set of characteristics for which we have comparable measures in administrative and survey data. We compare unweighted and weighted measures from the survey with means computed using administrative data on the entire survey sample as well as survey respondents only. This exercise allows us to assess how well the weights adjust for nonresponse.

Table TR6.10 summarizes estimates for mothers on W-2/AFDC receipts, Food Stamp receipts, and earnings. Data on earnings are from UI records and will not match survey reports if the latter include extensive employment in sectors not covered by UI. Figures are shown for 1998 (the reference period for the Time 1 survey) and 1999 (the reference period for Time 2). Statistics are computed from administrative data for the sample of all individuals eligible for interview at Time 1 and Time 2 as well as for the subgroup of sample members who completed interviews.[25] These estimates are weighted to adjust for differential rates of assignment to control and experimental groups, stratification of the sample by case type (AFDC cases that transitioned to W-2 and new entrants to W-2), and stratification by initial tier placement (upper and lower tiers). Survey statistics are reported as unweighted, weighted to adjust for sampling (i.e., differential rates of assignment, stratification by case type and by tier), and weighted to adjust for sampling as well as nonresponse.

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[25] Statistics computed for respondents take into account unit and item nonresponse so the administrative and survey estimates pertain to the same groups of individuals.

Table TR6.10
Selected Outcomes for Mothers, as Measured in Administrative and Survey Data

	In 1998					In 1999				
	Administrative Data		Survey Data			Administrative Data		Survey Data		
	Survey Sample	T1 Rs	T1 Rs	T1 Rs	T1 Rs	Survey Sample	T2 Rs	T2 Rs	T2 Rs	T2 Rs
Type of Weighting	(a)	(a)	(b)	(a)	(c)	(a)	(a)	(b)	(a)	(c)
AFDC/W-2 Receipts	$3,137	$3,191	$2,292	$2,582	$2,604	$1,383	$1,453	$1,426	$1,620	$1,632
	(2,579)	(2,613)	(2,711)	(2,884)	(2,894)	(2,100)	(2,157)	(2,414)	(2,590)	(2,608)
Food Stamp Receipts	1,963	2,011	1,611	1,744	1,747	1,836	1,922	1,533	1,665	1,666
	(1,495)	(1,504)	(1,583)	(1,665)	(1,665)	(1,670)	(1,703)	(1,706)	(1,775)	(1,776)
Earnings	4,528	4,703	5,493	5,097	5,007	6,049	6,429	7,671	7,024	6,951
	(5,260)	(5,281)	(6,217)	(6,155)	(6,114)	(6,575)	(6,670)	(7,829)	(7,557)	(7,525)

Notes: (a) Data use sampling weights to adjust for differential assignment to control-experimental, stratification of sample by case type, and initial tier placement. (b) Data are not weighted. (c) Data use weights to adjust for sampling (see a) and nonresponse. Standard deviations are shown in parentheses.

Table TR6.11
Selected Outcomes for Fathers, as Measured in Administrative and Survey Data

	In 1998					In 1999				
	Administrative Data		Survey Data			Administrative Data		Survey Data		
	Survey Sample	T1 Rs	T1 Rs	T1 Rs	T1 Rs	Survey Sample	T2 Rs	T2 Rs	T2 Rs	T2 Rs
Type of Weighting:	(a)	(a)	(b)	(a)	(c)	(a)	(a)	(b)	(a)	(c)
Child Support Payments	$859	$1,305	$2,093	$2,117	$1,811	$995	$1,516	$2,126	$2,108	$1,980
	(1,426)	(1,661)	(2,497)	(2,465)	(2,362)	(1,586)	(1,757)	(2,238)	(2,177)	(2,121)
Earnings	7,432	10,220	14,905	13,768	11,545	7,659	10,059	16,158	14,975	13,983
	(10,663)	(10,883)	(14,993)	(13,106)	(12,783)	(11,292)	(11,482)	(17,865)	(18,786)	(17,658)

Notes: (a) Data use sampling weights to adjust for differential assignment to control-experimental, stratification of sample by case type, and initial tier placement. (b) Data are not weighted. (c) Data use weights to adjust for sampling (see a) and nonresponse. Standard deviations are shown in parentheses.

The combined sampling and nonresponse weights move the survey estimates in the correct direction and close the initial gap between administrative and unweighted survey estimates by about one-third. Mothers tend to underreport receipt of W-2/AFDC and Food Stamps and overreport earnings. The weights adjust survey reports of W-2/AFDC and Food Stamps upwards, decreasing the gap by almost 30 percent. Weights adjust the survey estimate of earnings in 1998 downward such that the weighted survey mean is within $500 of the estimate for the entire sample based on UI data. The combined sampling and nonresponse weights have a similar impact at Time 2 by reducing the weighted estimates of earnings and Food Stamp receipts. However, mothers overreported earnings by a greater margin at Time 2, so the weighted estimate, while substantially lower, is still almost $2,000 greater than that based on UI data for the entire sample.

There is very little over- or underreporting of W-2 receipts at Time 2. In fact, the unweighted survey estimate is the best approximation of W-2 receipts for all mothers in the survey sample. Survey estimates adjusted using the sampling weights or the combined sampling and nonresponse weight move in the wrong direction and increase the initially small gap of about $40 to almost $250.

Table TR6.11 reports a similar exercise for fathers and shows means computed for earnings and child support payments. Again, UI records are used to compute earnings from administrative data and will not include income earned in sectors not covered by the UI system. Estimates using the combined sampling and nonresponse weight consistently move in the direction of the means reported for the overall sample. Survey estimates of child support payments in 1998 decline from an unweighted figure of about $2,000 to $1,800 while estimates of earnings decrease from almost $15,000 to around $11,500, thus reducing the initial gap between administrative and survey estimate by 20 to 40 percent. A similar pattern occurs in the results for 1999, though the weights tend to have a smaller impact. Compared with the results shown in Table TR6.10 for mothers, the nonresponse component of the weight has a greater effect on the final estimate, and the sampling weight alone sometimes has almost no impact on the survey estimate (e.g., child support payments).

Conclusion

The low response rates among fathers in the Survey of Wisconsin Works Families and the tendency for mothers with fewer economic resources to be underrepresented present significant challenges for researchers. Analysis of survey respondents alone, uncorrected for nonresponse, will likely yield biased estimates and inappropriate conclusions. Although survey participants do not differ noticeably from nonrespondents on several characteristics, such as age and family structure, they exhibit more stable patterns of employment, report higher wages, are more likely to pay (receive) formal child

support, and tend to pay (receive) higher amounts of support. These characteristics are likely to be correlated with several other outcomes and behaviors examined in the *W-2 Child Support Demonstration Evaluation Final Report* but not analyzed here. For example, father contact with children, the quality of or conflict in family relationships, and aspects of child well-being may be directly or indirectly related to these or other factors that affected our ability to locate and interview parents in the survey sample.

We have developed weights that adjust for nonresponse bias by estimating models of survey participation as a function of administrative data. Descriptive analyses show that the weights tend to improve estimates among survey respondents and better approximate the distribution in the survey sample, even though differences remain on some factors.

A wide range of outcomes or processes can be examined with the Survey of Wisconsin Works Families. The approach to nonresponse error discussed in this report was taken in an effort to develop a procedure that could be used easily and comparably across several different analyses—that is, something that may function as a "universal weight." When possible, analysts should evaluate the nonresponse error as it affects their research question and analysis plan. Ultimately, a "model-based" approach, tailored for a particular analysis, may provide a better correction for nonresponse error even though it cannot be easily adapted for use in other studies.

Mothers' Time 1 and Time 2 Response Rates, by Milwaukee/Non-Milwaukee Residence at Entry into W-2

	Time 1						Time 2					
	In Milwaukee County			Outside Milwaukee County			In Milwaukee County			Outside Milwaukee County		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Total Cases	2,029	1,676	82.6%	850	686	80.7%	2,026	1,681	83.0%	847	673	79.5%
Age of Resident Parent												
16–17	1	1	100.0	0	0	0.0	1	0	0.0	0	0	0.0
18–25	1,003	825	82.3	422	339	80.3	1,003	835	83.3	420	333	79.3
26–30	422	356	84.4	175	149	85.1	421	344	81.7	175	141	80.6
31 or older	603	494	81.9	253	198	78.3	601	502	83.5	252	199	79.0
Race of Resident Parent												
White	243	211	86.8	586	497	84.8	243	218	89.7	584	485	83.0
African American	1,535	1,282	83.5	147	114	77.6	1,532	1,286	83.9	146	118	80.8
Hispanic	156	108	69.2	34	25	73.5	156	104	66.7	34	25	73.5
Native American	21	17	81.0	49	32	65.3	21	16	76.2	49	28	57.1
Asian	8	4	50.0	19	6	31.6	8	4	50.0	19	6	31.6
Other	1	1	100.0	0	0	0.0	1	0	0.0	0	0	0.0
Unknown	65	53	81.5	15	12	80.0	65	53	81.5	15	11	73.3
Education of Resident Parent												
Less than high school	1,121	922	82.2	327	245	74.9	1,121	908	81.0	326	249	76.4
High school	731	603	82.5	399	335	84.0	729	622	85.3	397	318	80.1
More than high school	177	151	85.3	124	106	85.5	176	151	85.8	124	106	85.5
Language of Resident Parent												
English	1,982	1,659	83.7	839	684	81.5	1,979	1,662	84.0	836	672	80.4
Non-English	47	17	36.2	11	2	18.2	47	19	40.4	11	1	9.1
Employment History[a]												
No UI covered employment	382	305	79.8	141	104	73.8	381	291	76.4	141	96	68.1
1–4 quarters	816	665	81.5	294	235	79.9	816	672	82.4	292	231	79.1
5–7 quarters	542	456	84.1	263	215	81.7	541	469	86.7	263	219	83.3
All 8 quarters	289	250	86.5	152	132	86.8	288	249	86.5	151	127	84.1

	Time 1						Time 2					
	In Milwaukee County			Outside Milwaukee County			In Milwaukee County			Outside Milwaukee County		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Earnings History[a]												
No UI earnings	382	305	79.8	141	104	73.8	381	291	76.4	141	96	68.1
$1–$5,000	1,315	1,077	81.9	545	442	81.1	1,314	1,099	83.6	543	436	80.3
$5,001–$15,000	306	270	88.2	153	130	85.0	306	267	87.3	152	130	85.5
$15,001 or more	26	24	92.3	11	10	90.9	25	24	96.0	11	11	100.0
AFDC Receipt[a]												
None	312	246	78.8	302	242	80.1	311	245	78.8	301	245	81.4
1–18 months	657	543	82.6	354	288	81.4	657	550	83.7	352	179	50.9
19–24 months	1,060	887	83.7	194	156	80.4	1,058	886	83.7	194	149	76.8
Number of Children												
None	14	12	85.7	21	17	81.0	14	11	78.6	21	17	81.0
One	688	561	81.5	345	282	81.7	687	570	83.0	343	274	79.9
Two	575	473	82.3	246	205	83.3	574	480	83.6	245	207	84.5
Three or more	752	630	83.8	238	182	76.5	751	620	82.6	238	175	73.5
Age of Youngest Child												
Unborn	196	162	82.7	115	91	79.1	195	161	82.6	115	88	76.5
0–2	934	782	83.7	459	374	81.5	933	769	82.4	456	362	79.4
3–5	397	319	80.4	108	91	84.3	396	332	83.8	108	86	79.6
6–12	412	341	82.8	141	110	78.0	412	343	83.3	141	114	80.9
13–18	90	72	80.0	27	20	74.1	90	76	84.4	27	23	85.2
Focal Child's Parentage												
Legal father, unknown how	3	2	66.7	2	0	0.0	3	3	100.0	2	2	100.0
Nonmarital child	1,873	1,543	82.4	638	517	81.0	1,870	1,550	82.9	635	503	79.2
Marital child	153	131	85.6	210	169	80.5	153	128	83.7	210	168	80.0
Number Legal Fathers												
No legal fathers	614	486	79.2	276	213	77.2	613	476	77.7	274	205	74.8
One	1,026	850	82.8	440	364	82.7	1,025	861	84.0	439	362	82.5
Two or more	389	340	87.4	134	109	81.3	388	344	88.7	134	106	79.1

Appendix Table TR6.1, continued

	Time 1						Time 2					
	In Milwaukee County			Outside Milwaukee County			In Milwaukee County			Outside Milwaukee County		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Child Support Order[b]												
No child support order	873	693	79.4	454	346	76.2	872	689	79.0	452	333	73.7
Child support order	1,156	983	85.0	396	340	85.9	1,154	992	86.0	395	340	86.1
Child Support Paid by All NRPs[a]												
No child support paid	1,425	1,157	81.2	500	386	77.2	1,423	1,161	81.6	498	373	74.9
$1–$999	302	264	87.4	146	121	82.9	301	260	86.4	145	124	85.5
$1,000 or more	302	255	84.4	204	179	87.7	302	260	86.1	204	176	86.3
Arrearages Owed by All NRPs												
No arrearages owed	783	618	78.9	482	373	77.4	782	615	78.6	480	363	75.6
$1–$500	41	34	82.9	30	25	83.3	41	33	80.5	30	24	80.0
$501–$2,000	273	233	85.3	72	61	84.7	273	231	84.6	72	58	80.6
$2,001 or more	932	791	84.9	266	227	85.3	930	802	86.2	265	228	86.0
Research Group												
Control	997	808	81.0	439	355	80.9	997	830	83.2	437	349	79.9
Experimental	1,032	868	84.1	411	331	80.5	1,029	851	82.7	410	324	79.0
Case Type												
AFDC	1,205	1,000	83.0	277	224	80.9	1,203	996	82.8	275	220	80.0
W-2	824	676	82.0	573	462	80.6	823	685	83.2	572	453	79.2
Initial W-2 Assignment												
W-2 Transition	119	100	84.0	143	110	76.9	119	101	84.9	143	100	69.9
Community Service Job	1,131	930	82.2	146	113	77.4	1,130	40	3.5	145	112	77.2
Caretaker of Newborn	148	120	81.1	157	131	83.4	147	118	80.3	157	126	80.3
Upper Tier	631	526	83.4	404	332	82.2	630	522	82.9	402	335	83.3
Quarter of Entry												
4th quarter of 1997	871	710	81.5	447	361	80.8	871	718	82.4	445	353	79.3
1st quarter of 1998	795	665	83.6	150	130	86.7	793	659	83.1	149	124	83.2
2nd quarter of 1998	363	301	82.9	253	195	77.1	362	304	84.0	253	196	77.5

Notes: Response rate (RR) = I / (I + P + R + NC + O) where I=completed interview, P=partial interview, R=refusal, NC=noncontact (includes not located), O=other noninterview. Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Measured for the 12 months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

Appendix Table TR6.2
Mothers' Time 1 and Time 2 Response Rates among Mothers Living in Milwaukee at Entry into W-2, by Case Type

	Time 1						Time 2					
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Total Cases	1,205	1,000	83.0%	824	676	82.0%	1,203	996	82.8%	823	685	83.2%
Age of Resident Parent												
16–17	0	0	0.0	1	1	100.0	0	0	0.0	1	0	0.0
18–25	553	460	83.2	450	365	81.1	553	464	83.9	450	371	82.4
26–30	269	226	84.0	153	130	85.0	268	216	80.6	153	128	83.7
31 or older	383	314	82.0	220	180	81.8	382	316	82.7	219	186	84.9
Race of Resident Parent												
White	154	131	85.1	89	80	89.9	154	136	88.3	89	82	92.1
African American	899	759	84.4	636	523	82.2	897	753	83.9	635	533	83.9
Hispanic	100	71	71.0	56	37	66.1	100	65	65.0	56	39	69.6
Native American	14	10	71.4	7	7	100.0	14	10	71.4	7	6	85.7
Asian	5	3	60.0	3	1	33.3	5	3	60.0	3	1	33.3
Other	1	1	100.0	0	0	0.0	1	0	0.0	0	0	0.0
Unknown	32	25	78.1	33	28	84.8	32	29	90.6	33	24	72.7
Education of Resident Parent												
Less than high school	677	567	83.8	444	355	80.0	677	547	80.8	444	361	81.3
High school	428	347	81.1	303	256	84.5	426	366	85.9	303	256	84.5
More than high school	100	86	86.0	77	65	84.4	100	83	83.0	76	68	89.5
Language of Resident Parent												
English	1,174	987	84.1	808	672	83.2	1,172	984	84.0	807	678	84.0
Non-English	31	13	41.9	16	4	25.0	31	12	38.7	16	7	43.8
Employment History[a]												
No UI-covered employment	254	211	83.1	128	94	73.4	253	198	78.3	128	93	72.7
1–4 quarters	565	468	82.8	251	197	78.5	565	470	83.2	251	202	80.5
5–7 quarters	284	236	83.1	258	220	85.3	283	240	84.8	258	229	88.8
All 8 quarters	102	85	83.3	187	165	88.2	102	88	86.3	186	161	86.6

	Time 1						Time 2					
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Earnings History[a]												
No UI earnings	254	211	83.1	128	94	73.4	253	198	78.3	128	93	72.7
$1–$5,000	861	711	82.6	454	366	80.6	860	718	83.5	454	381	83.9
$5,001–$15,000	89	77	86.5	217	193	88.9	89	79	88.8	217	188	86.6
$15,001 or more	1	1	100.0	25	23	92.0	1	1	100.0	24	23	95.8
AFDC Receipt[a]												
None	0	0	0.0	312	246	78.8	0	0	0.0	311	245	78.8
1–18 months	324	262	80.9	333	181	54.4	324	261	80.6	333	289	86.8
19–24 months	881	738	83.8	179	149	83.2	879	735	83.6	179	151	84.4
Number of Children												
None	0	0	0.0	14	12	85.7	0	0	0.0	14	11	78.6
One	340	276	81.2	348	285	81.9	340	290	85.3	347	280	80.7
Two	343	286	83.4	232	187	80.6	342	281	82.2	232	199	85.8
Three or more	522	438	83.9	230	192	83.5	521	425	81.6	230	195	84.8
Age of Youngest Child												
Unborn	84	70	83.3	112	92	82.1	83	70	84.3	112	91	81.3
0–2	555	476	85.8	379	306	80.7	555	455	82.0	378	314	83.1
3–5	254	199	78.3	143	120	83.9	253	209	82.6	143	123	86.0
6–12	249	208	83.5	163	133	81.6	249	210	84.3	163	133	81.6
13–18	63	47	74.6	27	25	92.6	63	52	82.5	27	24	88.9
Focal Child's Parentage												
Legal father, unknown how	0	0	0.0	3	2	66.7	0	0	0.0	3	3	100.0
Nonmarital child	1,116	925	82.9	757	618	81.6	1,114	926	83.1	756	624	82.5
Marital child	89	75	84.3	64	56	87.5	89	70	78.7	64	58	90.6
Number Legal Fathers												
No legal fathers	299	243	81.3	315	243	77.1	299	237	79.3	314	239	76.1
One	648	529	81.6	378	321	84.9	647	534	82.5	378	327	86.5
Two or more	258	228	88.4	131	112	85.5	257	225	87.5	131	119	90.8

	Time 1						Time 2					
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Child Support Order[b]												
No child support order	455	365	80.2	418	328	78.5	455	362	79.6	417	327	78.4
Child support order	750	635	84.7	406	348	85.7	748	634	84.8	406	358	88.2
Child Support Paid by All NRPs[a]												
No child support paid	804	661	82.2	621	496	79.9	803	651	81.1	620	510	82.3
$1–$999	203	177	87.2	99	87	87.9	202	177	87.6	99	83	83.8
$1,000 or more	198	162	81.8	104	93	89.4	198	168	84.8	104	92	88.5
Arrearages Owed by All NRPs												
No arrearages owed	381	306	80.3	402	312	77.6	381	300	78.7	401	315	78.6
$1–$500	25	19	76.0	16	15	93.8	25	20	80.0	16	13	81.3
$501–$2,000	163	136	83.4	110	97	88.2	163	137	84.0	110	94	85.5
$2,001 or more	636	539	84.7	296	252	85.1	634	539	85.0	296	263	88.9
Research Group												
Control	568	461	81.2	429	347	80.9	568	472	83.1	429	358	83.4
Experimental	637	539	84.6	395	329	83.3	635	524	82.5	394	327	83.0
Initial W-2 Assignment												
W-2 Transition	66	54	81.8	53	46	86.8	66	55	83.3	53	46	86.8
Community Service Job	685	574	83.8	446	356	79.8	684	571	83.5	446	369	82.7
Caretaker of Newborn	32	27	84.4	116	93	80.2	32	24	75.0	115	94	81.7
Upper Tier	422	345	81.8	209	181	86.6	421	346	82.2	209	176	84.2
Quarter of Entry												
4th quarter of 1997	673	550	81.7	198	160	80.8	673	551	81.9	198	167	84.3
1st quarter of 1998	519	439	84.6	276	226	81.9	517	433	83.8	276	226	81.9
2nd quarter of 1998	13	11	84.6	350	290	82.9	13	12	92.3	349	292	83.7

Notes: Response rate (RR) = I / (I + P + R + NC + O) where I=completed interview, P=partial interview, R=refusal, NC=noncontact (includes not located), O=other noninterview. Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Measured for the twelve months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

Appendix Table TR6.3
Mothers' Time 1 and Time 2 Response Rates among Mothers Living outside Milwaukee at Entry into W-2, by Case Type

	Time 1						Time 2					
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Total Cases	277	224	80.9%	573	462	80.6%	275	220	80.0%	572	453	79.2%
Age of Resident Parent												
16–17	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
18–25	146	119	81.5	276	220	79.7	145	117	80.7	275	216	78.5
26–30	52	44	84.6	123	105	85.4	52	41	78.8	123	100	81.3
31 or older	79	61	77.2	174	137	78.7	78	62	79.5	174	137	78.7
Race of Resident Parent												
White	164	143	87.2	422	354	83.9	163	136	83.4	421	349	82.9
African American	71	54	76.1	76	60	78.9	70	57	81.4	76	61	80.3
Hispanic	16	13	81.3	18	12	66.7	16	13	81.3	18	12	66.7
Native American	14	9	64.3	35	23	65.7	14	10	71.4	35	18	51.4
Asian	9	2	22.2	10	4	40.0	9	2	22.2	10	4	40.0
Other	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Unknown	3	3	100.0	12	9	75.0	3	2	66.7	12	9	75.0
Education of Resident Parent												
Less than high school	128	95	74.2	199	150	75.4	127	96	75.6	199	153	76.9
High school	118	104	88.1	281	231	82.2	117	96	82.1	280	222	79.3
More than high school	31	25	80.6	93	81	87.1	31	28	90.3	93	78	83.9
Language of Resident Parent												
English	271	223	82.3	568	461	81.2	269	219	81.4	567	453	79.9
Non-English	6	1	16.7	5	1	20.0	6	1	16.7	5	0	0.0
Employment History[a]												
No UI-covered employment	64	49	76.6	77	55	71.4	64	47	73.4	77	49	63.6
1–4 quarters	128	104	81.3	166	131	78.9	126	99	78.6	166	132	79.5
5–7 quarters	63	52	82.5	200	163	81.5	63	56	88.9	200	163	81.5
All 8 quarters	22	19	86.4	130	113	86.9	22	18	81.8	129	109	84.5

	Time 1						Time 2					
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Earnings History[a]												
No UI earnings	64	49	76.6	77	55	71.4	64	47	73.4	77	49	63.6
$1–$5,000	187	151	80.7	358	291	81.3	185	149	80.5	358	287	80.2
$5,001–$15,000	26	24	92.3	127	106	83.5	26	24	92.3	126	106	84.1
$15,001 or more	0	0	0.0	11	10	90.9	0	0	0.0	11	11	100.0
AFDC Receipt[a]												
None	0	0	0.0	302	242	80.1	0	0	0.0	301	245	81.4
1–18 months	131	106	80.9	223	182	81.6	129	103	79.8	223	176	78.9
19–24 months	146	118	80.8	48	38	79.2	146	117	80.1	48	32	66.7
Number of Children												
None	1	1	100.0	20	16	80.0	1	1	100.0	20	16	80.0
One	107	90	84.1	238	192	80.7	106	82	77.4	237	192	81.0
Two	76	67	88.2	170	138	81.2	75	69	92.0	170	138	81.2
Three or more	93	66	71.0	145	116	80.0	93	68	73.1	145	107	73.8
Age of Youngest Child												
Unborn	26	18	69.2	89	73	82.0	26	17	65.4	89	71	79.8
0–2	165	135	81.8	294	239	81.3	163	129	79.1	293	233	79.5
3–5	33	28	84.8	75	63	84.0	33	28	84.8	75	58	77.3
6–12	45	37	82.2	96	73	76.0	45	38	84.4	96	76	79.2
13–18	8	6	75.0	19	14	73.7	8	8	100.0	19	15	78.9
Focal Child's Parentage												
Legal father, unknown how	2	0	0.0	0	0	0.0	2	2	100.0	0	0	0.0
Nonmarital child	225	183	81.3	413	334	80.9	223	177	79.4	412	326	79.1
Marital child	50	41	82.0	160	128	80.0	50	41	82.0	160	127	79.4
Number Legal Fathers												
No legal fathers	75	57	76.0	201	156	77.6	74	51	68.9	200	154	77.0
One	152	125	82.2	288	239	83.0	151	127	84.1	288	235	81.6
Two or more	50	42	84.0	84	67	79.8	50	42	84.0	84	64	76.2

	Time 1						Time 2					
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Child Support Order[b]												
No child support order	111	83	74.8	343	263	76.7	110	75	68.2	342	258	75.4
Child support order	166	141	84.9	230	199	86.5	165	145	87.9	230	195	84.8
Child Support Paid by All NRPs[a]												
No child support paid	139	103	74.1	361	283	78.4	138	99	71.7	360	274	76.1
$1–$999	71	60	84.5	75	61	81.3	70	61	87.1	75	63	84.0
$1,000 or more	67	61	91.0	137	118	86.1	67	60	89.6	137	116	84.7
Arrearages Owed by All NRPs												
No arrearages owed	107	78	72.9	375	295	78.7	106	75	70.8	374	288	77.0
$1–$500	11	10	90.9	19	15	78.9	11	9	81.8	19	15	78.9
$501–$2,000	31	28	90.3	41	33	80.5	31	24	77.4	41	34	82.9
$2,001 or more	128	108	84.4	138	119	86.2	127	112	88.2	138	116	84.1
Research Group												
Control	143	118	82.5	296	237	80.1	142	120	84.5	295	229	77.6
Experimental	134	106	79.1	277	225	81.2	133	100	75.2	277	224	80.9
Initial W-2 Assignment												
W-2 Transition	36	24	66.7	107	86	80.4	36	22	61.1	107	78	72.9
Community Service Job	68	54	79.4	78	59	75.6	67	55	82.1	78	57	73.1
Caretaker of Newborn	26	21	80.8	131	110	84.0	26	18	69.2	131	108	82.4
Upper Tier	147	125	85.0	257	207	80.5	146	125	85.6	256	210	82.0
Quarter of Entry												
4th quarter of 1997	273	220	80.6	174	141	81.0	271	217	80.1	174	136	78.2
1st quarter of 1998	4	4	100.0	146	126	86.3	4	3	75.0	145	121	83.4
2nd quarter of 1998	0	0	0.0	253	195	77.1	0	0	0.0	253	196	77.5

Notes: Response rate (RR) = I / (I + P + R + NC + O) where I=completed interview, P=partial interview, R=refusal, NC=noncontact (includes not located), O=other noninterview. Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Measured for the 12 months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

Appendix Table TR6.4
Fathers' Time 1 and Time 2 Response Rates for Full Effort Replicates[a]

	Time 1			Time 2		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Total Cases	677	289	42.7%	736	340	46.2%
Age of Nonresident Parent						
16–17	3	1	33.3	5	1	20.0
18–25	206	96	46.6	240	114	47.5
26–30	176	75	42.6	185	75	40.5
31 or older	287	116	40.4	299	148	49.5
Unknown	5	1	20.0	7	2	28.6
Race of Nonresident Parent						
White	117	60	51.3	130	74	56.9
African American	263	106	40.3	293	126	43.0
Hispanic	29	12	41.4	31	9	29.0
Native American	12	4	33.3	14	6	42.9
Asian	3	0	0.0	3	0	0.0
Other	0	0	0.0	0	0	0.0
Unknown	253	107	42.3	265	125	47.2
Employment History[b]						
No UI-covered employment	175	45	25.7	200	67	33.5
1–4 quarters	156	55	35.3	170	75	44.1
5–7 quarters	169	89	52.7	177	93	52.5
All 8 quarters	152	90	59.2	162	97	59.9
Unknown	25	10	40.0	27	8	29.6
Earnings History[b]						
No UI earnings	175	45	25.7	200	67	33.5
$1–$5,000	255	108	42.4	275	127	46.2
$5,001–$15,000	150	85	56.7	161	91	56.5
$15,001 or more	72	41	56.9	73	47	64.4
Unknown	25	10	40.0	27	8	29.6
Parentage of Focal Child						
Legal father, unknown how	4	2	50.0	5	2	40.0
Paternity	558	236	42.3	610	280	45.9
Marriage	115	51	44.3	121	58	47.9
Number of Children with RP						
None	8	7	87.5	9	7	77.8
One	421	180	42.8	467	203	43.5
Two	154	69	44.8	161	88	54.7
Three or more	94	33	35.1	99	42	42.4

Appendix Table TR6.4, continued

	Time 1			Time 2		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Age Youngest Child with RP						
Unborn	12	6	50.0	15	9	60.0
0–2	222	109	49.1	268	128	47.8
3–5	174	68	39.1	176	86	48.9
6–12	219	84	38.4	226	95	42.0
13–18	50	22	44.0	51	22	43.1
Child Support Order with RP[c]						
No child support order	237	95	40.1	294	126	42.9
Child support order	440	194	44.1	442	214	48.4
Child Support Payments to RP[b]						
No child support payments	440	164	37.3	501	208	41.5
$1–$999 child support paid	126	70	55.6	124	66	53.2
$1,000 or more child support paid	111	55	49.5	111	66	59.5
Arrearages Owed to State						
No arrearages	205	96	46.8	261	125	47.9
$1–$500 owed	29	10	34.5	28	10	35.7
$501–$2,000	122	57	46.7	125	51	40.8
$2,001 or more	321	126	39.3	322	154	47.8

Notes: Response rate (RR) = I / (I + P + R + NC + O) where I=completed interview, P=partial interview, R=refusal, NC=noncontact (includes not located), O=other noninterview. Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Fathers in survey replicates 1 through 10 were eligible for telephone and in-person interviews ("full effort"). Fathers in survey replicates 11 through 30 were eligible only for telephone interviews ("partial effort").
[b]Measured for the 12 months prior to October 1, 1997.
[c]Measured as of October 1, 1997.

Fathers' Time 1 and Time 2 Response Rates, by Milwaukee/Non-Milwaukee Residence of Resident Parent at Entry into W-2

	Time 1						Time 2					
	In Milwaukee County			Outside Milwaukee County			In Milwaukee County			Outside Milwaukee County		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Total Cases	1,324	390	29.5%	611	253	41.4%	1,460	426	29.2%	670	270	40.3%
Age of Nonresident Parent												
16–17	8	2	25.0	6	3	50.0	13	3	23.1	9	2	22.2
18–25	435	139	32.0	186	66	35.5	507	150	29.6	210	72	34.3
26–30	340	90	26.5	149	70	47.0	356	87	24.4	163	67	41.1
31 or older	534	159	29.8	268	113	42.2	576	186	32.3	283	127	44.9
Unknown	7	0	0.0	3	1	33.3	8	0	0.0	5	2	40.0
Race of Nonresident Parent												
White	41	15	36.6	285	139	48.8	52	22	42.3	309	148	47.9
African American	648	195	30.1	126	31	24.6	740	214	28.9	142	32	22.5
Hispanic	59	10	16.9	36	11	30.6	68	10	14.7	400	12	3.0
Native American	5	0	0.0	27	11	40.7	7	1	14.3	28	9	32.1
Asian	1	0	0.0	6	0	0.0	1	0	0.0	6	0	0.0
Other	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Unknown	570	170	29.8	132	61	46.2	592	179	30.2	145	69	47.6
Employment History[a]												
No UI-covered employment	371	64	17.3	151	35	23.2	420	81	19.3	169	48	28.4
1–4 quarters	316	76	24.1	143	54	37.8	350	102	29.1	155	55	35.5
5–7 quarters	278	107	38.5	140	63	45.0	299	104	34.8	153	70	45.8
All 8 quarters	285	125	43.9	169	98	58.0	310	123	39.7	180	94	52.2
Unknown	74	18	24.3	9	3	33.3	81	16	19.8	13	3	23.1
Earnings History[a]												
No UI earnings	371	64	17.3	151	35	23.2	420	81	19.3	169	48	28.4
$1–$5,000	497	144	29.0	221	85	38.5	549	170	31.0	240	85	35.4
$5,001–$15,000	266	117	44.0	139	73	52.5	289	117	40.5	152	82	53.9
$15,001 or more	116	47	40.5	92	57	62.0	121	42	34.7	96	52	54.2
Unknown	74	18	24.3	9	3	33.3	81	16	19.8	13	3	23.1

	Time 1						Time 2					
	In Milwaukee County			Outside Milwaukee County			In Milwaukee County			Outside Milwaukee County		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Parentage of Focal Child												
Legal father, unknown how	3	1	33.3	1	1	100.0	3	1	33.3	2	1	50.0
Paternity	1,185	349	29.5	417	159	38.1	1,309	379	29.0	463	176	38.0
Marriage	136	40	29.4	194	93	47.9	148	46	31.1	205	93	45.4
Number of Children with RP												
None	2	2	100.0	13	8	61.5	7	4	57.1	16	10	62.5
One	846	245	29.0	401	163	40.6	948	264	27.8	439	173	39.4
Two	314	100	31.8	134	62	46.3	330	107	32.4	146	62	42.5
Three or more	162	43	26.5	64	20	31.3	175	51	29.1	69	25	36.2
Age Youngest Child with RP												
Unborn	14	4	28.6	19	9	47.4	23	10	43.5	21	9	42.9
0–2	358	123	34.4	261	102	39.1	450	130	28.9	297	114	38.4
3–5	379	108	28.5	130	50	38.5	388	117	30.2	136	58	42.6
6–12	480	127	26.5	172	81	47.1	500	140	28.0	185	73	39.5
13–18	93	28	30.1	30	11	36.7	99	29	29.3	31	16	51.6
Child Support Order with RP[b]												
No child support order	366	106	29.0	287	111	38.7	481	130	27.0	336	124	36.9
Child support order	958	284	29.6	325	142	43.7	979	296	30.2	334	146	43.7
Child Support Payments to RP[a]												
No child support payments	888	214	24.1	343	113	32.9	1,017	262	25.8	395	133	33.7
$1–$999 child support paid	232	93	40.1	115	53	46.1	236	86	36.4	118	50	42.4
$1,000 or more child support paid	204	83	40.7	154	87	56.5	207	78	37.7	157	87	55.4
Arrearages Owed to State												
No arrearages	273	86	31.5	307	135	44.0	383	109	28.5	359	158	44.0
$1–$500 owed	44	10	22.7	30	18	60.0	46	14	30.4	30	14	46.7
$501–$2,000	295	91	30.8	65	32	49.2	307	81	26.4	66	25	37.9
$2,001 or more	712	203	28.5	210	68	32.4	724	222	30.7	215	73	34.0

	Time 1						Time 2					
	In Milwaukee County			Outside Milwaukee County			In Milwaukee County			Outside Milwaukee County		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Survey Replicate												
Full effort replicate	457	184	40.3	220	105	47.7	500	216	43.2	236	124	52.5
Partial effort replicate	867	206	23.8	392	148	37.8	960	210	21.9	434	146	33.6

Notes: Response rate (RR) = I / (I + P + R + NC + O) where I=completed interview, P=partial interview, R=refusal, NC=noncontact (includes not located), O=other noninterview. Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Measured for the 12 months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

Appendix Table TR6.6
Fathers' Time 1 and Time 2 Response Rates, by Case Type of Resident Parent

	Time 1						Time 2					
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Total Cases	1,072	324	30.2%	864	319	36.9%	1,131	358	31.7%	999	338	33.8%
Age of Nonresident Parent												
16–17	5	1	20.0	9	4	44.4	6	0	0.0	16	5	31.3
18–25	352	110	31.3	269	95	35.3	372	118	31.7	345	104	30.1
26–30	273	82	30.0	216	78	36.1	284	86	30.3	235	68	28.9
31 or older	437	131	30.0	365	141	38.6	462	154	33.3	397	159	40.1
Unknown	5	0	0.0	5	1	20.0	7	0	0.0	6	2	33.3
Race of Nonresident Parent												
White	113	51	45.1	213	103	48.4	121	60	49.6	240	110	45.8
African American	479	135	28.2	295	91	30.8	509	141	27.7	373	105	28.2
Hispanic	55	9	16.4	40	12	30.0	61	13	21.3	47	9	19.1
Native American	11	4	36.4	21	7	33.3	13	4	30.8	22	6	27.3
Asian	5	0	0.0	2	0	0.0	5	0	0.0	2	0	0.0
Other	0	0	0.0	0	0	0.0	0	0	0.0	0	0	0.0
Unknown	409	125	30.6	293	106	36.2	422	140	33.2	315	108	34.3
Employment History[a]												
No UI-covered employment	308	55	17.9	214	44	20.6	331	79	23.9	258	50	19.4
1–4 quarters	245	64	26.1	214	66	30.8	256	78	30.5	249	79	31.7
5–7 quarters	235	91	38.7	183	79	43.2	246	99	40.2	206	75	36.4
All 8 quarters	234	105	44.9	220	118	53.6	244	93	38.1	246	124	50.4
Unknown	50	9	18.0	33	12	36.4	54	9	16.7	40	10	25.0
Earnings History[a]												
No UI earnings	308	55	17.9	214	44	20.6	331	79	23.9	258	50	19.4
$1–$5,000	393	121	30.8	325	108	33.2	412	136	33.0	377	119	31.6
$5,001–$15,000	224	98	43.8	181	92	50.8	233	98	42.1	208	101	48.6
$15,001 or more	97	41	42.3	111	63	56.8	101	36	35.6	116	58	50.0
Unknown	50	9	18.0	33	12	36.4	54	9	16.7	40	10	25.0

	Time 1						Time 2					
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Parentage of Focal Child												
Legal father, unknown how	1	1	100.0	3	1	33.3	2	1	50.0	3	1	33.3
Paternity	946	286	30.2	656	222	33.8	995	312	31.4	777	243	31.3
Marriage	125	37	29.6	205	96	46.8	134	45	33.6	219	94	42.9
Number of Children with RP												
None	1	1	100.0	14	9	64.3	1	1	100.0	22	13	59.1
One	688	211	30.7	559	197	35.2	730	224	30.7	657	213	32.4
Two	249	82	32.9	199	80	40.2	259	94	36.3	217	75	34.6
Three or more	134	30	22.4	92	33	35.9	141	39	27.7	103	37	35.9
Age Youngest Child with RP												
Unborn	12	5	41.7	21	8	38.1	14	8	57.1	30	11	36.7
0–2	326	107	32.8	293	118	40.3	354	109	30.8	393	135	34.4
3–5	307	86	28.0	202	72	35.6	314	105	33.4	210	70	33.3
6–12	357	109	30.5	295	99	33.6	375	113	30.1	310	100	32.3
13–18	70	17	24.3	53	22	41.5	74	23	31.1	56	22	39.3
Child Support Order with RP[b]												
No child support order	285	78	27.4	368	139	37.8	336	89	26.5	481	165	34.3
Child support order	787	246	31.3	496	180	36.3	795	269	33.8	518	173	33.4
Child Support Payments to RP[a]												
No child support payments	670	159	23.7	561	168	29.9	723	192	26.6	689	203	29.5
$1–$999 child support paid	213	84	39.4	134	62	46.3	215	88	40.9	139	48	34.5
$1,000 or more child support paid	189	81	42.9	169	89	52.7	193	78	40.4	171	87	50.9
Arrearages Owed to State												
No arrearages	204	63	30.9	376	158	42.0	254	74	29.1	488	193	39.5
$1–$500 owed	41	12	29.3	33	16	48.5	41	14	34.1	35	14	40.0
$501–$2,000	214	74	34.6	146	49	33.6	218	70	32.1	155	36	23.2
$2,001 or more	613	175	28.5	309	96	31.1	618	200	32.4	321	95	29.6

Appendix Table TR6.6, continued

	Time 1												Time 2										
	AFDC Case			W-2 Case			AFDC Case			W-2 Case		
	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate	Survey Sample (N)	Respondents (N)	Response Rate
Survey Replicate												
Full effort replicate	702	153	21.8	307	136	44.3	388	183	47.2	348	157	45.1
Partial effort replicate	370	171	46.2	557	183	32.9	743	175	23.6	651	181	27.8

Notes: Response rate (RR) = I / (I + P + R + NC + O) where I=completed interview, P=partial interview, R=refusal, NC=noncontact (includes not located), O=other noninterview. Characteristics are measured at entry into W-2 unless otherwise noted.

[a]Measured for the 12 months prior to October 1, 1997.
[b]Measured as of October 1, 1997.

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