

**SURVEYING CURRENT AND FORMER  
TANF RECIPIENTS IN IOWA**

**DRAFT**

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## I. BACKGROUND

The welfare caseload nationwide in 1999 under Temporary Assistance for Needy Families (TANF) is about half of its peak in 1994 under Aid to Families with Dependent Children (AFDC). The number of families on welfare has fallen by 47 percent, from 5.1 million in January 1994 to 2.7 million in March 1999. Over the same period, the number of individuals on welfare has fallen from 14.3 million to 7.3 million, a reduction of 49 percent. Only 2.7 percent of the U.S. population received welfare in March 1999, the lowest percentage since 1969 and half of the 5.5 percent peak in January 1993.

The causes of the reduction in welfare caseloads nationwide and in the individual states have been much debated. Among the factors that have been put forward as being responsible for the reduction, the following three merit serious attention:

- 1. *An Expanding Economy.*** Real GDP has been growing since 1991 at annual rates of between 2.3 percent and 3.9 percent. The unemployment rate has fallen from a peak of 7.5 percent in 1992 to 4.2 percent in March 1999.
- 2. *State Demonstrations of Welfare Reform.*** Before welfare was reformed at the federal level, most states had received federal waivers to implement their own demonstrations of welfare-reform. The Clinton Administration granted such waivers to 43 states. Many of the reforms, such as strengthened work requirements with strong sanctions for noncompliance and time limits on the receipt of benefits, were dramatic deviations from the AFDC status quo.
- 3. *Federal Welfare Reform.*** In August 1996, President Clinton signed into law the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which instituted welfare reform at the federal level. PRWORA replaced AFDC and its emphasis on income maintenance with TANF, which emphasizes individual responsibility and employment. Many states that had reformed their welfare programs under federal waivers found that only modest additional changes were necessary to bring them into compliance with TANF.

## **A. THE NEED TO DOCUMENT THE POST-WELFARE STATUS OF FAMILIES**

If the expanding economy had been the only factor driving the decline in welfare roles in the mid- to late-1990s, then it would have been assumed that, after leaving welfare, most families were supported by earnings from employment. Under that hypothetical scenario, there would have been no compelling need to document the post-welfare status of those families because their exit from welfare would not have been viewed as a threat to their well being. But the actual scenario for welfare caseload reductions involved not only economic growth but also state-initiated reforms, followed by the federally mandated reforms. And that scenario generated two very different compelling reasons for states to document the post-welfare status of families.

First, in order to receive a federal waiver for a welfare reform demonstration in the pre-PRWORA era, a state had to agree to evaluate its demonstration. An evaluation typically entailed tracking samples of welfare applicants and recipients for several years, during which time many of the sample members left welfare. While some of the waiver demonstration evaluations were conducted on the basis of administrative data only, many relied on a combination of administrative data and survey data. The advantage of a survey is that it can provide information on a broader range of family characteristics and outcomes than are available in administrative files. The disadvantages are that they are costly and time-consuming to conduct, are typically based on small samples to save money and time, and they often fail to achieve high response rates and therefore actually collect data from only a fraction of the sampled cases. Administrative data are especially attractive with respect to the latter two points--sample sizes tend to be large and administrative data can typically be obtained for 90 percent or more of the sample members.

The second reason why the reforms created a need for states to document the post-welfare status of families is that they were seen as major contributors to the reductions in welfare caseloads. The

reforms typically restricted access to assistance by narrowing eligibility criteria, imposing sanctions for failure to work or to take other steps toward self sufficiency, and instituting time limits on the receipt of assistance. This meant that some, perhaps many, families were leaving welfare without jobs or other sources of financial support. While falling caseloads were widely regarded as evidence of the success of welfare reform, even some architects of the reforms were concerned about the well being of families that were leaving welfare.

## **B. STATE SURVEYS OF CURRENT AND FORMER WELFARE RECIPIENTS**

During the mid-1990s many states conducted surveys of welfare applicants and recipients who had been randomly assigned to treatment and control samples in their waiver demonstration evaluations.<sup>1</sup> The surveys were typically conducted one to four years after random assignment, which meant that many sample members had left welfare before the surveys began. Gordon et al. (1996) review three waiver demonstration evaluations in which surveys had been conducted and found response rates of 41 percent in Colorado, 60 percent in California, and 84 percent in Minnesota. While Minnesota's response rate was excellent, those of Colorado and California were disappointing and potentially problematic. In random-assignment evaluations low survey response rates increase the risk of bias in impact estimates based on the survey data. Gordon et al. note that the DHHS staff members who were responsible for monitoring the state waiver demonstration evaluations were concerned that many had failed to achieve adequate survey response rates. While welfare policy researchers generally shared this concern, the low survey response rates failed to attract broader attention among policy makers, program administrators, and the media.

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<sup>1</sup>States that conducted surveys as part of their waiver demonstration evaluations include Arizona, California, Colorado, Connecticut, Florida, Indiana, Iowa, Michigan, and Minnesota.

States undertook a second generation of surveys for the purpose of welfare policy research during the period 1996 to 1998. With the signing into law of PRWORA in 1996, the states were under no federal mandate to conduct those surveys. Rather, they conducted them to satisfy their own needs. State TANF program directors were receiving frequent inquiries from elected officials, welfare advocacy groups, and the media for information about the status of families that had left welfare. Those inquiries were generated by concern that welfare reform was causing some to families that were incapable of being self-sufficient to lose their eligibility for assistance, thus placing them at risk of extreme deprivation.

In a recent report on the status of former welfare recipients, the U.S. General Accounting Office (1999) reviews 16 second-generation surveys that had been conducted in as many states. The surveys were of either of two populations. Four of the surveys were of families that had lost their eligibility for cash assistance because they had failed to comply with recently stiffened program requirements.<sup>2</sup> The remaining twelve surveys were of families that had left assistance for any reason.<sup>3</sup> Response rates on these surveys ranged from 17 percent to 85 percent; five had response rates of 32 percent or less, six had response rates of 45 to 53 percent, and four had response rates of 69 percent or higher.<sup>4</sup> GAO chose not to include in its report findings from the surveys with low response rates (high nonresponse rates), stating:

In our attempt to describe the condition of former welfare families, we were constrained by the data currently available from these early state tracking studies. More specifically, the

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<sup>2</sup>The four surveys of sanctioned families were conducted in Iowa, Michigan, New Jersey, and Tennessee. The sample for the Tennessee survey also included families that were on TANF and had earned income.

<sup>3</sup>The twelve surveys of families that had left cash assistance were conducted in Idaho, Indiana, Kentucky, Louisiana, Montana, New Mexico, Oklahoma, Pennsylvania, South Carolina, Washington, Wisconsin, and Wyoming. This count excludes two studies (conducted in Maryland and Wisconsin) that are included in the GAO review but were based on administrative data only.

<sup>4</sup>GAO was unable to obtain information on the response rate for one of the surveys.

high nonresponse rates in many state studies limit the usefulness of the results because generalizations cannot be made to all families of interest. Because those families who do not respond to surveys . . . may be the ones at greatest risk of negative outcomes, some policymakers and program officials are particularly concerned about not having enough information to determine the status of these families. [p. 28]

GAO elected to review findings from only those studies of former welfare recipients that had either obtained a survey response rate of at least 70 percent or had documented that survey respondents were not substantially different from nonrespondents in characteristics available in administrative data files.

A number of presentations based on the second-generation surveys were given at a February 1998 conference on "Tracking and Followup Under Welfare Reform."<sup>5</sup> In a paper summarizing those presentations, Ganzglass et al. (1998), note that:

A high response rate is critical to the success of [a TANF followup] survey and its acceptance by the public, media, and decisionmakers. A high response rate ensures greater accuracy by minimizing "response bias," the difference between the respondents and the total sample. Major followup studies generally seek a response rate of 70 percent or more. [p. 8]

In 1998, the Office of the Assistant Secretary for Planning and Evaluation (ASPE) at DHHS issued grants to 13 states or counties to conduct studies of families that have left TANF.<sup>6</sup> While most of these studies entail the collection and analysis of data from multiple sources, all include at least one survey of former TANF recipients. Following the awarding of these grants, these surveys and others like them have come to be known as "TANF leavers surveys." They are the third generation of surveys for the purpose of welfare policy research.

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<sup>5</sup>The 1998 conference was sponsored by the National Governors' Association Center for Best Practices, the National Conference of State Legislatures, and the American Public Welfare Association.

<sup>6</sup>The 13 recipients of 1998 ASPE grants to conduct TANF leavers studies are: Arizona; Cuyahoga Co. (OH); the District of Columbia; Florida; Georgia; Illinois; Los Angeles Co. (CA); Massachusetts; Missouri; New York; San Mateo, Santa Cruz, and Santa Clara counties (CA); Washington; and Wisconsin.

In light of the low response rates achieved on many of the second-generation surveys, the Federal Register (May 21, 1998) announcement of the availability of the grants to conduct third-generation surveys stipulated:

Because of the importance of a high response rate in ensuring reliability, these procedures [to ensure a high response rate] will be an important part of the evaluation of proposals containing surveys. [p. 27,980]

In their proposals, most of the recipients of the 1998 ASPE grants specified response rate targets in the 70-80 percent range for their third-generation surveys. Most of these surveys are still in process. Final survey response rates are either not yet known or have not yet been publicly released.

### **C. THE IOWA WELFARE REFORM EVALUATION**

Iowa implemented its welfare reform program, the Family Investment Program (FIP), on October 1, 1993, under waivers from federal regulations governing the AFDC and Food Stamp programs.<sup>7</sup> In response to the federal terms for issuing the waivers, in August 1994 the Iowa Department of Human Services (DHS) awarded Mathematica a contract to conduct a random-assignment evaluation of FIP. That evaluation, which is still ongoing, is based on two samples of FIP cases. The first sample consists of 7,006 cases that were participating in FIP on September 30, 1993 and were randomly assigned to treatment status (welfare reform rules) or control status (AFDC rules).<sup>8</sup> This is the "FIP participant sample." The second sample consists of 9,471 cases that applied for FIP benefits and went through random assignment during the 2-1/2 years following September 30, 1993. This is the "FIP applicant sample." Mathematica has been using data in FIP and unemployment

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<sup>7</sup>Following the signing into law of PRWORA in 1996, FIP was modified slightly and became Iowa's TANF program.

<sup>8</sup>Two cases were assigned to treatment status for every one case that was assigned to control status. This was true for the FIP participant sample and the FIP applicant sample.

insurance administrative files to track all members of the two samples from their date of random assignment to the present and to estimate the impacts of the reforms on the limited number of outcome measures that are available in those files.<sup>9</sup>

To obtain richer followup data than are available in program administrative files, Mathematica conducted two surveys of research cases in the Iowa FIP evaluation. We conducted a "core survey" of cases randomly selected from the applicant and participant samples and a "child impact survey" of those core survey respondents who reported the presence of a child age 5-12 years in their households.<sup>10</sup> The field period for these surveys was July 1998 through August 1999. Despite their recent field period, these surveys are members of the first generation of welfare surveys discussed in the previous section. This paper reports on our conduct of the core survey only.

From the full samples of FIP participants and FIP applicants, we used stratified random sampling to select a core survey sample of 4,163 research cases.<sup>11</sup> We used DHS administrative data to identify an adult in each research case to be interviewed, designated the "sample member." In general, the sample member was the individual that had been designated as the "case-name person" for FIP administrative purposes. The case-name person is usually the adult member of a FIP case who submitted the application for assistance. However, in the small percentage of FIP cases that are "child-only cases," the case-name person is a minor. For such cases we designated the "payee-name person" to be the sample member. The payee-name person is an adult guardian in whose name FIP checks are issued.

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<sup>9</sup>Estimates of the impacts of Iowa's welfare reform on outcomes obtained from administrative files are reported in Fraker et al. (1998).

<sup>10</sup>Some the survey respondents completed only the core interview while others completed both the core interview and the child impact interview.

<sup>11</sup>Three strata--applicant/participant, treatment/control, and presence/absence of a child age 5-12 years (based on administrative data)--defined eight cells that we used to randomly select the core survey sample.

In the course of conducting the core survey, we learned that sample members were deceased in 42 cases in the survey sample. We also learned that 8 cases were duplicates of other cases in the survey sample, and 2 cases were ineligible for the survey for other reasons. We classified all of these 52 cases as ineligible for the survey, resulting in a sample of 4,111 survey-eligible cases. We completed interviews with sample members in 2,951 of the 4,111 survey-eligible cases, for a response rate of 72 percent (71.8 percent).

#### **D. THE PURPOSE OF THIS PAPER**

Obtaining a response rate on the Iowa core survey of at least 70 percent, which is now the standard for a high-quality survey of a welfare population, was very difficult. The first of two factors that greatly contributed to the difficulty was the absence of extended contact information on sample members at the time of random assignment. We are strong proponents of having the members of a survey sample provide the names, addresses, and telephone numbers of several friends or relatives on a special contact information form at baseline (the time of random assignment in an experimental evaluation). Unfortunately, this was not possible on the FIP evaluation. Instead, we had only the contact information that was available in DHS administrative files for the sample members themselves. The second factor that contributed to the challenge of reaching the 70 percent response rate threshold on the Iowa core survey was the long duration between random assignment and the survey interview--almost six years in some cases. This meant that the limited contact information that was available in FIP administrative files was often well out of date by the time that we attempted to interview sampled cases.

We believe that much can be learned from the procedures that we used to conduct the Iowa core survey that would benefit the current third generation of surveys of welfare population--the TANF leavers surveys that are now underway--and other surveys that will follow. Indeed, we ourselves are

striving to apply what we have learned on the Iowa core survey as we design and carry out a survey of TANF leavers in Iowa that has been funded by a 1999 ASPE grant and by Iowa DHS. In addition, we believe that the findings from our statistical analysis of the characteristics of Iowa core survey respondents at aggregate response rates of 20, 40, 60, and 72 percent, as reported in Chapter IV of this paper, are striking. They suggest that, on the Iowa core survey, an aggregate response rate well below 70 percent might have yielded data that would have been adequate for the research needs of the FIP evaluation. We encourage the states and research organizations that are now conducting TANF leavers surveys to perform similar analyses, as any relaxation of the current 70 percent response-rate standard should be based on consistent evidence from many surveys

#### **E. ROADMAP FOR THIS PAPER**

Chapter II of this paper introduces a dozen techniques that MPR used to obtain a 72 percent response rate on the Iowa core survey. Half of these are standard techniques that we use on most surveys; the other half are specialized techniques that we use less routinely on other surveys. Chapter III presents a chronological narrative of Iowa core survey operations over the 13-month field period. This chapter illustrates how a spike in the weekly number of completed interviews often followed our application of a specific survey technique. Chapter IV presents a statistical analysis of the characteristics of survey respondents at selected aggregate survey response rates.

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## **II. TECHNIQUES FOR MAXIMIZING SURVEY COMPLETION RATES**

Data collection for the “core survey” of cases in the random-assignment evaluation of Iowa’s Family Investment Program employed a mixed-mode methodology of telephone interviews with in-person follow-up. We have found it useful to classify the elements of this methodology into two categories--standard survey techniques and specialized survey techniques. The first five months of the thirteen-month survey field period were characterized by our exclusive reliance on standard techniques. Those included the mailing of an advance letter, telephone and in-person contact attempts, the use of two standard national databases to search for addresses and telephone numbers, and efforts to convert interview refusals into interview completions. We continued to use the standard techniques during the final eight months of the field period, but we supplemented them a number of specialized techniques. This chapter begins by describing six standard survey techniques that we used on the Iowa core survey. It then introduces six specialized techniques that were instrumental in boosting the survey’s response rate up to and slightly beyond the 70 percent target.

### **A. STANDARD SURVEY TECHNIQUES**

Data collection for the Iowa core survey encompassed a thirteen-month field period from July 1998 through July 1999.<sup>12</sup> The contact information that was available to us from DHS administrative records for the 4,111 sample members who were eligible to participate in the survey included the sample member’s name, Social Security number, date of birth, and last known address and telephone

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<sup>12</sup>A handful of interviews (10) were conducted in August 1999 as a result of calls made by sample members to MPR’s telephone survey center in New Jersey. Our active efforts to contact and interview sample members ceased at the end of July 1999.

number as of the fall of 1997.<sup>13</sup> Also from DHS records, we had the names and Social Security numbers of other individuals who were in the same FIP case as a sample member at the time of random assignment. This information was between ½ and 4-¾ years old at the start of the survey field period. The evaluation design included neither the collection of supplemental contact information at random assignment (i.e., the names of other people who would be likely to know how to contact the sample member) nor interim contact with sample members by MPR. We used this basic contact information in conjunction with six standard survey techniques to locate, contact, and interview the members of the Iowa core survey sample.

## **1. Advance Letter**

Before making any telephone contact attempts, we sent all sample members an advance letter explaining that they had been selected to participate in a voluntary study of Iowa's welfare program--FIP. The letter stated in broad terms the objectives of the study and encouraged the recipients to call MPR's toll-free 800 number to complete a half-hour interview.

An advance letter is standard in MPR's telephone and mixed-mode surveys. It serves two functions. First, it generates calls by sample members to our 800 number. Interviews are conducted immediately as calls come in to our telephone survey center. Since those calls may originate from a pay telephone or a friend's telephone, an advance letter (accompanied by an 800 number) provides a way to conduct a telephone interview with a sample member who does not have a telephone. Second, an advance letter helps our telephone interviewers to gain the cooperation of sample members when it is necessary for us to call them for the purpose of conducting an interview.

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<sup>13</sup>Although contact information for sample members was obtained from DHS administrative records as of the fall of 1997, it was not necessarily current at that time. The information was current as of a sample member's last application for or participation in a DHS program (FIP, food stamps, SSI, and Medicaid). For a sample member who left all types of assistance in the fall of 1993, the contact information was between 4-½ and 4-¾ years old as of the start of the survey field period in July 1998. In addition to having the last address reported to DHS as of the fall of 1997, we had a complete history of address changes that were reported to DHS between the date of random assignment and the fall of 1997.

On the envelopes of all outgoing advance letters, we stamp “return service requested.” This directs the postal service to return to MPR, rather than forwarding to the addressee, any letter with an outdated address for which a forwarding address is on file. The postal service writes the new address on the envelope and sends the letter back to MPR. When a letter is returned to us marked “undeliverable,” and without a forwarding address, we use a national database to conduct our own search for a new address (see Section A. 3, below).

When we obtain an updated address for a returned letter, we enter the new contact information into our sample database and send a replacement letter to that address. This continues until a letter is not returned to us, until an updated address cannot be obtained, or until telephone contact has been made with the sample member. An unreturned letter signals that it was actually delivered to the designated address, where someone, perhaps the sample member, received it. Ideally, the sample member would read the letter and call our 800 number. However, several less than ideal possibilities also exist:

- A person other than the sample member receives the letter but fails to pass it on to the intended recipient.
- The letter makes it into the hands of the sample member, but he or she fails to open it.
- The sample member opens the letter but fails to call the 800 number.

When an advance letter is not returned to us and no telephone contact has been made (see Section A.2, below), we may use specialized techniques to overcome these barriers to completion of an interview. On the Iowa core survey, these included tiered incentive payments and specialized mailing strategies, both of which are described in Section B of this chapter. When an advance letter is returned to us and we are unable to find a current address or contact the sample member by

telephone, the case is referred to field staff for in-person follow-up, as described in Section A.4, below.

## **2. Telephone Contact**

After waiting several days for the advance letters for the Iowa core survey to be delivered, interviewers in our New Jersey telephone center began to call sample members, using the telephone numbers obtained from DHS records. This strategy of actively attempting telephone contact was implemented concurrently with the strategy of passively accepting calls from sample members in response to the advance letters.

Like the advance letter, active attempts at telephone contact are standard in MPR's telephone and mixed-mode surveys, and the process of searching for a correct current telephone number is analogous to the process of searching for a valid current address. If the telephone number that is part of the initial contact information proves to be incorrect, disconnected, or no longer in service, we call directory assistance to determine if a new telephone number can be easily obtained. When these search techniques yield a new telephone number, we call it. If we succeed in reaching a sample member, we attempt to complete an interview by telephone.

## **3. Database Searches**

It is not unusual for the postal service to return an advance letter to us without an updated address. It is typically stamped "undeliverable," with an indication that the address on the envelope is incomplete or that the addressee no longer lives there and has left no forwarding address. In a case like this, we use the sample member's name and Social Security number to search a national database that contains address information obtained from credit records. If a "hit" is obtained, yielding an updated address, we enter the new contact information into our sample database and send a replacement letter to the new address.

Similarly, when we do not have a current telephone number for a sample member, and cannot obtain one by calling directory assistance, we turn to a national “crisscross” directory that matches addresses and telephone numbers. We use our subscription to this directory to search for the telephone number(s) currently associated with a sample member’s last known address.<sup>14</sup> A limitation of the crisscross directory is that a sample member may no longer be living at the last known address, in which case a call to the matching telephone number would not directly result in contact with that individual.

#### **4. Field Follow-Up**

In a typical mixed-mode survey, MPR assigns a case to a field interviewer for in-person contact attempts if: (1) several mailings have failed to generate a call by the sample member to our toll-free number and (2) no working telephone number is available or multiple telephone attempts have failed to produce a completed interview.<sup>15</sup> Attempts by a field interviewer to locate a sample member and complete an interview are thought to be more effective than attempts made by letter or telephone. The field interviewer visits one or more addresses identified as potentially belonging to a sample member. If the sample member is found, an in-person interview is attempted. If the sample member cannot be found at the available address(es), the field interviewer makes inquiries in the surrounding neighborhood and utilizes contacts with community organizations to determine the individual’s current whereabouts.

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<sup>14</sup>When a telephone number is available for a sample member, it can be used to find a new address in the crisscross directory. The advance letter is then mailed to that address.

<sup>15</sup>In the Iowa core survey, the vast majority of cases assigned to field interviewers were ones that had failed to respond to our advance letter and for which we had no telephone number.

## **5. Contact with Out-of-State and Incarcerated Sample Members**

Approximately 12 percent of the sample for the Iowa core survey had moved out of the state between the time of their random assignment in the FIP evaluation and our attempt to locate and interview them. Also, a much smaller number of sample members were incarcerated at the time we sought to interview them. We used MPR's standard survey procedures to deal with these two situations. For out-of-state sample members, these procedures include use of the advance letter, the 800 telephone number, and active attempts at telephone contact. They do not include in-person contact unless it can be accomplished with minimal travel. For incarcerated sample members, we contact officials at the various facilities, explain the study, and request permission to conduct the interview. This permission is typically granted. On the Iowa core survey we interviewed approximately 10-15 incarcerated sample members.

## **6. Refusal Avoidance and Conversion**

Success in locating and contacting sample members is necessary but not sufficient to achieve a high survey response rate. That success must be accompanied by success in avoiding interview refusals among contacted sample members and in converting initial refusals into completions. Our standard refusal avoidance strategy focuses on convincing sample members that the study is worthwhile, that their confidentiality will be preserved, and that their government assistance benefits will not be affected by their participation in the study. Implementation of the strategy begins with the advance letter. We train interviewers to reinforce these messages during their contacts with sample members. Also during training, we impress upon interviewers the importance of a high survey response rate to the overall quality of the completed study and provide them with specific practical techniques for avoiding interview refusals.

If, despite our efforts to avoid interview refusals, a contacted sample member informs us that he or she does not want to participate in the survey, we implement a standard strategy for converting the refusal into a completed interview. This strategy consists of two components. First, we mail a special letter to the sample member who has refused to complete an interview. This letter reemphasizes the importance of the study and the sample member's participation in it. It also identifies MPR as a legitimate survey research firm that has integrity and is independent of any government agency. After this letter is mailed, a telephone interviewer with extensive training and experience in refusal conversion techniques calls the sample member and attempts to convince him or her to participate in the study. If this attempt fails and we receive a second refusal, our standard policy is to classify the case as a final refusal and make no further contact attempts. However, on some surveys, with the client's permission, we do make an additional attempt to interview two-refusal cases. This is one of the specialized survey techniques that we employed on the Iowa core survey, as discussed in Section B of this chapter.

## **B. SPECIALIZED SURVEY TECHNIQUES**

Application of the standard survey techniques outlined above enabled us to obtain with relative ease an interim 48 percent response rate on the Iowa core survey. In contrast, reaching and then exceeding the survey's target response rate of 70 percent was quite challenging and required the use of specialized techniques. Descriptions of six of the specialized techniques that we used to obtain the survey's final 72 percent response rate follow. These techniques are designated as "specialized" not because our use of them on the Iowa survey was unique, but rather because we do not routinely use them in our mixed-mode surveys.

## 1. Enhanced Techniques for Mail Contact

We employed techniques for mail contact with sample members on the Iowa core survey that went well beyond the standard techniques. As described above, the standard techniques entail the use of form letters in a traditional format--an advance letter and a refusal conversion letter. These may be mailed in “waves ” to large numbers of sample members, or on an ad hoc basis to individual sample members. Our enhanced techniques for mail contact in Iowa entailed waves of mass mailings of three different styles of printed materials--fliers, letters with personalized messages, and postcards.

We used *fliers* to announce some, but not all, offers of incentive payments.<sup>16</sup> The first such offer, a \$10 incentive payment, was not made until more than two months into the survey field period. The amount of the incentive was subsequently increased several times, as discussed below. The fliers announcing the incentives were more attractive and easier to read than the advance letter. The messages conveyed by the fliers were brief, were accompanied by eye-catching graphics, and were printed in a large font on colored paper. The current incentive payment was prominently displayed on the fliers. Multiple waves of fliers were sent to sample members (those who had not yet completed an interview) via first-class U.S. mail or Priority Mail. We selectively used the latter delivery mode for confirmed addresses in order to convey the importance of the study and the enclosed material.

Late in the survey field period, we conducted a mailing to all outstanding sample members that consisted of a *formal letter accompanied by a personalized, hand-written, message* on an attached post-it note. The letter announced a new, higher, incentive payment of \$25. The note encouraged the sample member to call MPR’s toll-free 800 number and complete the interview. The 800 number was included in the note’s message, so that the sample member could post the note near a telephone as a reminder to make the call. Also accompanying the letter was a glossy, colored brochure on

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<sup>16</sup>Some offers of a new, higher, incentive payment were conveyed by letter and some were conveyed by postcard.

MPR, which we hoped would further convey our status as a reputable research firm. We sent these letters via Priority Mail so they would stand out among all the articles of mail that were delivered to the addresses of the sample members.

In the last weeks of the survey field period we conducted two waves of mailings of *postcards* to outstanding sample members via first-class U.S. mail.<sup>17</sup> The postcards were somewhat like small versions of the fliers. They conveyed an abbreviated message, accompanied by an eye-catching graphic, printed on colored postcard stock. The messages highlighted the current incentive payment (\$25 for the first postcard, \$50 for the second) and requested the sample member to call MPR's 800 number and complete the interview. Since a postcard's message is displayed for any and all to see, the messages on these postcards did not indicate that the addressee had ever applied for or received welfare. The fact that the messages were displayed had the added benefit that other individuals living at the address to which a postcard was delivered might read the message and encourage the sample member to complete the interview.

## **2. Tiered Incentive Payments**

We used incentive payments to encourage sample members to participate in the Iowa core survey. This was not unusual; incentive payments are often part of our strategy for attaining a high response rate on a survey. What was somewhat unusual was our use of tiered incentive payments and the strategic timing of our progression from lower to higher tiers. The amounts offered ranged from \$0 at the outset of the survey field period to \$50 near the end, with intermediate offers of \$10, \$15, and \$25. Our decision regarding the date of each increase in the incentive payment was made in realtime, based upon our sense of when we had reaped all the gains in terms of completed

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<sup>17</sup>The postcards were marked so that the postal service would return them to us with any forwarding address information. We used that information to update our address database for the Iowa core survey and to send replacement postcards to the new addresses.

interviews from the existing incentive level. The time gap between increases shrank as the survey field period lengthened. Each increase was announced to outstanding sample members by a mailing of letters, fliers, or postcards, and was accompanied by a burst of intensity in our telephone contact efforts.

### **3. An Alternate Methodology for Field Follow-Up**

Field follow-up is a defining feature of a mixed-mode survey, as discussed in Section A.4. On the Iowa core survey, we conducted field follow-up with sample members whom we had been unable to interview by telephone. We held two multi-day, on-site, training sessions for field staff several months apart. The first session provided instruction on the standard methodology for field follow-up--locating sample members and conducting in-person interviews using a hard-copy instrument. The second training session provided instruction on an alternate methodology for field follow-up--locating sample members and using a cell phone to complete the interview. The latter entailed the field staff person using an MPR-issued cell phone to call our 800 number and then handing the telephone to the sample member who then completed the interview with an experienced interviewer using the computer assisted telephone interviewing (CATI) system at our New Jersey telephone survey center.

After experiencing low productivity by field staff using the standard methodology for field follow-up, we shifted to the alternate methodology for two reasons:

1. It allows virtually all field activities to be focused on locating hard-to-reach sample members. Field staff need not be proficient interviewers to be effective.
2. It saves money by directly entering survey responses into the CATI system rather than first recording them on a hard-copy instrument in the field and then entering them into CATI in our New Jersey facility.

Unfortunately, productivity under the alternate methodology for field follow-up also proved to be disappointing. Chapter III describes our response to that disappointment.

#### **4. Updated Contact Information from Iowa DHS**

Midway through the survey field period, we requested help from Iowa DHS in locating hard-to-reach sample members. We gave DHS a file of names and Social Security numbers of sample members whom we could not locate using our standard searching techniques. DHS used this identifying information to search through its principal administrative data system for updated addresses and telephone numbers and sent us back a file containing the updated information.<sup>18</sup> We then followed those leads by calling the telephone numbers, running the new addresses through the crisscross directory to find missing telephone numbers, and mailing letters and fliers to the new addresses.

#### **5. Specialized Database Searches**

We used two specialized databases to supplement the standard crisscross directory and credit history databases as sources of contact information on members of the Iowa core survey sample. The first of these, a proprietary national database, offers similar capabilities as the two standard databases, but it also provides information from several new sources and thus has the potential to generate new contact leads. We submitted to the firm that owns this database a disk containing the names and Social Security numbers of outstanding sample members whom we had been unable to locate. We received back a file containing updated addresses and telephone numbers for those sample members who were successfully matched with contact information in the database. We then used our standard techniques to follow-up on that information.

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<sup>18</sup>The updated contact information was from the same DHS administrative data system that was the source of our initial contact information on sample members.

The second specialized database, also a proprietary national database, maintains drivers' license and motor vehicle records for many states, including Iowa. The drivers' license and motor vehicle records in this database contain address information only, no telephone numbers. We searched through this database for matches with the outstanding sample members whom we had been unable to locate. We ran addresses produced by this process through the crisscross directory to obtain matching telephone numbers. We then implemented standard follow-up procedures.

## **6. Conversion of Second Refusals**

Our standard policy is to stop attempting to complete an interview after receiving a second refusal directly from a sample member. We followed this policy in Iowa until very late in the survey field period. At that time, we requested permission from our client, Iowa DHS, to contact by mail those sample members who had twice refused to complete an interview. DHS granted permission for this contact, but under the condition that we initiate no telephone follow-up after the mailing. We crafted a letter to these sample members that emphasized the importance of the study and their participation in it, highlighted the increased incentive payment of \$25, and requested that they call our toll-free telephone number to complete the interview. We used Priority Mail to underscore the importance of the letter. The recipients of the letter had had no contact with us since their second refusal to complete an interview, which for most had been months in the past. In accordance with our agreement with DHS, we interviewed the recipients of this letter who called us but we did not attempt to call those who did not respond to the letter.

## **C. EXTENSION OF THE SURVEY FIELD PERIOD**

When we are unable to attain the targeted completion rate or number of interviews on a survey within the originally specified field period, we may ask our client for permission to extend the field

period. We made this request on the Iowa core survey and it was approved by our client.<sup>19</sup> An extended field period on a survey may enable us to employ specialized techniques; however, an extended field period can have beneficial effects even if it entails only continued use of standard survey techniques. Additional time enables us to pursue more leads. It also increases the chance that a difficult to locate sample member will cycle back through a former address or contact an individual that we had been in touch with while looking for the sample member. Time also aids us by demonstrating our perseverance to sample members who have been trying to avoid a survey. This may signal the importance of a study more effectively than words. Many sample members in the Iowa core survey completed interviews only after receiving numerous letters and telephone calls from us.

#### **D. FINAL THOUGHTS ON OUR USE OF THESE TECHNIQUES**

Our fielding of the Iowa core survey was consistently challenging--requiring creative problem solving, quick action, and careful monitoring of the sample. The importance of achieving an interview completion rate of 70 percent or higher led us to aggressively move beyond standard survey techniques to those that we have designated here as “specialized.” Chapter III presents a chronological narrative and process analysis of our application of the standard and specialized survey techniques that we have introduced in this chapter. The narrative is accompanied by charts showing weekly numbers of completed interviews. By comparing the timing of our application of techniques with the timing of interview completions, we are able to informally assess the efficacy of certain of the techniques.

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<sup>19</sup>The field period for the Iowa core survey was extended from the original six months to thirteen months.

### **III. ANALYSIS OF THE TIMING OF INTERVIEW COMPLETIONS**

To illustrate the life cycle of the Iowa core survey, we developed a timeline that shows the number of interviews conducted by week during the survey's data collection period. On the timeline, we indicate when various techniques or strategies were implemented to further our progress toward the goal of a 70 percent interview completion rate. This chapter presents our analysis of the timeline and the survey techniques. The purpose of this analysis is *not* to quantify the effectiveness of specific techniques or to compare the relative effectiveness of one technique to another. Such an analysis would require random assignment of sample members to different data collection methodologies. Instead, we provide a qualitative process analysis of the conduct of the Iowa core survey--the obstacles encountered, both routine and unanticipated, and the techniques used to surmount those obstacles and achieve the target interview completion rate. We believe that this analysis reveals issues and techniques that are broadly applicable to surveys of current or former welfare recipients.

#### **A. THE TIMELINE FOR INTERVIEW COMPLETIONS**

Interviews for the Iowa core survey began on July 10, 1998, and ended on August 23, 1999, for a 60-week field period. We completed interviews with 2,951 out of 4,111 eligible cases for an overall response rate of 72 percent. We began the survey by conducting locating and interviewing by telephone. As the effectiveness of that mode waned, we made a planned switch to field locating and interviewing. The effectiveness of that mode fell far short of our expectations. In response, we shifted first locating and then interviewing back to a telephone mode. During this later telephone phase of the survey we used intensive locating and interview conversion techniques to attain and exceed our goal of a 70 percent aggregate response rate.

Exhibit 1 shows the number of completed interviews by week over all but the final three weeks of the field period<sup>20</sup> and the dates of our crossing of the 20, 40, 60 and 70 percent aggregate completion rate thresholds. The 40 percent completion rate threshold was passed rather quickly, in the 16 week of the field period. The remainder of the 60-week field period was spent raising the response rate to its final value of 72 percent.

## **B. STRATEGY FOR ANALYZING INTERVIEW COMPLETIONS**

We employed many techniques to increase the completion rate in the Iowa core survey. As described in the preceding chapter, those included tailored mailings, incentive payments, field locating, and numerous other techniques. The survey process analysis presented in the following section examines in chronological order each specialized technique for increasing the Iowa core survey completion rate, highlighting the factors that led us to adopt that technique and demonstrating the types of specialized techniques that were required over the course of the field period in order to reach our completion rate goal.

## **C. FINDINGS FROM THE SURVEY PROCESS ANALYSIS**

We separated the survey timeline into three sections to facilitate the analysis of techniques for increasing the interview completion rate. Exhibit 2 displays Segment One of the timeline (the weeks of July 5 through November 22, 1998).<sup>21</sup> Exhibit 3 displays Segment Two of the timeline (the weeks of November 29, 1998, through March 28, 1999). And Exhibit 4 displays Segment Three of the timeline (the weeks of April 4 through August 1, 1999). Each of these three exhibits also identifies

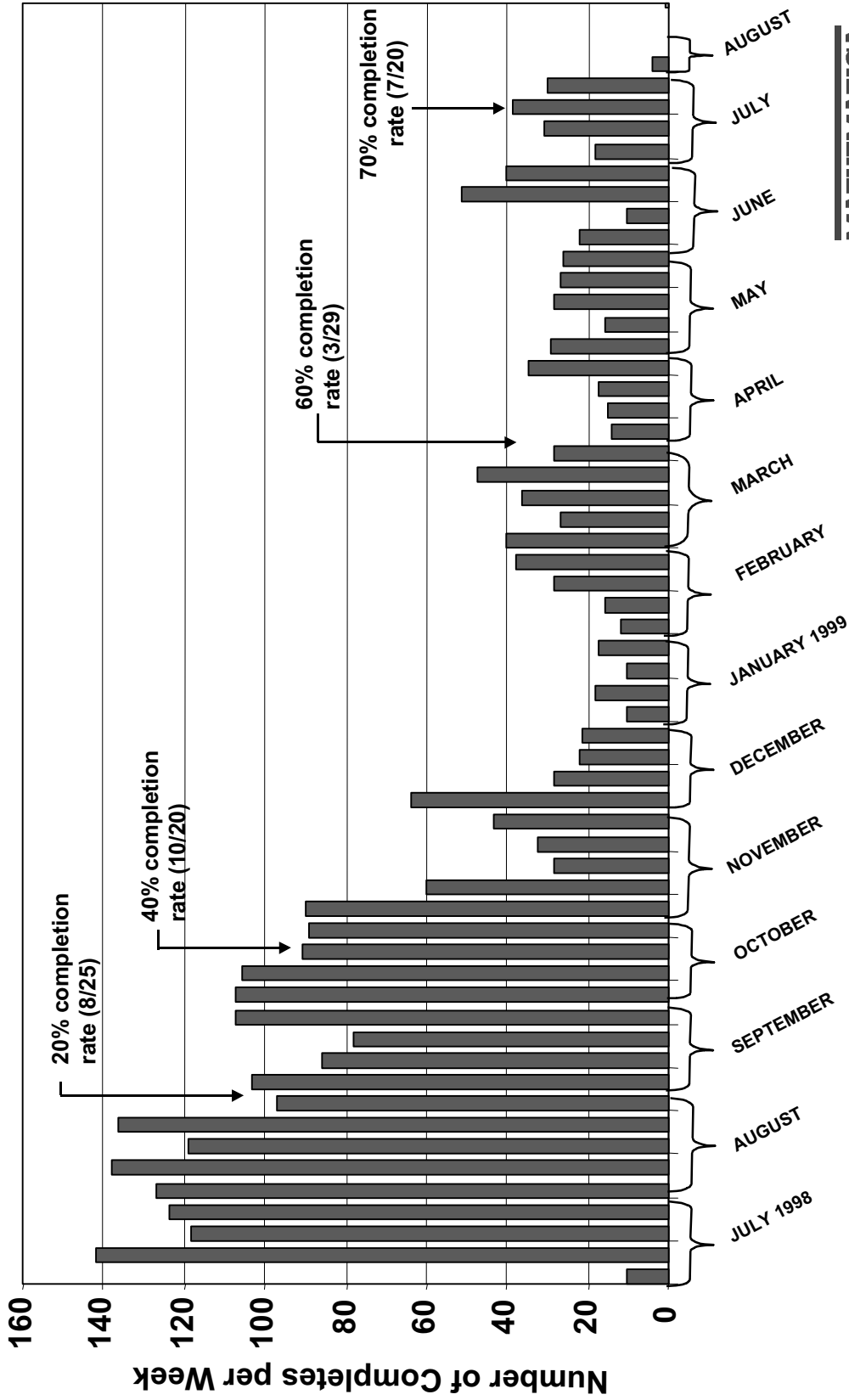
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<sup>20</sup>Only 6 interviews were completed during the final three weeks of the survey field period.

<sup>21</sup>In this section, a specific week in the survey field period is identified by the date of the first day in the week. Each week throughout this section, begins on Sunday. Thus, July 5, 1998, refers to the week that began on that date and ended July 11, 1998.

# Exhibit 1

## Iowa Core Survey: Timeline of Completed Interviews



the techniques that were used to increase the survey completion rate and shows when they were implemented.

### **1. Segment One (July - November 1998)**

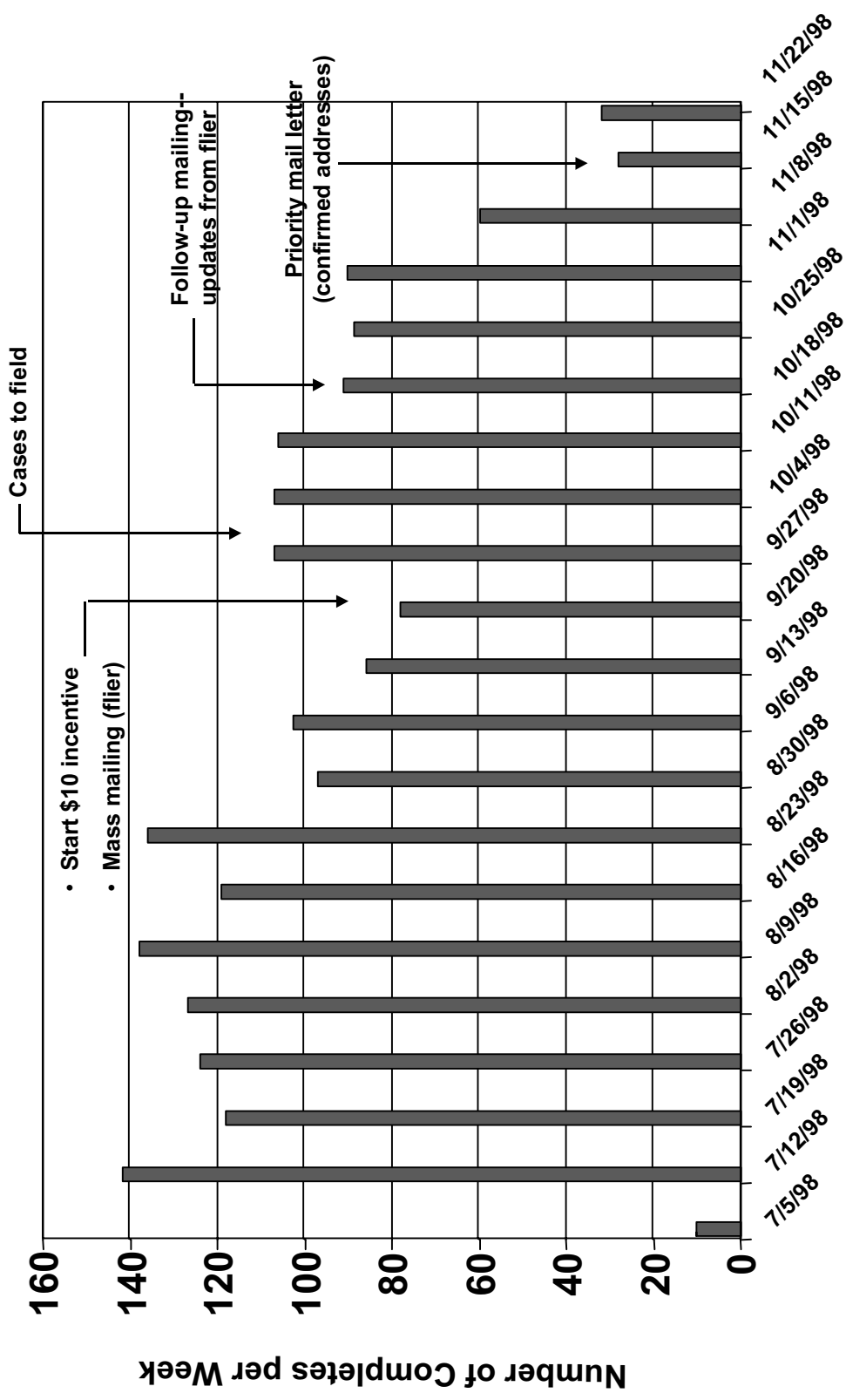
Collection of the Iowa core survey data began at Mathematica's New Jersey telephone survey center during the week of July 5, 1998--the first week of Segment One. We crossed the 20 percent aggregate interview completion rate threshold during the ninth week of this 21-week segment. By the end of Segment One we had completed almost two-thirds of the total number of interviews that we would ultimately complete over the entire survey field period.

As with most surveys, the initial weeks of the Iowa core survey were characterized by "sample creaming." Specifically, we attempted to contact and interview each sample member during the first three weeks of the field period. That effort revealed many cases with inadequate contact information, and for whom basic searching techniques (e.g., an inquiry to directory assistance or the mailing of a second letter to encourage a call to Mathematica's 800 number) failed to yield good contact information. Those cases were passed on to Mathematica survey staff who are specialists in locating sample members. Fully 78 percent of the cases in the Iowa core survey sample required locating services. Meanwhile, Mathematica's telephone interviewers attempted to interview those sample members for whom good contact information was available. Refusal conversion efforts to complete interviews with sample members who initially declined to participate in the survey were not undertaken at that time--instead, the interviewing effort was focused on sample members who were more inclined to participate in the survey.

As shown in Exhibit 2, the number of interview completions fell off sharply during the week of August 30--the ninth week of the survey. This signaled the end of the "sample creaming" phase of the survey. Subsequent phases would require more intensive locating and refusal conversion

## Exhibit 2

### Iowa Core Survey: Segment One July to November 1998



efforts. We had achieved a 25 percent interview completion rate; barely more than a third of the way to our final goal of a 70 percent completion rate.

As the decline in interview completions continued through the week of September 20, we instituted the first in a series of increasingly larger incentive payments.<sup>22</sup> Starting September 21, a \$10 payment was offered to sample members for completing the interview. The incentive payment was advertised in two mailings to sample members who had not yet responded to the survey. The first of these mailings utilized a flier format that was visually distinct from the standard letter format that we had been using up to that time. This mailing generated an increase in call-ins to our 800 number and in the number of interviews completed through the week of October 11. An additional benefit of this mailing was our receipt of updated addresses from the postal service for some sample members to whom the flier was not delivered. The second mailing, which started the week of October 16 and consisted of a standard letter, was sent to the updated addresses only. The completions generated by this mailing persisted through the week of November 1. A third, smaller mailing was sent at the end of Segment One. This mailing was sent by Priority Mail to cases with confirmed addresses. We hoped that the distinctive packaging would underline the importance of the study and encourage sample members to call our telephone survey center in New Jersey using the 800 number that was provided in the letter. Those that did so would not require more expensive field contacts.

The offer of a \$10 incentive payment coincided (intentionally) with the beginning of limited survey field operations. Up to that time, all survey locating and interviewing activities had been conducted out of Mathematica's telephone survey center. Seventy field staff were given a week of training in Des Moines on survey locating and interviewing techniques. We began sending core

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<sup>22</sup>The absence of a financial incentive during the "sample creaming" phase of the survey was a carefully considered strategic decision. We did not want to draw down our limited funds for financial incentives by making payments to sample members who would willingly complete the interview without them.

survey assignments to those staff during the week of September 27--the thirteenth week of the survey. The initial assignments consisted of cases with several leads but no clear address or telephone number. The telephone survey center had exhausted the potential of standard centralized procedures to contact these cases.

During October, staff in our telephone survey center continued their efforts to locate sample members with poor contact information. As updated contact information was obtained, those cases were sent to the field staff for interviewing. The search efforts by the telephone survey center became increasingly less successful and in early November we ceased them. At that time we began sending the residual cases with poor contact information to the field. However, as field staff began to work these challenging cases, the number of completed interviews declined sharply during the weeks ending November 8 through 22.

The field staff were inexperienced and lacked the requisite skills to effectively and efficiently locate the sample members that we had been unable to locate and/or contact from our New Jersey facility. Consequently, field labor hours and costs per completed interview started to rise in November. By the end of Segment One in late November, we were considering alternatives to 100 percent field operations in order to increase productivity and reduce costs. This marked the end of Segment One. We had attained an aggregate interview completion rate of 48 percent.

## **2. Segment Two (November 1998 - March 1999)**

Given the low productivity and high costs incurred at the end of Segment One, the second segment of the survey field period began with a change in field operations that was designed to address those issues. We decided that we could locate cases more effectively and cost-efficiently from our New Jersey telephone survey center, since it is staffed with trained and experienced locators. Therefore, we shifted all sample locating activities from the field back to our New Jersey facility

during the week of November 29, 1999. We also resumed our previous policy of sending only selected cases to the field for interviewing--those with good addresses or promising leads.

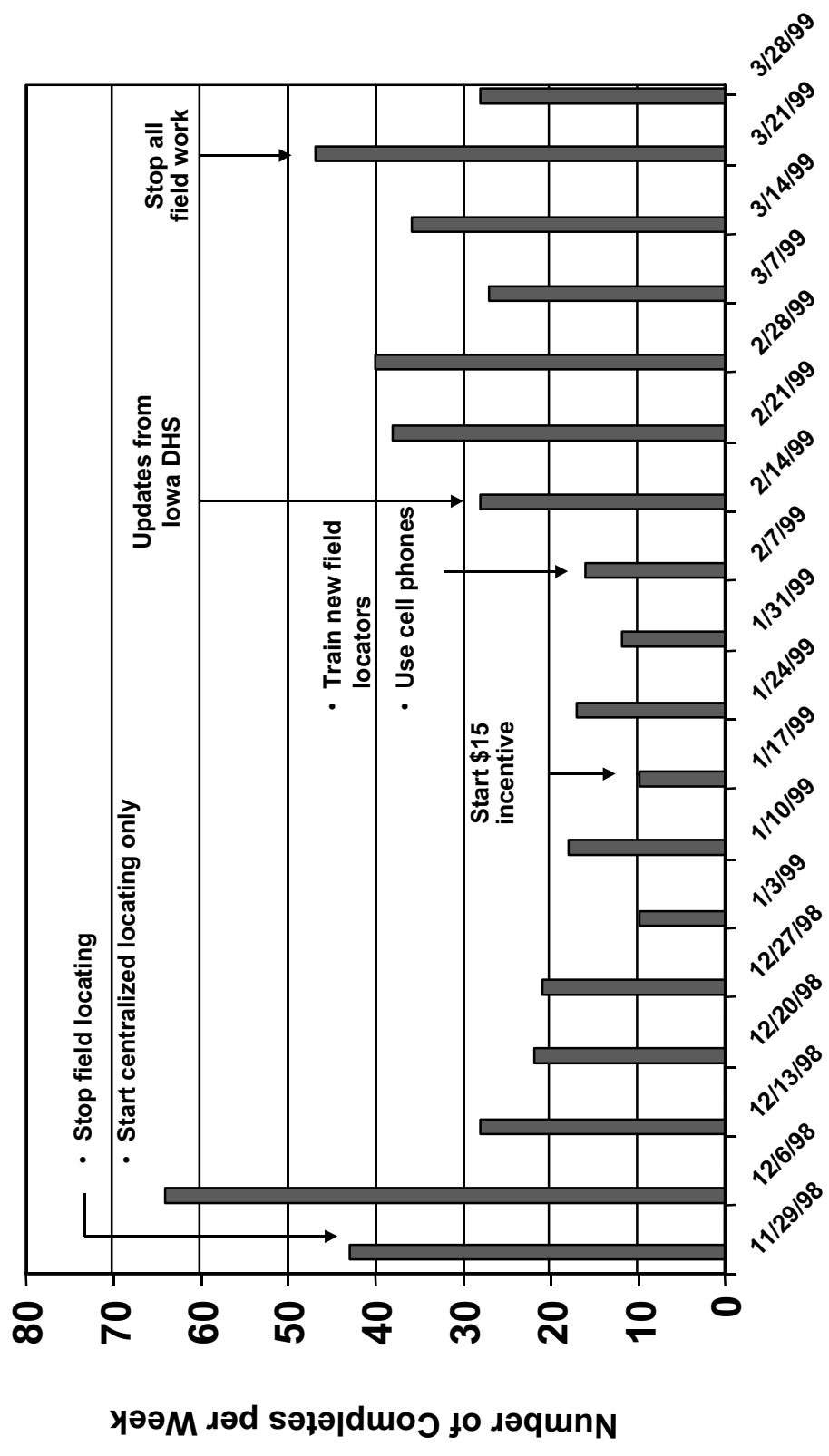
Exhibit 3 shows a strong increase in the number of completed interviews during the weeks of November 29 and December 6. We attribute this increase primarily to the renewed centralized locating activity. In addition, the sample had been in the field for over a month, during which time it had been dormant with respect to locating activities in our New Jersey facility. Some of the completions may have been a passive consequence of that dormancy--new updates from locating databases and postal returns with updated addresses occur with the passing of time even in the absence of specialized locating activity.

The wave of completions following the resumption of searching activities in our New Jersey facility was followed by a collapse during the week of December 13, with further reductions through the middle of January 1999. Clearly, the benefits from our new strategy were short-lived. Despite an increase in the incentive payment to \$15 on January 20 (and an associated mailing to advertise the higher incentive), production remained low and survey costs remained high through the end of January. At that time we had completed 2,233 interviews for an aggregate response rate of 54 percent. We needed to complete another 645 interviews to achieve our 70 percent response rate target. However, we had averaged only 13 interviews per week during January, implying that it would take another 11 months to complete the core survey, absent an increase in productivity.

We again needed to devise a new strategy to reinvigorate survey operations and improve productivity. Since our first group of field staff lacked good locating skills, we decided to assign

### Exhibit 3

## Iowa Core Survey: Segment Two November 1998 to March 1999



them for conducting child impact interviews<sup>23</sup> and only targeted core interviews that required paper-pencil administration (primarily interviews in jails and prisons). We also decided to hire another group and focus their training on field locating techniques. Upon making in-person contact with a sample member, a field locator would use a cell phone to call Mathematica's New Jersey facility and hand the telephone to the sample member, who would then complete the interview with one of our experienced telephone interviewers. This strategy would have the side benefit of producing interviews that would be completed with our CATI system rather than with hard-copy questionnaires, thereby improving accuracy in the conduct of the interviews and facilitating the processing of the resultant data. The new field staff were recruited during January and were trained for several days in early February. Immediately upon completion of training they began searching for sample members.

Training and using the field locating staff was one of the most expensive specialized strategies that we implemented during the survey to increase the completion rate. Conducting multi-day off-site training is expensive, as are securing cell phone contracts and supporting field staff in the use of that equipment. Unfortunately, we received very little return on this investment. The locating of sample members again proved to be too difficult for field staff to do efficiently, despite their intensive training in that activity.

Despite the continued ineffectiveness of field locating activities, the weekly number of completed interviews steadily increased throughout the month of February, as shown in Exhibit 3. Most of the 102 interviews that were completed during the final three weeks of February were conducted by our telephone center staff. The telephone effort was aided by DHS's response to a request that we had made in early February for updated contact information on sample members from administrative files.

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<sup>23</sup>Since child impact interviews were completed after the core interview, there was accurate contact information and most of those cases required minimal locating.

Approximately 80 interviews completed during the remainder of the month resulted directly from the updated contact information or from leads generated by that information.

Since the field locating effort was costly and was not producing completed interviews, we could not continue it without sustaining a major budget shortfall on the survey. Given our success early in the fall of 1998 and again later that fall in locating sample members from our New Jersey telephone survey center, we decided to cease all field operations and conduct the remainder of the survey from the telephone center. We knew it was risky to stop in-person field operations in a survey of a low-income population, but we also knew that we could make many more contact attempts by mail and telephone to each remaining sample member than any one field locator/interviewer could make in-person. Therefore, on March 22, 1999, we ceased all in-person locating activity on the core survey and all but targeted interviewing activity. We stopped assigning cases to the field and retrieved all previously assigned cases that had not yet been interviewed. At this point--the end of the Segment Two--we had achieved a 60 percent completion rate.

### **3. Segment Three (April - August 1999)**

The third and final segment of the survey data collection period was characterized by utilization of previously untapped specialized databases, increases in incentive payments, and specialized mailings. We undertook these activities in recognition that we had fully exploited the existing information on cases that had not yet been contacted and that we faced significant barriers to completing interviews with previously contacted cases.

The first specialized database that we turned to was a national database service that offers capabilities similar to those of the crisscross directory and credit history database to which Mathematica subscribes and which we used throughout this and many other surveys. However, this specialized database service is enhanced in that it accesses several additional sources and thus it

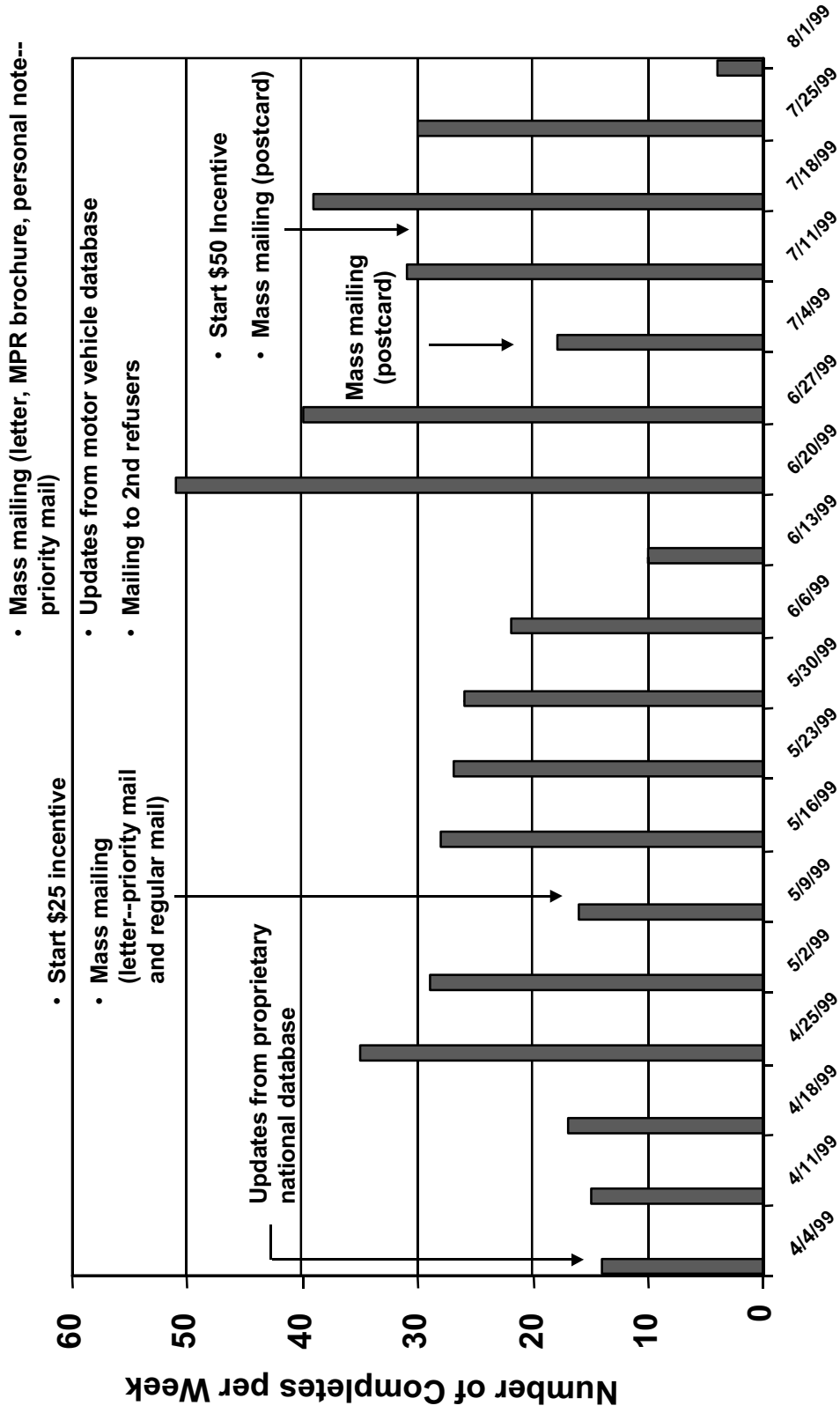
offered the potential for new contact information. We did not receive as many updated telephone numbers from this service as we had hoped, but our expectations regarding address leads were met (some of the “leads” were actual address updates). We mailed a letter, encouraging a call to our 800 number, to each sample members for whom this new database had directly or indirectly generated an updated address. We also submitted the updated addresses to our crisscross directory service in an attempt to identify the associated telephone numbers, which we then called.

Through either direct hits or leads on current addresses or telephone numbers, the new database service generated approximately 77 completed interviews during the weeks of April 11 through May 2, 1999 as illustrated in Exhibit 4. While this was a modest success rate out of the more than eleven hundred names that we submitted to the database service, the cost of locating and interviewing those 77 sample members was very low, especially compared with the costs associated with field operations. These completions brought us to a 62 percent interview completion rate early in Segment Three, but we still needed 300 more completions to reach our target of 2,878 completed interviews for a response rate of 70 percent.

After exhausting all leads from the new database service, we decided to raise the incentive payment to \$25 and do another mass mailing of a formal-style letter announcing the higher incentive. That mailing was to the approximately 1,050 “active” sample members--sample members who had not yet completed an interview, who had not twice told us that they did not want to participate in the survey, and for whom we had at least one possible address. For some of these sample members we had multiple possible addresses. What we did not have was confirmation that any of these addresses

# Exhibit 4

## Iowa Core Survey: Segment Three April 1999 to August 1999



were correct. We had only an indication that they may be correct since our previous letters to these sample members had not been returned to us by the postal service indicating it was undeliverable.<sup>24</sup>

This mailing started on May 12 and continued through the end of May as we worked our way through the sample. Similar to the previous mailings, this one generated calls by sample members to our 800 number to do the interview, as well as many address updates from the postal service. We used the latter to attempt matches with telephone numbers using the crisscross directory and then called all hits. Exhibit 4 shows the initial increase and gradual decline in the weekly number of completed interviews during the period of mid-May through early June in response to this mailing. By the week of June 13, interview completions had fallen back to a very low level but the total number of completed interviews had risen to 2,732, or 66 percent of the full sample of 4,111 cases. We needed to complete 146 more interviews to achieve a 70 percent response rate.

A significant component of the monthly cost of the Iowa core survey was essentially fixed--it was incurred each month regardless of the number of completed interviews. By June, there was strong financial pressure to quickly bring the survey to a close, thereby minimizing the number of months in which those fixed costs would be incurred.

To boost the interview completion rate, we decided to do another mass mailing during the weeks of June 20 and 27. This would enable us to quickly follow up on the address leads that had been generated by the previous mailing and would also emphasize the importance of the study to sample members who had just received a letter that would be quickly followed by another. Since multiple previous mailings had been made to most of these addresses, we wanted this mailing to be distinctive in the “look” of both the envelope and its contents, as well as in the mode of delivery. We continued to use a formal-style letter (maintaining a \$25 incentive for completing the interview), but we added

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<sup>24</sup>The other possible outcomes for these letters are: (1) delivered to the address on the envelope but failed to generate a telephone response so we don't know whether the sample member ever received it, (2) returned to us by the postal service with a forwarding address affixed to the envelope.

a friendly, personalized post-it note to the letter. The note had a handwritten message encouraging the recipient to call our 800 number to complete the interview. The 800 number was included in the message so that, while a recipient might set the letter aside, he or she could post the note near a telephone as a reminder to call and complete the interview. We also included in this mailing a glossy brochure on Mathematica to accentuate our status as a reputable research firm. Finally, we used the Priority Mail delivery mode, with its distinctive envelope that would stand out among the other items in the recipient's mail and reinforce the importance of the survey.

We implemented two other strategies while this mailing was in progress. First, we began using another specialized database. This database maintains motor vehicle and driver's license records for many states including Iowa. Survey field staff had previously made contact with local DMV offices in Iowa on an ad hoc basis. They would submit the names of a few difficult-to-locate sample members to staff in local DMV offices, who would then search their records for addresses linked to those names. In mid-June, we acquired the proprietary database which enabled locating staff to systematically search for address matches for all of our active sample members. Second, by the week of June 21 we had completed a mailing to approximately 390 cases that we had classified as "refusals" because they had twice told us that they did not want to participate in the survey. We had previously agreed with Iowa DHS not to pursue these cases further. However, in recognition of the difficulty of obtaining the remaining interviews that were needed to achieve a 70 percent completion rate on this survey, DHS gave us permission to contact these sample members one more time by mail only.<sup>25</sup>

These three strategies produced a dramatic increase in interview completions in late June, as shown in Exhibit 4. We completed 91 interviews during the weeks of June 20 and 27, bringing the aggregate interview completion rate up to 69 percent. Approximately 21 of these interviews can be

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<sup>25</sup>Subsequent to this letter, we *initiated* no further contact with these sample members. We did conduct interviews with those who called our 800 number in response to this letter.

attributed to updated addresses obtained from the motor vehicle database. Another 20 or so resulted from the mailing to sample members who had twice declined to participate in the survey. The remaining 50 interviews were generated by the mass mailing with the personalized note, Mathematica brochure, and Priority Mail delivery.

After exhausting all leads generated by the three strategies of mid-to-late June, interview completions tumbled during the week of July 4. In anticipation of this fall-off, in late June we had planned and prepared materials for a postcard mailing to all remaining active sample members. This mailing would reemphasize the importance of the study to those who had received previous mailings from us and request that they call our 800 number. Since a postcard's message is openly displayed, we avoided any mention of welfare in the message on this postcard, so as not to violate the sample members' privacy. The fact that the message would be openly displayed could indirectly work to our advantage if others were to see it and encourage the sample member to participate in the study. We implemented the postcard mailing between July 2 and 13. The weekly completion rate rebounded in mid July, as shown in Exhibit 4. We completed the 2,878<sup>th</sup> interview on July 16, thereby achieving our goal of a 70 percent completion rate.

The needs of the related child impact survey led us to push hard for additional core interviews through the end of July.<sup>26</sup> We therefore decided to increase the incentive payment for completing the core survey to \$50. Between July 16 and 22, we mailed postcards announcing the higher incentive payment to all active sample members. For the first time, these postcards stated a deadline for calling our 800 number. We attribute most of the interviews that we conducted during and after the week of July 18 to this postcard mailing. After this final mailing, calls to our 800 number flowed to a

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<sup>26</sup>The sample for the child impact survey consisted of core sample members who had completed a core interview and had reported the presence of a child age five to twelve years in the household. We needed to complete enough core interviews with this type of sample member to allow us complete 1,500 child impact interviews.

trickle in early August. We conducted our 2,951<sup>st</sup> and final core interview on August 23, 1999, bringing us to a 72 percent aggregate interview completion rate.

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## **IV. ANALYSIS OF SURVEY RESPONDENTS**

This chapter presents findings from an analysis of respondents to the Iowa core survey that we conducted in order to assess the importance of achieving a high response rate. This analysis entailed the use of administrative and survey data to compare the characteristics of survey respondents at different aggregate response rates and with all members of the survey sample. Before presenting the analytic findings, we discuss the factors that motivated the analysis and examine the reasons why survey nonrespondents did not complete an interview.

### **A. OVERVIEW**

In survey research, a high response rate is regarded as an important measure of a survey's success. However, attainment of a high response rate in a survey of a low-income population, such as current and former welfare recipients, is a challenge. It can be time consuming and expensive. What do we gain by attaining a high response rate--one in the seventies or higher? And what do we lose by attaining a lower response rate--one in the sixties or below? We asked ourselves these questions as we worked to achieve a high response rate on the Iowa core survey and, in particular, as we struggled to move from a response rate of sixty percent to one in excess of seventy percent. Shortly after survey field operations had ceased in August 1999 and a survey database had been constructed (September 1999), we conducted an analysis of the characteristics of survey respondents at four different aggregate response rates in order to answer these questions.

Our analysis of survey respondents had three components. We began our analysis by examining the reasons that survey nonrespondents did not complete an interview. These reasons were compiled by our survey staff as they attempted to locate, contact, and interview sample members. We then used data from DHS administrative records to compare the characteristics of all sample members

(4,111 “case-name persons”) with the characteristics of survey respondents at four different aggregate response rates: 20, 40, 60, and 72 percent. Lastly, we compared the responses to selected survey questions given by sample members in the highest response rate group with those given by the subsets of sample members in the three lower response rate groups.

## **B. REASONS FOR NONRESPONSE**

Twenty-eight percent of the members of the sample for the Iowa core survey did not complete an interview. The principal reason for interview nonresponse was our inability to contact sample members. Sixteen percent of sample members fell into this category. We were unable to locate approximately one-fourth of these individuals. While we succeeded in locating the remaining three-fourths with some certainty, we were unable to contact them because they either had no telephone, had an unpublished telephone number, or were never at home when a field interviewer attempted contact.

The second most important reason for interview nonresponse was refusal by contacted sample members to be interviewed. Ten percent of sample members refused an interview. We were unable to interview the remaining two percent of the sample primarily because of language barriers. A few nonrespondents had mental or physical impairments that prevented their participation in the surveys or were never available to complete an interview during the survey field period.<sup>27</sup>

## **C. ANALYSIS OF RESPONDENTS BASED ON ADMINISTRATIVE DATA**

Our first analysis of survey respondents is based on data that were available in DHS administrative records at baseline--the time when each sample member was randomly assigned to treatment or control status in the experimental evaluation. In this analysis we compare the baseline

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<sup>27</sup>A sample member who was “never available to complete an interview” was one who had been located, contacted, and had not refused to participate in the survey, but who was not available at any time during the survey field period to complete an interview.

characteristics of all sample members (respondents and nonrespondents) with those of four groups of survey respondents defined by different aggregate survey response rates--20, 40, 60, and 72 percent.<sup>28</sup> The results of this analysis are presented in Exhibit 5. The first column in this exhibit (the column on the far left) lists the characteristics used to compare the four response rate groups with the full sample. There are twelve characteristics that we have classified into eight categories.<sup>29</sup> The second column (from the left) presents the empirical values (computed as means or percentages) of these characteristics for the full sample of 4,111 case-name persons. The next four major columns present the empirical values of these characteristics for each of the four aggregate response rate groups. These columns also present the differences between these values and those for the full sample, as well as indicators of the statistical significance of the differences. All of the data are taken from administrative records.

The indicators of the statistical significance presented in the columns labeled *Sig 1* are based on conventional chi-square statistics for categorical variables and z-statistics for continuous variables. The indicators of statistical significance presented in the columns labeled *Sig 2* are based on variants of the conventional statistics in which each designated aggregate response rate group is assumed to have: (1) the same number of respondents (2,951) as the 72 percent response rate group, and (2) the same composition of respondents as the designated group itself. These adjusted statistics are insensitive to differences in sample size across the four response rate groups, but retain their sensitivity to compositional differences. The *Sig 2* indicators of statistical significance that are based

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<sup>28</sup>The methodology for defining the four aggregate response rate groups was as follows: (1) For each sample member who completed an interview, the date of the interview was recorded and stored in the survey data file. (2) The 2,952 survey respondents were sorted in chronological order based on the interview date and were written into a file. (3) For the XX percent response rate group, we selected the first  $0.XX * 4,111 = N_{XX}$  respondents from the sorted file. For example, the 20 percent response rate group consists of the first  $0.20 * 4,111 = 823$  respondents in the sorted file. (4) The 72 percent response rate group includes all 2,951 survey respondents.

<sup>29</sup>Three of the eight categories include more than one characteristic: age of the case-name person (two characteristics), demographic composition of the FIP case (three characteristics), and FIP benefits (two characteristics).

**EXHIBIT 5--IOWA CORE SURVEY:  
COMPARISON OF RESPONDENTS AT DIFFERENT AGGREGATE RESPONSE RATES TO FULL SAMPLE  
(BASED ON ADMINISTRATIVE DATA FOR FIP APPLICANTS AND PARTICIPANTS COMBINED)**

Characteristic (Source: Administrative Data) (Ref. Period: Time of Random Assignment <sup>t</sup> )	Full Sample (N=4,111)		Survey Respondents at 72% Response Rate (N=2,951)		Survey Respondents at 60% Response Rate (N=2,467)		Survey Respondents at 40% Response Rate (N=1,645)		Survey Respondents at 20% Response Rate (N=823)						
	Mean or Percentage	Difference (Full - 72%) Amt	Sig 1	Mean or Percentage	Difference (Full - 60%) Amt	Sig 1	Sig 2	Mean or Percentage	Difference (Full - 40%) Amt	Sig 1	Sig 2	Mean or Percentage	Difference (Full - 20%) Amt	Sig 1	Sig 2
Gender (%)															
Female	86.5	-2.0		88.6	-2.1	***		88.6	-2.1			88.5	-2.0		
Male	13.5	2.0	***	11.4	2.1	***		11.4	2.1	**		11.5	2.0		
Total	100.0			100.0				100.0				100.0			
Race/Ethnicity (%)															
White	78.6	-2.4		81.2	-2.6			82.9	-4.3			84.3	-5.7		
Black	15.0	0.2		14.5	0.5			13.1	1.9			13.0	2.0		
Hispanic	3.7	0.8		3.0	0.6			2.8	0.9			1.9	1.8		
Other	2.7	1.3	***	1.3	1.4	***		1.1	1.6	***		0.8	1.9	***	
Total	100.0			100.0				100.0				100.0			
Missing (N)	(234)			(122)				(76)				(38)			
Marital Status (%)															
Never married	55.6	-0.7		57.1	-1.5			55.1	0.6			54.2	1.5		
Married	24.0	1.0		22.8	1.2			24.3	-0.3			25.4	-1.4		
Formerly married	20.4	-0.3		20.1	0.2			20.6	-0.3			20.4	-0.1		
Total	100.0			100.0				100.0				100.0			
Missing (N)	(206)			(108)				(70)				(35)			
Educational Level (%)															
High school dropout	31.9	1.1		30.2	1.8			30.0	1.9			30.2	1.8		
Attending high school/vocat. school	4.9	0.0		4.8	0.0			4.6	0.3			3.6	1.2		
Completed or attending special ed.	0.3	0.0		0.3	0.0			0.4	-0.2			0.3	0.0		
High school degree or GED	52.5	-0.6		53.7	-1.2			54.1	-1.6			55.3	-2.8		
At least some college	10.4	-0.5		10.9	-0.5			10.9	-0.4			10.6	-0.2		
Total	100.0			100.0				100.0				100.0			
Missing (N)	(2,527)			(1,739)				(945)				(465)			
Age															
Less than 18 years (%)	7.7	0.0		7.9	-0.3			7.3	0.4			7.2	0.5		
Average age (years)	28.5	0.2		28.3	0.2			28.6	-0.1			29.1	-0.7	**	***
Demographic composition															
No. of persons associated with case	3.3	0.0		3.3	0.0			3.3	0.0			3.4	-0.1		**
Age of youngest person under 18	5.9	0.1		5.7	0.2			5.8	0.1			5.8	0.0		**
Unemployed parent case (%)	7.3	1.1	**	6.2	1.3	**		6.0	1.4	**		6.4	0.9	*	
FIP benefits															
Receives FIP benefits (%)	75.0	-1.4	*	76.7	-1.7	**		76.6	-1.6	**		77.6	-2.6	*	***
Average amount of FIP benefit at RA	\$635.24	-\$16.70	*	\$660.02	-\$24.78	**		\$653.81	-\$18.57	*		\$671.57	-\$36.33	**	***
FIP treatment/control status (%)															
Treatment Group	66.3	-0.9		66.7	-0.4			65.8	0.6			68.3	-2.0		
Control Group	33.7	0.9		33.3	0.4			34.2	-0.6			31.7	2.0		**
Total	100.0			100.0				100.0				100.0			

NOTE: Significance tests reported in a column labeled "Sig 1" compare the full survey sample (respondents and nonrespondents) to the subsample of respondents at the indicated response rate. Significance tests reported in a column labeled "Sig 2" compare the full sample to a hypothetical sample of N=2,951 that has the same composition as the subsample of respondents at the indicated response rate. The number of cases with missing values is reported in parentheses.

\*Significant at the .10 level.

\*\*Significant at the .05 level.

\*\*\*Significant at the .01 level.

on the adjusted statistics support comparisons across the aggregate response rate groups that are not influenced by differences in group size.

To facilitate exposition of the statistical results presented in Exhibit 5, we will use the following notation to refer to the four groups of survey respondents that are defined by the aggregate survey response rate:

- GROUP20 designates the 20 percent response rate group
- GROUP40 designates the 40 percent response rate group
- GROUP60 designates the 60 percent response rate group
- GROUP72 designates all survey respondents--the 72 percent response rate group

The most striking feature of Exhibit 5 is the high degree of consistency between the characteristics of GROUP40, GROUP60, and GROUP72 and the characteristics of the full survey sample. While differences between the three highest response rate groups and the full sample are statistically significant for four of the twelve characteristics, that is primarily a consequence of the large sizes of those groups. The differences themselves tend to be small regardless of whether they are statistically significant. For example, 15.0 percent of the full sample of FIP case-name persons is African-American (black), compared with 14.8 percent of GROUP72 and 13.1 percent of GROUP40. Also, 31.9 percent of the full sample dropped out of high school, compared with 30.8 percent of GROUP72 and 30.0 percent of GROUP40.

The differences in characteristics between the full sample and GROUP20 are generally larger than those for the three highest response rate groups. These differences are statistically significant, based on the adjusted test statistics, for eight of the twelve characteristics. However, we are again surprised that the differences themselves are not larger for this low response rate group.

There is weak evidence of convergence between the characteristics of the groups defined by the aggregate survey response rate and the characteristics of the full sample as the response rate increases. For example, the average FIP benefit per quarter is larger in all of the response rate groups than in the full sample, but the difference declines from \$36 for GROUP20, to \$19 for GROUP40, and finally to \$17 for GROUP72. Similarly, the percentage of case-name persons who are high school graduates is larger in all of the response rate groups than in the full sample, but the gap declines from 2.8 percentage points for GROUP20, to 1.6 percentage points for GROUP40, and 0.6 percentage points for GROUP72.

**Discussion of Findings Based on Administrative Data.** Overall, the deviation in the characteristics of the four aggregate response rate groups from those of the full survey sample are small--smaller than we anticipated. There is a weak tendency for the groups to more closely resemble the full survey sample as the aggregate response rate increases. Much of this convergence is achieved with the transition from GROUP20 to GROUP40. Although weak, the evidence of convergence is consistent with our expectations, which are based on our prior experience that individuals of higher socio-economic status (SES) are, on average, easier to contact and interview. This implies that individuals of higher SES tend to be interviewed earlier in a survey field period and therefore are over-represented in low response rate groups.

The overall findings surprised us. We expected to see greater deviation in the characteristics between the response rate groups and the full survey sample, and greater convergence with the full sample as the aggregate response rate increased. Our surprise at the findings prompted us to question whether the limited characteristics that are measured DHS administrative records may have resulted in our analysis failing to capture the relevant differences between the response rate groups and the

full sample. This questioning led us to conduct a second analysis; a comparison of respondents in the three lowest aggregate response rate groups with all respondents, based on survey data.

#### **D. ANALYSIS OF RESPONDENTS BASED ON SURVEY DATA**

The Iowa core survey collected data on many of the outcomes that are central to the ongoing debate about welfare policy. These measures are much broader than those found in welfare program administrative records. They include measures of welfare dependence, quality of life, and attitudes toward work and welfare. We believed that these more subjective measures might reveal differences among the four groups defined by the aggregate survey response rate that are not apparent in the objective administrative data.

Exhibit 6 reports on our analysis of the survey data for the purpose of comparing respondents in the three lowest aggregate response rate groups with all respondents. The structure of Exhibit 6 is similar to that of Exhibit 5, except that the reference group is all survey respondents (N = 2,951) rather than all members of the survey sample (N = 4,111). The first column in Exhibit 6 lists the eleven survey data items that are the basis for the comparisons. The second column presents the empirical values (means or percentages) of these survey data items for all respondents.<sup>30</sup> The next three major column headings present the empirical values of these survey data items for each of the three lowest aggregate response rate groups--GROUP60, GROUP40, and GROUP20. These columns also present the differences between these values and those for all survey respondents, as well as indicators of the statistical significance of the differences.<sup>31</sup>

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<sup>30</sup>In the previous section, the notation GROUP72 was used to refer to all survey respondents.

<sup>31</sup>The indicators of statistical significance given in the columns in Exhibit 6 labeled *Sig 1* and *Sig 2* were computed following procedures analogous to those used in the analysis underlying Exhibit 5. The number of respondents in GROUP60, 2,467, was used to compute the standardized test statistics that are the basis for the *Sig 2* indicators of statistical significance.

**EXHIBIT 6--IOWA CORE SURVEY:  
COMPARISON OF RESPONDENTS AT DIFFERENT AGGREGATE RESPONSE RATES TO ALL RESPONDENTS  
(BASED ON SURVEY DATA FOR FIP APPLICANTS AND PARTICIPANTS COMBINED)**

Characteristic (Source: Survey Data) (Reference Period: Time of Interview)	All Survey Respondents (N=2,951)		Survey Respondents at 60% Response Rate (N=2,467)		Survey Respondents at 40% Response Rate (N=1,645)		Survey Respondents at 20% Response Rate (N=823)					
	Mean or Percentage	Mean or Percentage	Mean or Percentage	Difference (All - 60%) Amt	Sig 1	Mean or Percentage	Difference (All - 40%) Amt	Sig 1	Mean or Percentage	Difference (All - 20%) Amt	Sig 1	Sig 2
Homeless or living on street during past year (%)	3.8 (6)	3.3 (6)	0.6			3.0 (3)	0.8	*	2.1 (1)	1.7	***	***
As a place to live & raise kids, my neighborhood is (%):												
Excellent or very good	48.8	49.2	-0.4			50.5	-1.7		51.4	-2.6		
Good	37.5	36.9	0.6			36.1	1.4		34.3	3.3		
Not too good or poor	13.7	13.9	-0.2			13.4	0.3		14.3	-0.7		
Total	100.0 (15)	100.0 (5)				100.0 (1)			100.0			***
Has children under age 18 not living at home (%)	10.8 (4)	10.2 (4)	0.6			9.9 (4)	0.9		9.4 (3)	1.4		**
Highest grade of school completed (%):												
None	0.3	0.3	0.0			0.2	0.1		0.2	0.1		
Grades 1 - 8	6.0	5.7	0.4			5.6	0.4		5.0	1.0		
Grades 9 - 11	30.0	28.3	1.8			25.0	5.1		27.0	3.1		
Grade 12	33.3	33.9	-0.7			35.1	-1.8		36.7	-3.5		
Grades 13 - 15	24.8	26.0	-1.1			27.3	-2.5		24.6	0.2		
Grades 16+	5.6	5.9	-0.3			6.8	-1.2	***	6.5	-0.9		***
Total	100.0 (7)	100.0 (7)				100.0 (7)			100.0 (3)			***
Met with PROMISE JOBS case worker (%)	36.7 (72)	37.5 (59)	-0.7			37.8 (46)	-1.1		39.1 (19)	-2.3		**
Currently working at a formal job (%)	63.2	63.0	0.2			62.6	0.6		58.7	4.5		***
Was in welfare-dependent household as child (%)	29.7 (89)	28.8 (71)	0.9			28.9 (44)	0.8		27.5 (22)	2.2		**
Expects to be on FIP one year from now (%)	9.2 (126)	9.7 (110)	-0.5			10.1 (77)	-0.9		11.6 (41)	-2.5		***
Expects to be on FIP five years from now (%)	2.0 (129)	2.0 (114)	0.0			2.2 (79)	-0.2		2.6 (40)	-0.5		*
Is aware of time limit on FIP assistance (%)	83.7 (429)	83.8 (357)	-0.1			84.2 (242)	-0.5		83.7 (119)	0.1		***
Has work-limiting disability (%)	23.5 (14)	24.0 (12)	-0.5			25.0 (10)	-1.5	*	26.1 (2)	-2.6		***

NOTE: Significance tests reported in a column labeled "Sig 1" compare the sample of all survey respondents to the subsample of respondents at the indicated response rate. Significance tests reported in a column labeled "Sig 2" compare the sample of all respondents to a hypothetical sample of N=2,467 that has the same composition as the subsample of respondents at the indicated response rate. The number of cases with missing values is reported in parentheses.

\*Significant at the .10 level.

\*\*Significant at the .05 level.

\*\*\*Significant at the .01 level.

We are again struck by the high degree of consistency between the characteristics of GROUP60 and GROUP 40 and the characteristics of all survey respondents. The consistency tends to be slightly stronger for GROUP 60 than for GROUP40. For example, 3.8 percent of all respondents reported that they were homeless sometime during the year preceding the interview, compared with 3.3 percent of GROUP60 and 3.0 percent of GROUP40. And 83.7 percent of all respondents were aware of the existence of a time limit on the receipt of FIP assistance, compared with 83.8 percent of GROUP60 and 84.2 percent of GROUP40. GROUP60 is not significantly different from all survey respondents in any of the eleven characteristics, whereas GROUP 40 is significantly different in three characteristics.

GROUP20 is distinctly different from all survey respondents. The differences are not only statistically significant (for ten out of eleven characteristics), they also are moderately large. For example, whereas 63.2 percent of all survey respondents told us that they were currently employed, only 58.7 percent of GROUP20 did so. Most of the gap between the GROUP 20 characteristics and the characteristics of all respondents dissipates as the survey response rate climbs to 40 percent.

**Discussion of Findings Based on Survey Data.** Overall, the deviation of the characteristics of the 40 percent and 60 percent aggregate response rate groups from those of all survey respondents is small. In contrast, the 20 percent response rate group is clearly distinct from all survey respondents. As the aggregate response rate rises, the characteristics of groups defined by that rate converge with the characteristics of all survey respondents. However, most of the convergence occurs as the response rate rises to 40 percent; very little occurs as the response rate rises beyond that level. As in the analysis based on administrative data, this finding of convergence is consistent with our experience from previous surveys that sample members of lower SES are harder to contact and

interview and, therefore, are more likely than those of higher SES to complete an interview later in the survey field period.

## **E. CONCLUDING REMARKS**

The Iowa core survey was very difficult and expensive to conduct. As these challenges became apparent and the survey field period stretched out, Mathematica's senior management gave increasing attention to the survey. The survey director and project director briefed senior management on the status of the survey in a formal meeting every month. These formal briefings were supplemented with numerous informal briefings during the latter half of the field period. At no point did the company waiver from its commitment to obtain a 70 percent response rate on this survey. This did necessitate our requesting supplemental funding for the survey from our clients. Mathematica also contributed very substantial funding to the survey.

At Mathematica, the results of the statistical analysis of the Iowa core survey respondents were naturally viewed in light of the challenges and expense of fielding the survey. We were, and remain, quite surprised at the small differences in characteristics between the subset of respondents defined by the aggregate 40 percent response rate and: (1) the full survey sample (based on characteristics measured in administrative data) and (2) the sample of all survey respondents (based on characteristics measured in survey data). However, given the extraordinary effort that was required to boost the survey response rate from 60 percent to 72 percent, we are even more struck by the very small differences between the subset of respondents defined by the 60 percent aggregate response rate and both the full survey sample and all survey respondents.

Because the Iowa core survey was conducted concurrently with the Iowa child impact survey and many of the survey operations served both surveys, we are unable to precisely isolate the costs of completing a core interview. However, our seat-of-the-pants estimate is that the final 500 core

interviews, those that moved the aggregate response rate from 60 percent to 72 percent, cost about \$250 to \$400 each, or a total of \$125,000 to \$200,000. The statistical findings presented in this chapter leave us wondering whether those funds were well spent.

Mathematica remains committed to achieving a high response rate (70 percent or greater) on surveys of low-income populations. However, the analytic findings reported in this chapter provide little support for that commitment. Perhaps future analyses based on a broader range of the Iowa core survey items will provide that support. Even if that does not occur, it is hoped that similar analyses of surveys conducted in different sites by different organizations will be conducted to enable us to assess whether these results are unique to Iowa or hold for other states as well.

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**APPENDIX**

**STATISTICAL ANALYSIS OF SURVEY RESPONDENTS  
SEPARATELY FOR FIP APPLICANTS  
AND FIP PARTICIPANTS**

**EXHIBIT 5A--IOWA CORE SURVEY:  
COMPARISON OF RESPONDENTS AT DIFFERENT AGGREGATE RESPONSE RATES TO FULL SAMPLE  
(BASED ON ADMINISTRATIVE DATA FOR FIP APPLICANTS)**

Characteristic (Source: Administrative Data) (Ref. Period: Time of Random Assignment <sup>t</sup> )	Full Sample (N=2,245)		Survey Respondents at 69% Response Rate (N=1,538)		Survey Respondents at 60% Response Rate (N=1,347)		Survey Respondents at 40% Response Rate (N=898)		Survey Respondents at 20% Response Rate (N=449)	
	Mean or Percentage	Difference (Full - 69%) Amt	Mean or Percentage	Difference (Full - 60%) Amt	Mean or Percentage	Difference (Full - 40%) Amt	Mean or Percentage	Difference (Full - 20%) Amt	Mean or Percentage	Difference (Full - 20%) Amt
		Sig 1		Sig 1		Sig 1		Sig 1		Sig 1
										Sig 2
Gender (%)										
Female	82.5	-2.7	85.4	-2.8	85.0	-2.4	85.5	-3.0	85.5	-3.0
Male	17.5	2.7	14.6	2.8	15.0	2.4	14.5	3.0	14.5	3.0
Total	100.0	***	100.0	***	100.0	***	100.0	***	100.0	***
Race/Ethnicity (%)										
White	79.4	-3.8	83.4	-4.0	83.9	-4.5	86.1	-6.6	86.1	-6.6
Black	11.9	0.5	11.1	0.8	11.1	0.8	11.2	0.7	11.2	0.7
Hispanic	5.6	1.6	4.2	1.3	4.0	1.6	4.0	3.4	4.0	3.4
Other	3.1	1.7	1.2	1.8	1.0	2.1	0.5	2.6	0.5	2.6
Total	100.0	***	100.0	***	100.0	***	100.0	***	100.0	***
Missing (N)	(222)	(140)	(123)	(72)	(40)					
Marital Status (%)										
Never married	52.3	-1.6	54.4	-2.1	53.7	-1.3	51.9	0.4	51.9	0.4
Married	29.8	1.1	29.0	0.8	29.9	-0.1	29.4	0.5	29.4	0.5
Formerly married	17.8	0.6	16.5	1.3	16.4	1.4	18.7	0.9	18.7	0.9
Total	100.0		100.0		100.0		100.0		100.0	
Missing (N)	(197)	(124)	(111)	(65)	(37)					
Educational Level (%)										
High school dropout	26.7	2.1	24.1	2.6	24.8	1.9	23.3	3.4	23.3	3.4
Attending high school/vocat. school	4.3	-0.9	5.2	-0.9	5.6	-1.3	4.5	-0.2	4.5	-0.2
Completed or attending special ed.	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
High school degree or GED	57.3	-0.4	58.3	-1.0	57.9	-0.6	60.2	-2.9	60.2	-2.9
At least some college	11.7	-0.8	12.3	-0.6	11.7	0.0	12.0	-0.3	12.0	-0.3
Total	100.0		100.0		100.0		100.0		100.0	
Missing (N)	(1,646)	(1,099)	(966)	(632)						
Age										
Less than 18 years (%)	9.3	-0.9	10.4	-1.1	9.2	0.0	8.5	0.8	8.5	0.8
Average age (years)	28.1	-0.5	27.6	0.5	28.0	0.1	28.8	-0.7	28.8	-0.7
Demographic composition										
No. of persons associated with case	3.1	0.0	3.0	0.1	3.0	1.2	3.1	0.0	3.1	0.0
Age of youngest person under 18	6.4	0.1	6.3	0.1	6.2	0.1	6.5	-0.1	6.5	-0.1
Unemployed parent case (%)	10.5	1.5	8.9	1.6	8.7	1.8	8.9	1.6	8.9	1.6
FIP benefits										
Receives FIP benefits (%)	55.7	-0.6	56.2	-0.5	55.3	0.3	55.2	0.4	55.2	0.4
Average amount of FIP benefit at RA	\$294.14	\$5.79	\$288.34	\$4.40	\$287.3	\$6.82	\$276.94	\$17.20	\$276.94	\$17.20
FIP treatment/control status (%)										
Treatment Group	66.7	-0.9	67.4	-0.7	65.6	1.1	68.6	-1.9	68.6	-1.9
Control Group	33.3	0.9	32.6	0.7	34.4	-1.1	31.4	1.9	31.4	1.9
Total	100.0		100.0		100.0		100.0		100.0	

NOTE: Significance tests reported in a column labeled "Sig 1" compare the full survey sample (respondents and nonrespondents) to the subsample of respondents at the indicated response rate. Significance tests reported in a column labeled "Sig 2" compare the full sample to a hypothetical sample of N=1,538 that has the same composition as the subsample of respondents at the indicated response rate. The number of cases with missing values is reported in parentheses.

\*Significant at the .10 level.

\*\*Significant at the .05 level.

\*\*\*Significant at the .01 level.

**EXHIBIT 5P--IOWA CORE SURVEY:**  
**COMPARISON OF RESPONDENTS AT DIFFERENT AGGREGATE RESPONSE RATES TO FULL SAMPLE**  
**(BASED ON ADMINISTRATIVE DATA FOR FIP PARTICIPANTS)**

Characteristic (Source: Administrative Data) (Ref. Period: Time of Random Assignment <sup>t</sup> )	Full Sample (N=1,866)		Survey Respondents at 76% Response Rate (N=1,413)		Survey Respondents at 60% Response Rate (N=1,120)		Survey Respondents at 40% Response Rate (N=747)		Survey Respondents at 20% Response Rate (N=374)			
	Mean or Percentage	Difference (Full - 76%) Amt	Sig 1	Mean or Percentage	Difference (Full - 60%) Amt	Sig 1	Mean or Percentage	Difference (Full - 40%) Amt	Sig 1	Mean or Percentage	Difference (Full - 20%) Amt	Sig 2
Gender (%)												
Female	91.3	-0.9		91.9	-0.6		92.0	-0.7		90.9	0.4	
Male	8.7	0.9		8.1	0.6		8.0	0.7		9.1	-0.4	
Total	100.0			100.0			100.0			100.0		
Race/Ethnicity (%)												
White	77.8	-1.0		79.9	-2.1		81.5	-3.7		83.6	-5.8	
Black	18.3	0.3		16.9	1.4		15.4	3.0		14.0	4.4	
Hispanic	1.6	-0.1		1.9	-0.3		1.8	-0.2		1.3	0.2	
Other	2.3	0.8		1.3	1.1	**	1.3	1.0	**	1.1	1.2	**
Total	100.0			100.0		**	100.0		**	100.0		**
Missing (N)	(12)			(10)			(6)					
Marital Status (%)												
Never married	59.3	0.5		59.2	0.1		56.0	3.3		54.0	5.3	
Married	17.6	0.4		17.5	0.1		19.8	-2.3		21.8	-4.2	
Formerly married	23.2	-0.9		23.3	-0.2		24.2	-1.0	**	24.2	-1.0	*
Total	100.0			100.0			100.0		**	100.0		**
Missing (N)	(9)			(9)			(6)					
Educational Level (%)												
High school dropout	35.1	0.8		33.9	1.2		33.3	1.9		33.5	1.6	
Attending high school/vocat. school	5.2	0.5		4.1	1.1		3.6	-1.6		3.6	1.6	
Completed or attending special ed.	0.4	-0.1		0.5	-0.1		0.7	-0.3		0.4	0.0	
High school degree or GED	49.6	-1.0		51.1	-1.4		51.2	-1.6		52.7	-3.0	
At least some college	9.6	-0.4		10.5	-0.8		11.2	-1.5	*	9.8	-0.2	
Total	100.0			100.0			100.0		*	100.0		
Missing (N)	(881)			(509)			(335)					
Age												
Less than 18 years (%)	5.7	0.7		5.4	0.3		5.5	0.2		5.1	0.7	
Average age (years)	28.9	0.0		29.1	-0.2		29.1	-0.2		29.7	-0.9	*
Demographic composition												
No. of persons associated with case	3.6	0.0		3.6	0.0		3.6	0.0		3.7	-0.1	**
Age of youngest person under 18	5.3	0.1		5.2	0.1		5.2	0.1		5.2	0.1	
Unemployed parent case (%)	3.5	0.3		2.8	0.8		2.9	0.6		3.7	0.2	
FIP benefits												
Receives FIP benefits (%)	98.3	-0.2		98.8	-0.5		99.1	-0.8	**	99.2	0.9	***
Average amount of FIP benefit at RA	\$1,045.62	-\$2.09		\$1,045.77	-\$0.15		\$1,042.89	\$2.73		\$1075.48	-\$29.86	***
FIP treatment/control status (%)												
Treatment Group	65.9	-1.0		66.0	-0.1		66.0	-0.1		69.8	3.9	
Control Group	34.1	1.0		34.0	0.1		34.0	0.1		30.2	-3.9	
Total	100.0			100.0			100.0			100.0		***

NOTE: Significance tests reported in a column labeled "Sig 1" compare the full survey sample (respondents and nonrespondents) to the subsample of respondents at the indicated response rate. Significance tests reported in a column labeled "Sig 2" compare the full sample to a hypothetical sample of N=1,413 that has the same composition as the subsample of respondents at the indicated response rate. The number of cases with missing values is reported in parentheses.

\*Significant at the .10 level.  
 \*\*Significant at the .05 level.  
 \*\*\*Significant at the .01 level.

**EXHIBIT 6A--IOWA CORE SURVEY:  
COMPARISON OF RESPONDENTS AT DIFFERENT AGGREGATE RESPONSE RATES TO ALL RESPONDENTS  
(BASED ON SURVEY DATA FOR FIP APPLICANTS)**

Characteristic (Source: Survey Data) (Reference Period: Time of Interview)	All Survey Respondents (N=1,538)		Survey Respondents at 60% Response Rate (N=1,347)		Survey Respondents at 40% Response Rate (N=898)		Survey Respondents at 20% Response Rate (N=449)	
	Mean Or Percentage	Mean or Percentage	Mean or Percentage	Difference (All - 60%) Amt Sig 1	Mean or Percentage	Difference (All - 40%) Amt Sig 1	Mean or Percentage	Difference (All - 20%) Amt Sig 1
Homeless or living on street during past year (%):	3.0 (1)	3.0 (1)	-0.1 (1)		2.0 (1)	-1.0 *	0.9	2.1 ***
As a place to live & raise kids, my neighborhood is (%):								
Excellent or very good	51.0	51.6	-0.6		52.6	-1.6	56.8	-5.8
Good	35.8	34.7	1.1		34.4	1.3	29.4	6.4
Not too good or poor	13.2	13.7	-0.5		12.9	0.3	13.8	-0.6
Total	100.0 (7)	100.0 (2)			100.0 (1)		100.0	**
Has children under age 18 not living at home (%)	10.6 (2)	10.2 (2)	0.4		9.6 (2)	1.0	9.6 (2)	1.0
Highest grade of school completed (%):								
None	0.3	0.3	0.0		0.2	0.0	0.4	-0.2
Grades 1 - 8	5.6	5.1	0.5		4.7	0.9	3.8	1.8
Grades 9 - 11	27.1	25.9	1.2		22.5	4.6	21.0	6.2
Grade 12	35.5	36.3	-0.8		37.1	-1.5	38.8	-3.3
Grades 13 - 15	26.2	27.2	-1.0		29.5	-3.2	29.5	-3.2
Grades 16+	5.2	5.2	0.0		6.0	-0.8	6.5	-1.3
Total	100.0 (2)	100.0 (2)			100.0 (2)	**	100.0	**
Met with PROMISE JOBS case worker (%)	27.1 (28)	27.4 (20)	-0.3		27.7 (15)	-0.7	28.1 (4)	-1.0
Currently working at a formal job (%)	66.8	67.9	-1.0		67.3	-0.4	64.6	2.3 *
Was in welfare-dependent household as child (%)	27.2 (48)	26.5 (41)	0.8		26.0 (24)	1.2	26.4 (10)	0.8
Expects to receive FIP one year from now (%)	7.0 (61)	7.3 (53)	-0.3		7.4 (41)	-0.3	7.0 (20)	0.0
Expects to receive FIP five years from now (%)	1.3 (59)	1.4 (53)	-0.1		1.5 (38)	-0.2	1.6 (17)	-0.3
Is aware of time limit on FIP assistance (%)	81.5 (238)	81.4 (210)	0.1		81.8 (145)	-0.3	81.7 (71)	-0.3
Has work-limiting disability (%)	18.4 (7)	18.4 (7)	0.0		19.6 (6)	-1.2	20.1 (1)	-1.7

NOTE: Significance tests reported in a column labeled "Sig 1" compare the sample of all survey respondents to the subsample of respondents at the indicated response rate. Significance tests reported in a column labeled "Sig 2" compare the sample of all respondents to a hypothetical sample of N=1,538 that has the same composition as the subsample of respondents at the indicated response rate. The number of cases with missing values is reported in parentheses.

\*Significant at the .10 level.

\*\*Significant at the .05 level.

\*\*\*Significant at the .01 level.

**EXHIBIT 6P--IOWA CORE SURVEY:  
COMPARISON OF RESPONDENTS AT DIFFERENT AGGREGATE RESPONSE RATES TO ALL RESPONDENTS  
(BASED ON SURVEY DATA FOR FIP PARTICIPANTS)**

Characteristic (Source: Survey Data) (Reference Period: Time of Interview)	All Survey Respondents (N=1,413)		Survey Respondents at 60% Response Rate (N=1,120)		Survey Respondents at 40% Response Rate (N=747)		Survey Respondents at 20% Response Rate (N=374)	
	Mean or Percentage	Difference (All - 60%) Amt Sig 1	Mean or Percentage	Difference (All - 40%) Amt Sig 1	Mean or Percentage	Difference (All - 20%) Amt Sig 1	Mean or Percentage	Difference (All - 20%) Amt Sig 1
Homeless or living on street during past year (%):	4.7 (5)	0.7	4.0 (5)	0.7	3.5 (2)	1.2	2.9 (1)	1.7
As a place to live & raise kids, my neighborhood is (%):								
Excellent or very good	46.4	-0.4	46.8	-0.4	46.3	0.1	47.3	-0.9
Good	39.4	0.2	39.2	0.2	40.2	-0.7	37.4	2.0
Not too good or poor	14.2	0.2	14.0	0.2	13.5	0.6	15.2	-1.1
Total	100.0 (8)		100.0 (3)		100.0		100.0	
Has children under age 18 not living at home (%)	11.0 (2)	0.9	10.1 (2)	0.9	10.6 (2)	0.4	9.1 (2)	1.8
Highest grade of school completed (%):								
None	0.4	0.1	0.3	0.1	0.3	0.1	0.0	-0.4
Grades 1 - 8	6.5	-0.1	6.5	-0.1	6.6	-0.1	6.5	0.0
Grades 9 - 11	33.2	2.4	30.8	2.4	28.4	4.8	32.6	0.7
Grade 12	30.8	-0.6	31.4	-0.6	33.0	-2.2	33.4	-2.6
Grades 13 - 15	23.3	-1.2	24.5	-1.2	24.1	-0.8	21.0	2.4
Grades 16+	6.0	-0.6	6.5	-0.6	7.7	-1.7	6.5	-0.5
Total	100.0 (5)		100.0 (5)		100.0 (4)		100.0 (3)	
Met with PROMISE JOBS case worker (%)	47.4 (44)	0.5	47.9 (38)	0.5	48.4 (30)	-1.0	52.2	-4.8
Currently working at a formal job (%)	59.2	1.1	58.1	1.1	57.4	1.8	52.9	6.3
Was in welfare-dependent household as child (%)	32.4 (41)	1.3	31.1 (33)	1.3	31.4 (21)	0.6	27.1 (12)	5.3
Expects to receive FIP one year from now (%)	11.5 (65)	-0.6	12.1 (53)	-0.6	13.2 (36)	-1.7	15.3 (22)	-3.8
Expects to receive FIP five years from now (%)	2.8 (70)	0.3	2.5 (55)	0.3	3.1 (40)	-0.3	3.4 (24)	-0.6
Is aware of time limit on FIP assistance (%)	86.2 (191)	-0.8	87.0 (153)	-0.8	87.0 (101)	-0.8	86.5 (47)	-0.4
Has work-limiting disability (%)	29.0 (7)	-1.5	30.5 (5)	-1.5	31.0 (4)	-1.9	31.5 (2)	-2.4

NOTE: Significance tests reported in a column labeled "Sig 1" compare the sample of all survey respondents to the subsample of respondents at the indicated response rate. Significance tests reported in a column labeled "Sig 2" compare the sample of all respondents to a hypothetical sample of N=1,413 that has the same composition as the subsample of respondents at the indicated response rate. The number of cases with missing values is reported in parentheses.

\*Significant at the .10 level.

\*\*Significant at the .05 level.

\*\*\*Significant at the .01 level.