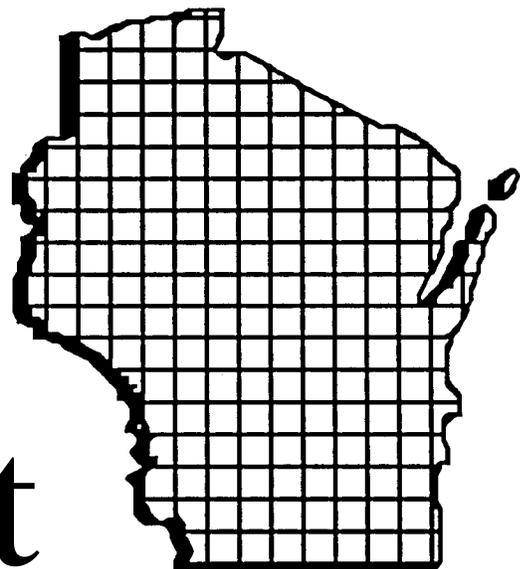


Wisconsin

Policy  
Research  
Institute

Report



December 2001

Volume 14, Number 9

**DISAPPEARING  
WISCONSIN  
WELFARE  
RECIPIENTS**

*Where Did They Go?*

## REPORT FROM THE PRESIDENT:

This is the second in a series of studies dealing with the economic conditions of poor, working mothers in Wisconsin. This project is under the direction of Professor Sammis White who has spent thirty years researching and writing about work and welfare in Wisconsin. Lori Geddes, an economist with a strong background in data analysis, assisted him.

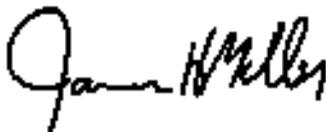
The data used for this project come from the Wisconsin Department of Workforce Development. It is a special database created to analyze the work and earnings experiences of the 96,000 women who were on AFDC in Wisconsin in 1990, and who worked in our state in jobs covered by Unemployment Insurance between January 1, 1990 and December 31, 1998. It is an enormous database that will produce the kind of information that policy-makers need to shape programs to benefit poor, working women.

Starting in 1991, women who had received AFDC in 1990 began to disappear from state records: they received no more aid nor did they ever again work in jobs covered by Unemployment Insurance in Wisconsin. They disappeared from the main state records. The big question is where did they go, especially since they seem to have lost their means of support.

It is likely that a significant number of these women left Wisconsin. The evidence that points to this conclusion includes: the fact that these women started to disappear as early as 1991 and were never officially seen again on the state records; the fact that the women who left look very similar to those that remained — less than a high school education, limited work experience, children to care for, and the like — and are likely to have lived similar lives that include many years on marginal incomes; and the probability that it is unlikely that women with these characteristics would have married or found a significant other to support them for so long on a single income.

If a large number of the 24,000 missing women from this 1990 cohort of AFDC recipients did leave the state, it means that there are fewer women who might reappear asking for help in the current recession. That would be good news for a state that is facing a large budget shortfall. On the other hand, those that remained in the state are more likely to need some form of assistance in a recession because only a portion of these women are likely to have become fully self-sufficient. Of those that continued to work in the state only one-quarter could be said to be earning at a level that clearly implies self-sufficiency.

Finally, we would like to thank the Helen Bader Foundation, Inc. for their support of this project.



James H. Miller

## WISCONSIN POLICY RESEARCH INSTITUTE, INC.

P.O. Box 487 • Thiensville, WI 53092  
(262) 241-0514 • Fax: (262) 241-0774

E-mail: [wpri@execpc.com](mailto:wpri@execpc.com) • Internet: [www.wpri.org](http://www.wpri.org)

# DISAPPEARING WISCONSIN WELFARE RECIPIENTS *WHERE DID THEY GO?*

SAMMIS B. WHITE, Ph.D.  
LORI A. GEDDES

	PAGE
EXECUTIVE SUMMARY	1
INTRODUCTION	3
HOW MANY HAVE DISAPPEARED?	4
HOW MANY DISAPPEARANCES ARE UNEXPLAINED?	8
COMPARISON OF THOSE WITHOUT WORK EXPERIENCE	11
COMPARISON OF THOSE WHO WORKED SOMETIME	13
THE PROBABILITY OF DISAPPEARING	16
POLICY IMPLICATIONS	18
APPENDIX — EMPIRICAL RESULTS	20
REFERENCES	24

## BOARD OF DIRECTORS

Robert Buchanan, *Chairman*  
Catherine C. Dellin  
Michael Grebe  
Roger Hauck  
Dennis Kuester  
James Klauser  
San Orr, Jr.  
Robert O'Toole  
Paul Schierl  
Timothy Sheehy  
Edward Zore  
James Miller, *President*

## EXECUTIVE SUMMARY

In 1998, some 33,702 (35%) of the 96,300 women who were on Aid to Families with Dependent Children (AFDC) in Wisconsin in 1990 were not working in Wisconsin. Of the 33,702, some 11,348 (one-third) had never worked in jobs covered by Unemployment Insurance (UI) in Wisconsin. A small portion (600+) had died. The question is what happened to the other 33,100 women who were still alive. If they were not employed in the formal economy, how were they supported? That is what this research hoped to discover.

Not too surprisingly, 8,584 of these women not working in 1998 were still on a form of assistance in Wisconsin in 1998, including almost 2,300 who were on AFDC/W-2. However, these numbers indicate that only 2% of the 1990 AFDC cohort was on AFDC/W-2 in 1998. That is a remarkable switch in lifestyles. The vast majority of the 8,584 women that were on a form of assistance in 1998 were using Food Stamps (FS) (80%) and Medical Assistance (MA) (92%).

The big question is what happened to the other 24,516 women (25% of the original 1990 cohort) that were not working or receiving aid in Wisconsin in 1998. These women had disappeared from these systems. The term “disappeared” is ambiguous, as it must be in this situation. These women disappeared from the work and assistance roles, the two most likely ways they can be supported. If these options are out, then the remaining ones, such as receipt of Social Security benefits, marriage or cohabitation, incarceration, and the like, are the options in the state. The other option is a move out of state. The move out is likely for a substantial portion of these women, especially those who left the welfare roles and employment early in the decade. It seems less and less likely these women could survive without aid or work over the decade. This fact strongly suggests that many of these women left Wisconsin. But there is no way to know for sure.

When other studies of why recipients have left welfare are reviewed, employment is given as the largest reason (25-54%). Yet none of these missing 1990 recipients are working in Wisconsin in 1998, at least in employment covered by Unemployment Insurance. So it must be other reasons. In part, a segment has received more Social Security or other non-AFDC support. That is valid for maybe as many as 15% of these women. Some got married. But in a Wisconsin study of recent welfare leavers, only 1% claimed this as a reason to leave welfare. Even if it were 5%, it does not explain where most of these women are. A few may be working as self-employed, but the self-employed constitute less than 7% of all members in the work force.

We cannot really determine what happened to these “missing” women. But we can identify their characteristics and work histories. We can say when they left. And we can speculate on where they went.

The vast majority of those who disappeared did so long before W-2 was instituted. Some 3,311 disappeared in 1991, and relatively similar numbers disappeared every year until 1998, when the number increased to 4,638. Thus, 70% had left all program records by the end of 1996. Only 7,400 women disappeared in 1997 and 1998. Since this number is only slightly above the average for the preceding years, it seems that W-2 was not a major force in causing women to disappear.

The modest annual disappearance is puzzling. Most of these women who disappeared had work experience in Wisconsin. These women with work experience left in increasing numbers over the course of the decade. Only 837 disappeared after 1990 while some 2,894 left after 1996 and 4,146 after 1997. There was no mass exodus, but the increasing state emphasis on work for Wisconsin’s AFDC recipients over the mid-part of the decade may have increased interest in moving elsewhere. In contrast, those AFDC recipients who never worked were much more likely to leave early in the decade. More than half of these women had disappeared by 1993. Only 959 left in 1997 and 1998 combined. The changing rules did not seem to scare away those AFDC recipients without work experience.

Those with work experience that disappeared were increasingly unlikely to use AFDC the year before they disappeared. What appears to have happened is that these women tended to have difficulty in the work place. They ended up, on average, earning less the year before they disappeared than they had previously. With greater state pressure to work and less success in doing so in Wisconsin, it seems likely that an increasing proportion of these women also left the state. A decline in annual earnings is one way to identify former or current recipients with a greater potential to disappear.

In terms of characteristics, there are modest differences between those who disappeared without working compared to those who disappeared after working. Both average less than 11th grade education, had an average of two

children, their youngest child in 1990 was six-years-old, and they had similar racial distributions. The big differences are between those on assistance, especially AFDC/W-2 in 1998 and those not on assistance. The women on assistance tend to be less educated, had had a younger child in 1990, and were more likely to be African American.

Among those women with work experience, women were more likely to disappear if they had more months of AFDC receipt, less education, received SSI in 1990 and 1994, had older children in 1990, and are a minority. Women are less likely to disappear if they have experienced a positive change in earnings over time. They are also less likely to disappear if they had worked more quarters each year early in the decade or were married with young children.

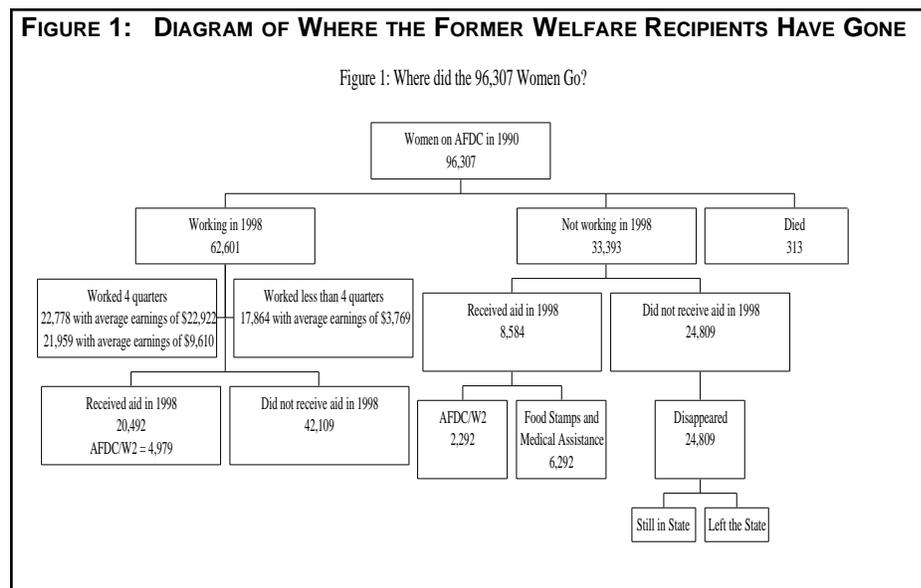
In terms of policy, it is clear that these women did not disappear because of a particular policy change. They “disappeared” fairly evenly over time. Many are likely to have left the state, making the size of the pool of women from the 1990 AFDC cohort that the state must be concerned with in the future considerably smaller. The state’s emphasis should be on those on assistance and those with similar characteristics more likely to return to assistance among those who are known to still be in the state. Furthermore, tracking all of these women across state boundaries would help all states’ understandings of these populations.

## INTRODUCTION

Wisconsin has been at the forefront of welfare reform in the 1990s. The state was among the first to move toward greater pressure to work and to formally end AFDC. It was the first to establish an alternative to AFDC. The state also experienced one of the most dramatic declines in the number of women on the assistance roles. From supporting close to 100,000 aid recipients in 1990, the state assistance roles dropped to 6,526 women in 2000. It climbed to 7,504 in the summer of 2001. Such a dramatic drop cannot help but raise questions about what happened to these women and their families. This paper and its predecessor seek to answer some of these questions. Both papers track the 96,300 women who were on AFDC in Wisconsin in 1990.

One of the most striking findings of the first report on the 96,300 women who were on AFDC in Wisconsin in 1990 is the fact that only 65% of these women were working in covered employment in the state in 1998. This is the case despite some 88% of these women having worked sometime over the 1990-1998 period. The big question is how are they supported? Have the 33,700 women who did not work in 1998 gone back on assistance in 1998 or did they never it? Have they married or are they involved in cohabitation and chosen not work? Have they died? Are they on the streets or incarcerated? Are they receiving Social Security? Are they self-employed or are they working in Wisconsin in the underground economy where earnings are not reported? Have they left the state? There are a number of possibilities.

Unfortunately, there are no formal, accessible data sources that allow us to track most of the options. We cannot learn who left Wisconsin or who is married. We cannot learn who is working in the underground economy or who is homeless. But we can learn who is still on AFDC/W-2 or other assistance in 1998. We can learn who died. We can learn about probable patterns of behavior. And we can learn a good deal about those who have seemingly disappeared. Some of that information will suggest possible outcomes, but other information will merely suggest if certain forms of behavior are more likely for women with certain characteristics.



Here is a quick summary of what we have learned to date. There are two groups of 1990 welfare recipients to examine that were not employed in Wisconsin in 1998:

1. 22,354 women who worked sometime in the 1990-1997 period but who did not work in 1998;
2. 11,348 women who never worked in covered employment in Wisconsin, 1990-1998.

Within these two groups of 33,702 women are some 313 women who had died by the end of 1994 and

probably a comparable number who died by the end of 1998 (but we lack the data to confirm this for the last four years). The number of deaths is so small as to not warrant further attention. What happened to the other 33,100 women warrants attention.

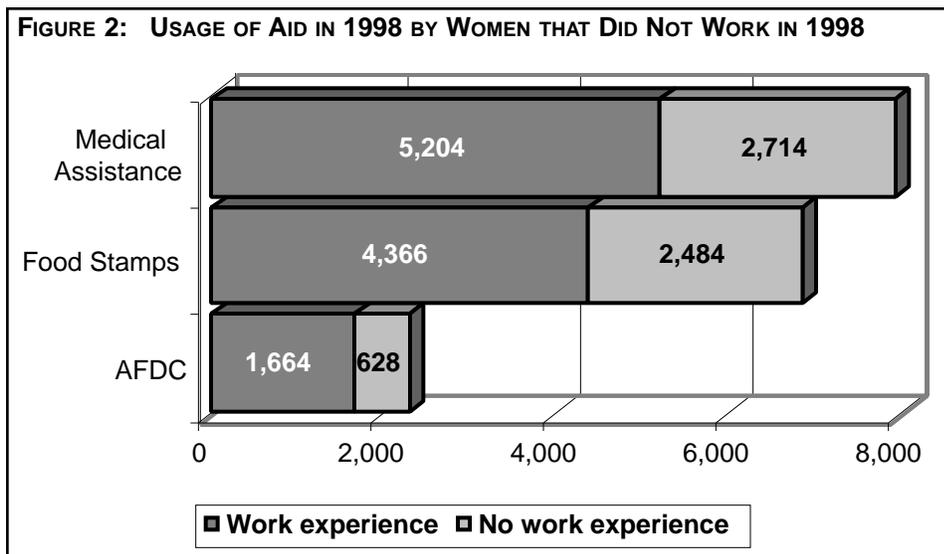
What happened to them deserves attention for a number of reasons. For one, critics have contended that W-2 suddenly drove many women off cash assistance. The rapid decline in overall participation would tend to confirm this. But closer analysis can determine if this is the case for those with longer-term involvement with AFDC. Second, it is wise for planning purposes to better estimate the scale of the possible future demand for assistance and training,

given the relatively large number of women in this 1990 cohort who did not work in 1998 but who might in the future. Additionally, planning would be assisted if the characteristics of these women were better known. Third, an analysis could help to resolve some of the (mis)perceptions about what happened to those women who had been on AFDC in Wisconsin.

### Who Is Still On Aid?

One of the first distinctions that needs to be made among the 33,100 women that did not work in 1998 is the identification of those who received assistance in 1998. As it turns out, 3,035 of those women who never worked 1990-1998 were on some form of assistance in 1998. In addition, 5,549 women who had worked sometime 1990-1997 were also on assistance. Thus, 8,584 women who were on AFDC in 1990 were also on assistance in 1998. They constitute 9% of the original 96,300 women on AFDC in 1990 and 26% of the 33,100 women who did not work in 1998.

The proportion on AFDC/W-2 in 1998 was not large. Only 628 women who had never worked received any AFDC or W-2 support in 1998. These were joined by 1,664 women who had some work experience. (Figure 2) Together they constituted but 2% of the original population or 7% of the women who did not work in 1998. By either count, it is clear that a very small portion of each group was still making use of cash support. This 1990 AFDC cohort had come very close to ending all use of cash support.



Members of this cohort were still somewhat reliant on other assistance. Some 2,407 of those that never worked and 3,885 women with some work experience did make use of Food Stamps or Medical Assistance in 1998. Together, the 6,292 women were 7% of the total original pool and 19% of those who did not work in 1998. There are no data on what these 6,292 women are using to support themselves, since they

are neither working nor receiving cash assistance. What we know is that they were in Wisconsin and not working in covered employment in 1998.

### HOW MANY HAVE DISAPPEARED?

Given the relatively modest use of assistance in 1998, there were 25,118 women who did not work in 1998 and who had also disappeared from the assistance records. This “disappearance” did not only occur as W-2 was initiated.<sup>1</sup> In fact, the vast majority of those women who “disappeared” did so long before W-2 started (Figure 3). Of the 8,313 women that never worked and yet were not on assistance in 1998, some 7,821 women “disappeared” from the records for assistance and employment before 1998. Only 492 first disappeared from both records in 1998. Similar, but not as pronounced, patterns exist for those with work experience. Of the 16,805 women who disappeared from

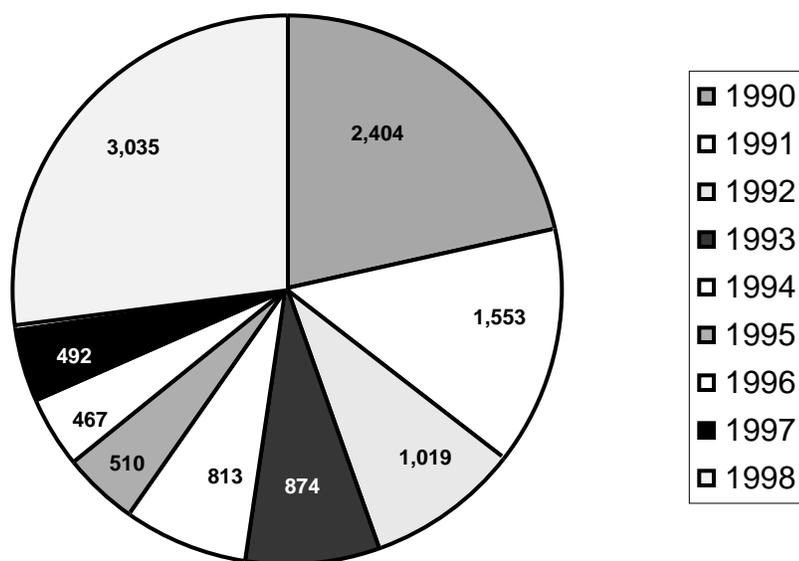
1. AFDC ended completely as of March 31, 1998. From that point on, all women who received cash assistance were participants in the W-2 program. Between October 1, 1997 and March 31, 1998, an increasing proportion of the women participants made the switch from AFDC to W-2.

the state records, 12,659 did so by the end of 1997. Thus, 20,480 disappeared by the end of 1997, and an additional 4,638 “disappeared” in 1998. W-2’s initiation may have played some role in their departure. But numerically there is little evidence that this was a dramatic shift. It certainly had little effect on those who had never worked.

These numbers reveal that 26% of all 96,300 women had “disappeared” from all state roles by the end of 1998. In fact, 21% of the 96,300 had “disappeared” by 1997. Furthermore, of the 33,702 women who did not work in 1998, 25,118 (75%) had “disappeared” by the end of 1998. Where they have gone is the question. There are many options.

Among these are: having left the state, having been married, having linked up with a supporting partner, having joined the cash economy, having become self-employed, having become reliant on Social Security, having been incarcerated, or having died. If the women have truly left the state, then the denominator of women who are of concern to Wisconsin public officials today is smaller by a substantial number than the 96,300. This would mean that there are many fewer women who could become future challenges to state initiatives to make these women self-sufficient.

**FIGURE 3: YEAR IN WHICH WOMEN WITHOUT WORK EXPERIENCE WERE LAST OFFICIALLY RECORDED, 1990-1998**



*Note: 1990 corresponds to the 2,404 wedge and consecutive years are in the clock-wise direction.*

The question is what happened to these women? Can we begin to assess where they were in 1998 and to understand the degree to which they differed from either those on assistance in 1998 or those who were working in covered employment in Wisconsin in 1998? That is the assignment of this report. It is a difficult assignment, since there are no records on these women once they left both the employment and assistance roles. All that can be done is identify them, their characteristics, and their previous behaviors. Using previous research on what has happened to former recipients, we then attempt to quantify the status of these women in 1998. We also attempt to predict whom it is that disappears from the work and assistance roles in Wisconsin.

### Research Insights Into Women That Leave AFDC

Much of the research that has been done on women leaving welfare is focused on how quickly they exit and return to AFDC or the likelihood of an exit from AFDC. Very few studies look at permanent or long-term exits from AFDC, and even fewer include reasons why women exit welfare. These studies use a wide range of techniques and different data sets, which may contribute to the contradiction of results between studies as well as the large range in the percentages of why women end welfare spells. Nevertheless, these studies do provide a good basis to begin understanding this population of women, as well as identify the need for better data on this population.

The studies that look at the quickness of leaving AFDC find that women with less than a high school education, with children younger than six years of age, and with little work experience, leave less quickly than other women (Klawitter et al., 1996). The same is true of women who were raised in non-English speaking homes, were raised on welfare, live in states with high Medicaid benefits, and are African American (Petersen, 1995). Women with a lower probability of exiting AFDC are single, have no marketable job skills, have two or more children, and live in areas

with high AFDC payments, where AFDC is administered at the local level (Cheng, 1995; Piskulich, 1993; Sandefur and Cook, 1998). Women have a higher probability of exiting AFDC if they have higher earnings, work more weeks, have prior work experience, work full-time, and have a high school diploma or the equivalent (Piskulich, 1993; Sandefur and Cook, 1998).

There is conflicting evidence on the effects of race, region, and area on the probability of leaving AFDC. Using data from the Survey of Income and Program Participation (SIPP), Piskulich (1993) found that White women, and women who lived in the south or in urban areas were less likely to exit AFDC. On the other hand, using data from the National Longitudinal Survey of Youth (NLSY), Sandefur and Cook (1998) found that minorities, women from the north central and west were less likely to permanently stop using AFDC, and women who lived in urban areas were more likely to permanently leave AFDC. Blank (1989) also found minorities less likely to leave welfare.

While the above studies give predictions on who is likely to leave AFDC and when, very little is revealed about why they are leaving AFDC. According to the few studies that included reasons for a welfare exit, work and marriage are seemingly the two most common with loss of an eligible child third. Most of the studies that examine why women leave welfare use events that occur near the exit to imply a reason for leaving. Thus, even these studies cannot concretely say that the women stopped receiving AFDC/W-2 because they got married or found a job. Nevertheless, these studies have concluded that 33%-69% leave for employment reasons or a change in household income, 5%-24% leave because they became a wife or are cohabiting, 7%-26% leave because they no longer have an eligible child and 7%-16% leave for other or unknown reasons (Blank, 1989; Harris, 1993, 1996; Sandefur and Cook, 1998).

Ellwood and Bane (1994) used twenty-one years of the Panel Survey of Income Dynamics (PSID) to study welfare dynamics and identified seven different reasons why women stopped receiving AFDC. Even though these are events that occurred near the time of AFDC exit, they provide a more comprehensive list than other studies noted above. The results show that 29% became a wife, 25% had an earnings increase, and 11% no longer had an eligible child. We can compare these numbers to a survey of former AFDC/W-2 recipients that was conducted by the Wisconsin Department of Workforce Development (WIDWD) in 1998. The sample size of the survey was 547 people who ended AFDC/W2 use during the first quarter of 1998, with 375 given telephone and in-person interviews. The advantage of this survey is that it asks specifically why the former recipient is no longer on AFDC/W-2. Unfortunately, it allows multiple reasons so that the percentages exceed 100. Table 1 shows the categories and percentages of the two studies.

The main difference between the two studies is that Ellwood and Bane (1994) find that leaving AFDC/W-2 because of changes in personal conditions, like becoming a wife, are more common than leaving for employment-related reasons. According to the table, the PSID sample is five times more likely to leave AFDC/W-2 because of a change in personal conditions than the WIDWD sample (45.6% versus 9%). The WIDWD sample is twice as likely to leave for employment-related reasons than the PSID sample (54% versus 25%). Only 30% of the WIDWD sample indicated that they left because they found a job, and 14% left because they earned too much.

Of course, since the WIDWD survey allows for multiple reasons, it is hard to compare the percentages. If the main reason for leaving AFDC/W-2 were identified, then perhaps the percentages would be similar between the two studies. Also, Ellwood and Bane (1994) point out that using events that occur around the time of exit does not give an exact reason for the exit because one event is chosen to be the main reason and then other events are considered. They happen to classify marriage as the main event with an earnings increase as an alternative when marriage is missing. When they looked at the earnings of those whom they classified as leaving to become a wife, only 12.6% had zero earnings following the exit and 10.4% had earnings of over \$6,000 (in 1992 dollars). These are more in-line with the other findings reported above, but the percentage that became a wife is still much higher than the WIDWD percentage of 1%.

### **Implications for Those in the 1990 AFDC Cohort**

Of the 96,307 women who received AFDC in 1990, 89,036 women stopped using AFDC by 1998 for some reason. We can apply the percentages from Table 3 to this sample in Table 2 to get a picture of why they have stopped receiving AFDC. Noting that the Ellwood and Bane (1994) method of classifying exits is inexact and using the 12.6% of wives with zero earnings as the true percent, then the number of women in Wisconsin who would have ended welfare because they got married would be 11,219 instead of 26,177. The adjusted number is still much higher than the

**TABLE 1: REASONS WHY FORMER AFDC/W-2 RECIPIENTS ARE NO LONGER ON AFDC/W-2**

Reason	PSID*	WIDWD**
Change in personal conditions	45.6%	9%
Became a wife/Cohabitation	29.4%	1%
No longer have eligible child	10.8%	2%
Family became smaller	5.4%	N/A
Going to School	N/A	3%
Head's earnings increased/Employment related	25.0%	54%
Transfer income increased/Disabled	12.1%	11%
Other's earnings increased/Assets or Child support exceed limits	6.7%	2%
Do not want to be on Welfare	N/A	34%
Non-Participation	N/A	16%
Law Changed	N/A	5%
Problems with case worker	N/A	4%
No child care or Transportation	N/A	4%
Family moved	1.6%	N/A
Other/unidentified	9.2%	23%

\* Source: Table 2.8, "Understanding Welfare Dynamics" in *Welfare Realities: From Rhetoric to Reform*, page 57.

\*\* Source: *Survey of Those Leaving AFDC or W-2 January to March 1998*, Preliminary Report by the Wisconsin Department of Workforce Development, pages 5 - 6.

890 based on the WIDWD percentages. Similarly, the number of women who would have left for employment related reasons would be 31,519 instead of 22,259 and is lower than the WIDWD result of 48,079.

Applying the other research results to this sample, we would expect that between 4,452 and 21,369 women would have left to become a wife, 29,382 to 61,435 women would have left for employment-related reasons, 6,233 to 23,149 would have left for no longer having an eligible child, and 6,233 to 14,246 women would have left for other reasons. These numbers are similar to the WIDWD numbers, except for the change in personal conditions category. The WIDWD numbers are much lower. Since the survey asked specifically why they are no longer receiving AFDC/W2, we could argue that WIDWD results are more reflective of this population than the other studies that rely on events that occur around the time of exit.

Unfortunately, the WIDWD survey allows for multiple reasons for ending AFDC/W-2 receipt, and the WIDWD column sums to more than 89,036. It would not be too difficult to identify the main reasons for leaving welfare; it would require compiling a frequency table to see which reasons were given together. For instance, those who said they left because they did not want to be on welfare could have said they were looking for a job or have obtained a job, and the response should be recoded as employment-related. Unless future surveys are stricter in identifying the main reason, we will never know the true reason for ending AFDC/W-2.

These studies give some insights, but they do not answer the question of what happened to these women. For example, over the nine years, between 1% and 29% marry. Other studies suggest that about 15% marry or are married when they enroll in AFDC. We would not expect a big jump above that. What these studies leave are several unanswered questions, most of which are unanswerable with the current data available. However, with these data, some further insights can be gained into this missing population. We must conclude that, with 25%-54% having an employment-related exit, and none of the "missing" women working in 1998, there is a strong suggestion that many have left Wisconsin.

**TABLE 2: PREDICTIONS OF THE REASON FOR EXIT OF THE 1990 WISCONSIN AFDC COHORT**

<b>Reason</b>	<b>PSID</b>	<b>WIDWD</b>
Change in personal conditions	40,601	8,013
Became a wife	26,177	890
No longer have eligible child	9,616	1,781
Family became smaller	4,808	N/A
Going to school	N/A	2,671
Head's earnings increased/Employment related	22,259	48,079
Transfer income increased/Disabled	10,773	9,794
Other's earnings increased/Assets or Child support exceed limits	5,965	1,781
Do not want to be on Welfare	N/A	30,272
Non-Participation	N/A	14,246
Law Changed	N/A	4,452
Problems with case worker	N/A	3,561
No child care or Transportation	N/A	3,561
Family moved	1,425	N/A
Other/unidentified	8,013	20,478

### HOW MANY DISAPPEARANCES ARE UNEXPLAINED?

To attempt to answer this question, the population is divided into two different groups: those with work experience and those without work experience.

#### Those Who Never Worked

About three-quarters of the 11,348 women who never worked were not receiving any assistance, nor were they working in 1998. These women had “disappeared” from the state assistance and employment roles. A few may have been in the corrections system or on some other state list. But we did not have access to such lists. To our analysis, they had “disappeared.” Thus, 8,313 women who had never worked in Wisconsin had “disappeared” from the state roles sometime in the 1990s. In fact, 53% of those not appearing on state lists had disappeared from the state roles by the end of 1993. Almost 2,500 (30%) of those who disappeared did not appear at all in 1991 or ever thereafter, as either a recipient or a worker. Such complete disappearance from both work and assistance suggests that a number of these women likely left the state. Then again, they could have married or become involved in some similar domestic arrangement. Or they might have found some other means of support within the state, such as becoming self-employed. This, however, seems unlikely since in the state of Wisconsin in 1998 only 6.5% of workers were considered self-employed. But to our records, they have disappeared, and that disappearance is complete for so long that it strongly suggests these women left the state.

Those who left AFDC did so in smaller numbers each year. Almost 2,500 left after 1990; 1,383 left after 1991; 787 left after 1992; and so forth, until only 160 left in 1997. These women left gradually; there was no wholesale exodus at any point in time, other than during or at the end of 1990. We cannot point to any particular policy change that suddenly affected this population.

Of the 3,035 women who were still actively receiving some form of assistance in 1998, few were consistent users of AFDC, MA, and FS throughout the 1990s. The maximum number of months of usage possible over nine years is 108. Those women still receiving aid in 1998 had received AFDC an average of 77 months, Food Stamps an average of 88 months, and Medical Assistance an average of 93 months. Some 2,147 (71%) used all three programs for 12 months in 1990. The percentage that used all three in every month was steady through at least 1993. But by 1995, the level had dropped to just over 1,000 women. In 1997 only 880 (29%) used all three programs all 12 months. These women were quite dependent upon assistance, but they slowly reduced their reliance over the decade.

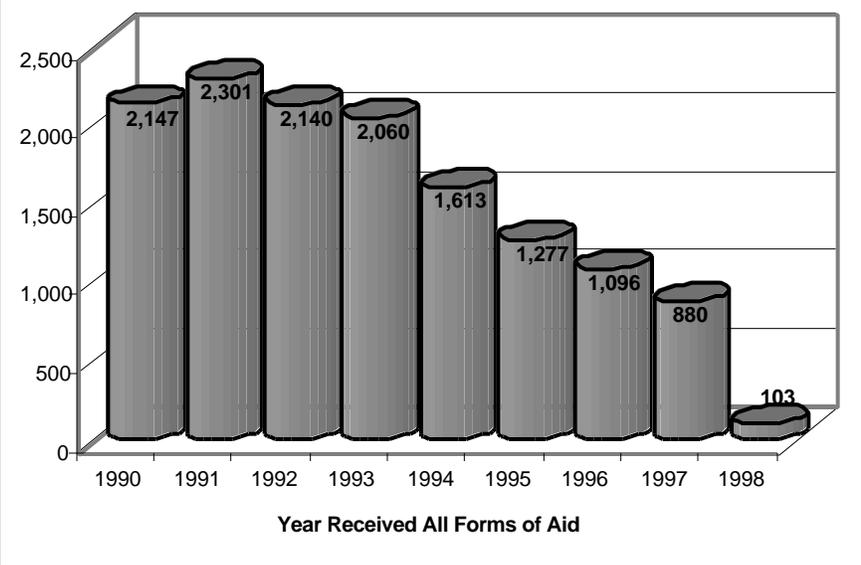
These women had long term commitments to AFDC. But with the advent of W-2, it appears that all but a very small portion did cut their reliance on cash assistance. The hoped-for change did occur. This group that had been extremely reliant on aid greatly reduced their use of cash assistance. What happened after this change in means of support is what must be explored further. These individuals should be tracked to see what happened to them in 1999, 2000, and 2001. Have they become employed, after years without, or are they still involved in some support program?

We can account in 1998 for the whereabouts of just 27% of this population that received support but never worked.

Those that never worked were not as “dependent” a population as many might surmise, given their lack of work. The majority of these individuals just disappeared, initially from AFDC, then from the other support programs. The task is to attempt to determine what has happened to these women. Is it likely all 8,313 did leave the state, or are there other possible explanations for their “disappearance”? The research on other AFDC populations suggests some outcomes, but the whereabouts of the majority is difficult to explain.

In sections below, demographic characteristics of this population are explored to see how similar they are to the rest of the 1990 AFDC population. If this population is less well-educated or has more children or whatever, the similarities or differences may suggest additional insights into their possible outcomes.

**FIGURE 4: WOMEN WITHOUT WORK EXPERIENCE ON AID IN 1998 BY YEARS IN WHICH THEY RECEIVED ALL FORMS OF AID FOR A FULL 12 MONTHS**



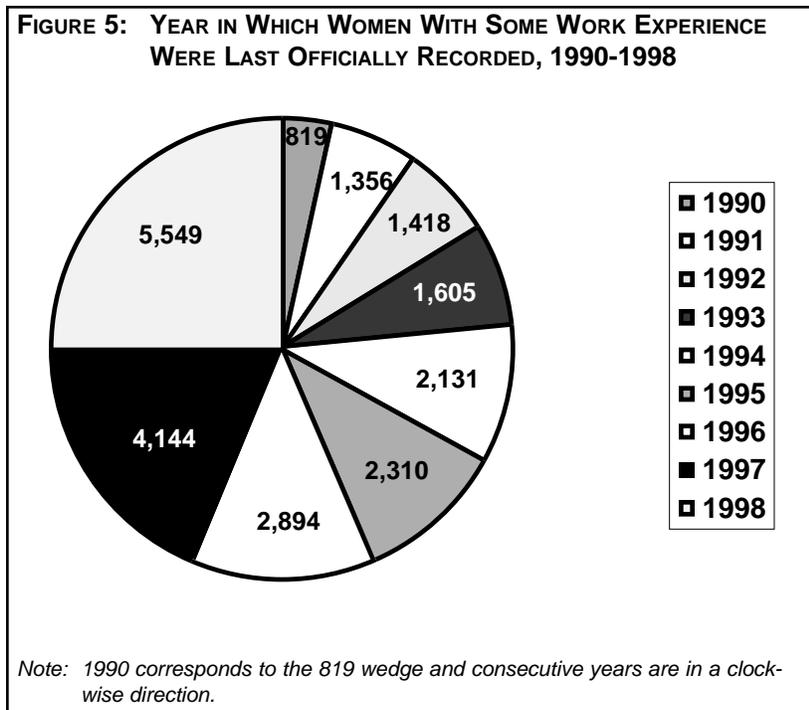
### Those Who Worked Sometime During 1990-1997

About 25% of the 22,354 (5,549) women who worked sometime but not in 1998 were on some form of assistance in 1998. That percentage on assistance is very similar to the 27% of the women who had never worked and who were on assistance in 1998. This suggests that there may be some similarities with both sets of women. That will be explored. First, their use of assistance in 1998 must be examined.

Surprisingly, some 30% of the 5,549 (1,664) women with previous work experience who were on assistance in 1998 were on AFDC/W-2. There were 2.7 times more women who had worked than had not worked over the 1990-1997 period who were on cash assistance in 1998. One might guess that those with work experience would be much less likely to need AFDC/W-2 in 1998. But this is not the case at all. Furthermore, almost 94% of those with work experience and on aid in 1998 were on Medical Assistance, and 74% were on Food Stamps. They appear to be moving away from cash assistance (from 100% to 30% on AFDC over the nine years), as was the policy intention. But, obviously, a significant number were still using AFDC/W-2.

The state records can account for 25% of those women with work experience who did not work in 1998. The charge is to determine what happened to the remaining 75%. They were on the AFDC roles in 1990 and the UI roles sometime between 1990 and 1997. Some were on both roles for many years. But they did not work nor receive any public assistance in 1998. When did they disappear, and where did they go? Those are two questions that should be answered. The first is far easier to answer than the second.

The number of women who had worked in Wisconsin but who disappeared from work and assistance roles grew slowly over much of the 1990s (Figure 5). Only 819 women disappeared from work and assistance by the end of 1990. Some 1,356 more disappeared by the end of 1991. Some 2,894 disappeared during 1996. The one large incremental jump occurred during 1997, when 4,144 women disappeared. This last increment is probably related to the demise of AFDC and the move to W-2. Still, the number of those “disappearing” at this time is but 19% of the total that worked sometime before 1998 and 4% of the original 96,300 women on AFDC in 1990.



The proportion of those who disappeared from the state grew much more slowly among those women who worked than among those who did not. It took until 1997 for at least half of the women with work experience to “disappear” compared to the end of 1993 for those who never worked. Many of these women did work periodically, and many received some form of aid periodically. Most of these women may not have disappeared in reaction to the stronger work requirement of W-2; they had work histories. Then again, their work histories may have been so short and unrewarding that the specter of required work forced them to rethink their Wisconsin residency.

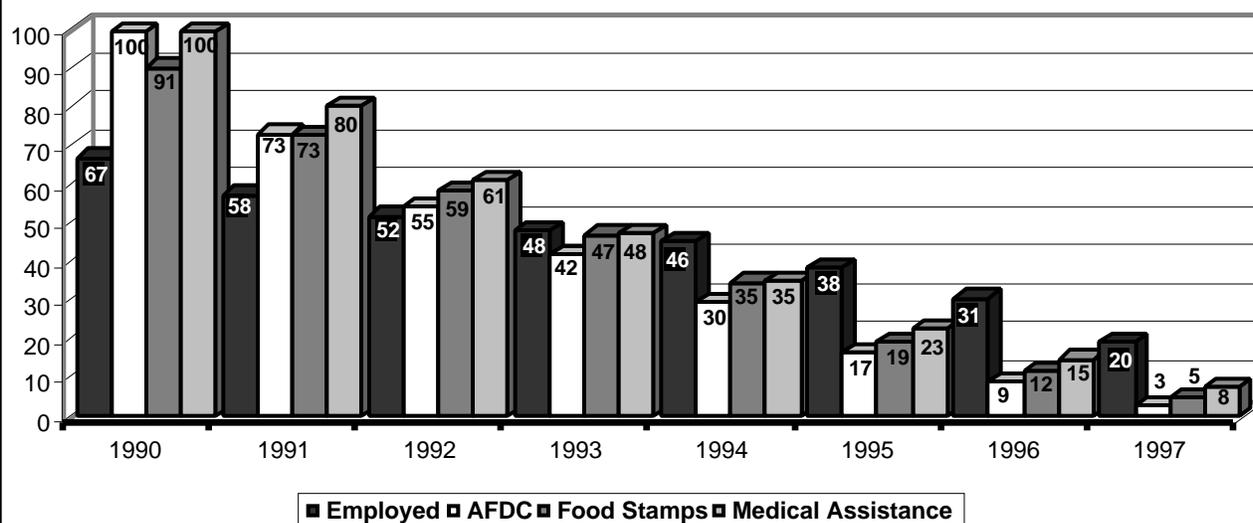
The year 1997 was the last year of AFDC for only 456 (11%) of the 4,146 who left during 1997. Most (79%) of those who disappeared by

the end of 1997 left work, not assistance. A small number did both. Most had left assistance, especially AFDC, some years before.

An ever decreasing proportion of those who disappeared had used AFDC the year before they disappeared. The rate declined from 100% in 1990 to 67% in 1991 to 11% in 1997. These women who disappeared were less and less reliant on cash assistance in the period before their departure from the records. This pattern suggests that the women might have been feeling more confident about their ability to support themselves elsewhere. The Wisconsin economy was strong in the 1990s, but it did not grow as fast as many other states.

Of the 4,146 women who disappeared in 1997, 1,282 (31%) had used Medical Assistance in 1997. MA was by far the most common form of assistance. (Food Stamps were used by 21%; AFDC, by 11%.) This was largely not a welfare-reliant population. They had moved on to work or other means of support before they disappeared. It seems likely that a portion of these women left the state for better-paying jobs, although some may have sought assistance elsewhere as well. Some may also have become self-employed, but with an average education level of less than high school and the fact that approximately 6.5% of employed people in Wisconsin in 1998 were self-employed, this is an unlikely prospect for most.

Their experience with work in Wisconsin in the years before they “disappeared” seldom suggests that they were having success in working in the state. Their average earnings in the year before they disappeared are usually far below their highest earnings (Table 3). For example, the average earnings their last year (\$3,702) is about half their average “best” year (\$7,406). This pattern suggests that other events have occurred in their lives. They may have had

**FIGURE 6: WORK AND AID HISTORIES OF THOSE WHO DISAPPEARED, 1990-1998**

Note: Numbers represent Percent of Women who disappeared

another child, but not one supported by Wisconsin AFDC. They may have qualified for SSI. They may have become involved with substance abuse and not only lost the job but lost other support. They may have disappeared into the corrections system. But much more likely is that they disappeared into another state.

Very few of those who did not work in 1998 worked consistently since 1990. Only 0.1% had worked in all 32 possible quarters, and 1% had worked in at least 29 of the 32 possible quarters. Only 5% had worked in at least two-thirds of the quarters. These women had a tenuous commitment to the workforce during the 1990s. In the 1990 to 1997 period, those who disappeared worked an average of eight quarters. This compares to nineteen quarters for those who worked in 1998.

Over half of the women who were still on assistance in 1998 had worked in eight or fewer quarters from the beginning of 1990 to the end of 1997. These women had especially tenuous connections to the work force. In contrast, among the women who disappeared at the end of 1997, over half had had at least fifteen quarters of work experience in the same eight years.

Over the nine-year study period, a decreasing proportion of the women that “disappeared” each year had not worked in 1990. Some 75% of the women who disappeared in 1991 did not work in 1990. Some 59% of those who disappeared in 1992 had not worked in 1990. By 1998, some 46% of those who disappeared had not worked in 1990 (Figure 7). This suggests that more of those that left early left for other than employment-related reasons. The early leaving women likely had less work experience. Those who left later picked up work experience in Wisconsin before they left.

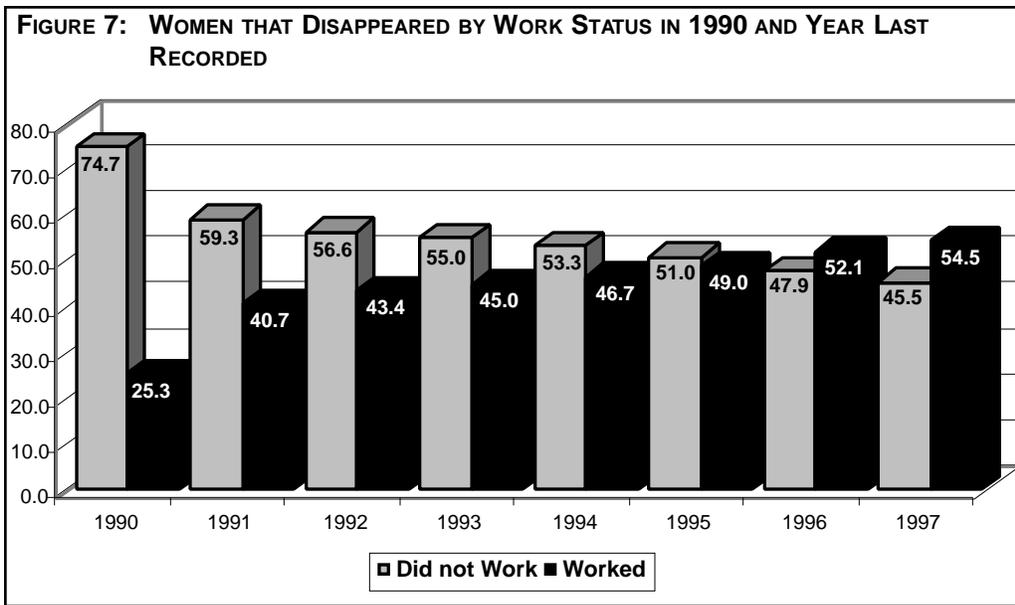
We began an analysis of the characteristics of these women to see what might be learned about similarities and differences that might help us predict future behavior of others involved in assistance.

**TABLE 3: AVERAGE EARNINGS IN THE YEAR PRECEDING DISAPPEARANCE, 1990-1998**

Last Year	Last Earnings	Best Earnings
1990	\$2,318	\$2,318
1991	\$2,997	\$4,127
1992	\$3,588	\$5,343
1993	\$3,702	\$6,337
1994	\$3,884	\$7,229
1995	\$3,965	\$8,266
1996	\$3,833	\$8,853
1997	\$3,961	\$9,263
<b>Total</b>	<b>\$3,702</b>	<b>\$7,406</b>

### COMPARISON OF THOSE WITHOUT WORK EXPERIENCE

The only comparisons that can be made among those without work experience are those involving demographic characteristics and use of assistance. A number of these measures appear in Table 4. The first column contains what



is known about the women who disappeared between 1990 and 1999. The second column contains information on those who did not disappear and who were on AFDC in 1998. The third column contains data on the larger number of women who were on either Food Stamps or Medical Assistance in

1998, but who were not working and never had worked.

The first point to note is that there is little difference among the three groups in terms of level of education completed in 1990 or 1994. Those who disappeared had slightly higher levels of education, but not by very much. And all are below eleven years. It is clearly not education that differentiates these women.

The only other characteristic that is somewhat similar is the percentage that was married in 1990. The range is 12% to 18% for those women still on aid and 15% for those who disappeared. For those who remained, the average is very similar to that of those who left. So, it is not likely that husbands have made the difference either in whether they disappear. Their marriage rate may have a slight impact on their never having worked, but it seems unwise to link the two.

**TABLE 4: DEMOGRAPHIC CHARACTERISTICS AND ASSISTANCE USE AMONG WOMEN WHO NEVER WORKED: COMPARISONS OF THOSE WHO DISAPPEARED TO THOSE WHO REMAINED IN 1998**

Variable	Disappeared	Did Not Disappear		Total
		AFDC in 98	No AFDC in 98	
Highest grade completed in 1990	10.9	10.6	10.7	10.8
Highest grade completed in 1994	10.9	10.7	10.8	10.9
Number of children in 1990	2	3	2	2
Age of youngest child in 1990	6	4	6	6
Married in 1990	15%	12%	18%	15%
Number of months of AFDC 90-97	23	90	72	37
Number of months of Food Stamps 90-97	25	90	78	40
Number of months of Medical Assistance 90-97	26	91	82	42
White	40%	19%	42%	39%
African American	35%	59%	37%	37%
Hispanic	9%	7%	6%	8%
Other Race	16%	14%	16%	16%

As one scans the other characteristics, it is clear that those who disappeared are not very different from those who stayed. Those who left had, on average, two children, their youngest was 6-years old; 15% were married; and their racial distributions are similar. Those who left, however, were more likely to have had more than a high school education, and were considerably less likely to have had three or more children. What is notable is that those who were on just Food Stamps or Medical Assistance in 1998 were more similar to those who disappeared than to those who received AFDC in 1998. Big differences exist between those still on cash assistance in 1998 and all of the others.

It makes little sense to compare use of assistance between individuals who disappeared in 1991 to those who were still on assistance in 1998. But the group on assistance in 1998 had used AFDC for an aggregate average of six and one-half years out of the possible nine years. They had used Food Stamps for 7.25 years and Medical Assistance for 7.75 years, on average. This group was committed to receiving aid. Those who disappeared by the end of 1994 had used an average of 15 months; those who left between 1995 and 1997 had used 33 months; and those who left in 1998 had received an average of 44 months. Even the last group received far fewer months of AFDC than did those who did not work in 1998 but were receiving AFDC.

The conclusion from this brief comparison is that among those women who never worked in Wisconsin, those who disappeared look somewhat more likely to be able to work some place than do those who remained in the state and on assistance in 1998. But they still have no (recent) work experience. Few show signs of having a significant other or spouse who could support them. When they left the roles, the average woman needed additional education to bring them up to at least a high school education. Only one-fifth was challenged by having three or more children, a proportion comparable to those women who remained in Wisconsin and who were working without assistance in 1998.

Without work experience, it is likely that the largest portion of these women moved to another state.

#### **COMPARISON OF THOSE WHO WORKED SOMETIME**

As has been mentioned, there are many more women who worked sometime than did not work at all; and the bulk (80%) of the women who have some work experience have stayed in Wisconsin. Just over 6,600 of these women have stayed and continued to receive a form of aid in 1998. Some 42,109 stayed and worked in 1998, without receiving any form of assistance. And some 16,800 women had work experience in Wisconsin and had disappeared from both work and welfare roles. Table 5 contains descriptions of these women and the women with work experience who stayed in Wisconsin.

The first column reveals characteristics of those women who disappeared some time despite having had work experience. The second column contains the data on those who are working in 1998 and receiving no aid. The third column has information on those who are working and receiving aid in 1998. The fourth column shows characteristics of those who are not working in 1998 and are receiving aid.

The first point to note is education. There is virtually no difference in the 1990 education levels of those who disappeared and those who are working without assistance in 1998. Those who are on aid and not working, however, have substantially less education than the other two groups. In fact, those on aid look very similar to those who disappeared without working.

The second point to note is that the women who worked and stayed, most notably those who are working without aid in 1998, are very similar on a number of characteristics to those who worked and disappeared. The two groups have the same number of children, although the youngest is younger among those who stayed. Both groups share almost the same rate of marriage in 1990 and have approximately the same racial and geographic distributions. They have the same percentage of individuals who have completed more than a high school degree, on average. And they share a similar proportion of those who have three or more children (about 20%). It appears that those women who have worked, whether they have stayed or left, are very similar.

What are different are the two groups of women with work experience who stayed. Those on aid in 1998 appear markedly less likely to succeed in the work force. They are less well-educated. Their youngest child is younger. They are much less likely to have been married. They are much more likely to be African American and live in Milwaukee. Only a very small number have completed more than high school. And about two-fifths have three or more children, making financial independence that much more difficult. The women on AFDC in 1998 with work experience look much more like the women without work experience on aid in 1998 than the other women with work experience.

**TABLE 5: COMPARISONS OF WOMEN WITH WORK EXPERIENCE BETWEEN THOSE WHO DISAPPEARED AND THOSE WHO STAYED**

Variable	Disappeared	Working in 98		Not Working in 98
		No AFDC	AFDC	AFDC
Number of Women	16,677	57,622	4,979	1,664
Highest grade completed in 1990	11.5	11.6	11.1	10.8
Highest grade completed in 1994	11.7	11.8	11.3	11.0
Number of children in 1990	2	2	2	2
Age of youngest child in 1990	6	5	5	3
Married in 1990	13%	11%	4%	4%
Number of quarters worked in 1990	2.5	2.8	2.3	2.1
Number of quarters worked in 1994	2.8	3.3	2.5	2.1
Number of quarters worked in 1997	2.1	3.6	2.9	2.0
Total quarters worked from 90-97	10	21	13	7
Total quarters worked from 95-97	5	10	7	4
Average earnings in 1990	\$4,261	\$5,346	\$2,583	\$2,149
Average earnings in 1994	\$6,793	\$10,247	\$3,295	\$2,457
Average earnings in 1997	\$3,960	\$13,009	\$4,723	\$1,891
Highest earnings	\$7,432	\$16,321	\$7,803	\$3,601
Number of employers in 1990	1.8	1.9	1.8	1.5
Number of employers in 1994	1.7	1.9	2.0	1.6
Number of employers in 1997	1.5	1.9	2.4	1.6
Average employer size in 1990	1,071	1,116	1,397	1,314
Average employer size in 1994	1,161	1,378	1,631	1,313
Average employer size in 1997	1,218	1,463	1,740	1,414
Number of months of AFDC, 90-97	27	37	83	85
Number of months of Food Stamps, 90-97	29	41	86	87
Number of months of Medical Assistance, 90-97	34	50	88	88
Employed in Construction, Manufacturing or Finance, 95-97	10%	29%	14%	10%
White	54%	60%	14%	16%
African American	29%	27%	76%	72%
Hispanic	5%	4%	5%	6%
Other Race	12%	9%	6%	9%

Having determined that the women with work experience look most like one another, except for those still on assistance, it is useful to examine their work experiences to see if differences here help to reinforce the demographic similarities and differences.

From the outset, those women who stayed in Wisconsin and were employed in 1998 displayed work characteristics that separate them from those that disappeared. Those working and receiving no aid in 1998 worked more quarters (.3), on average, in 1990. The difference between the two groups widened by mid-decade and by 1997. Those who left early had somewhat greater work success than their cohorts, but those who disappeared later were falling behind in terms of work experience.

Work commitment affects earnings. The women who disappeared worked slightly fewer quarters in 1990, and their earnings were lower by almost \$1,100 (25%). By 1994, the earnings differential was 51% in favor of those who stayed in Wisconsin. In 1997, the earnings differential was a whopping 229% in favor of those that stayed. The highest earnings for both groups are also quite different: those who stayed earned more than twice as much in their best year as those who disappeared. These huge differences strongly suggest that those who were late in leaving were quite different from those who left earlier as well as those who stayed and worked. Certainly, their work commitment and results are different.

One of the reasons for the difference in earnings is the percentage of each group that was able to secure jobs in the highest-paying industries — construction, manufacturing, and finance (CMF '95-'97). Those who worked in 1998 in Wisconsin were almost three times as likely to have found employment in one of these three industries in the years 1995 through 1997. In an earlier report, it was noted that such employment generally led to higher earnings and that women with stronger work histories were more likely to find employment in these industries (White and Geddes, 2001).

Work experience in 1990 seems to have had little influence on these outcomes, if one looks at such measures as the number of employers these women had or the size of the employers these women had. Both measures reverse their relative roles over the eight years. Less pronounced differences existed by 1997 in terms of the number and size of employers, but both still tended to work for very large employers.

Those who stayed in the state longer before disappearing were less committed to work, to finding multiple jobs, and to working more quarters by 1997. The result is that these women were progressively less able to compete with the regular workers. Such findings suggest that although both sets of women seemed quite similar on a number of demographic measures, those who left later tended to have less commitment and success in the work place. It is possible that that lack of success helped to persuade them to leave the workforce and possibly even the state.

When one compares the degree of utilization of the three assistance programs, it is obvious that those who stayed and worked in Wisconsin used the assistance programs more fully over the 1990-1997 period than those who left. This may well be due to the fact that the latter did leave. Since both groups share common demographic characteristics, it is hard to attribute the differences to differences in the women as opposed to differences in their tenure in Wisconsin. The implication is that since the women who left did not do as well in the work place, they are likely to have left the state, looking either for better work opportunities or a new setting for assistance. Since on some basic factors they appear just as employable as do those who stayed and worked, it is easy to conclude that a large number of these women left the state. Some did stay and were supported by others. A few died. A few were incarcerated. Some work in the underground economy. And some are supported by Social Security. But the combination of work history and demographic composition suggest that a sizeable, but undetermined, number are no longer state residents.

**TABLE 6: COMPARISONS OF THOSE WHO DISAPPEARED TO THOSE WHO DID NOT, BY YEAR OF WORK AND LAST YEAR OF AFDC RECEIPT**

Variable	Disappeared				Did Not Disappear			
	Year of Work			Last Year of AFDC	Year of Work			Last Year of AFDC
	First	Last	Best		First	Last	Best	
Earnings	\$3,689	\$3,320	\$7,406	\$5,111	\$4,350	\$11,907	\$14,731	\$7,626
Quarters Worked	2.3	2.0	2.9	2.6	2.5	3.3	3.7	3.2
Months of AFDC	7.1	3.0	4.2	5.4	8.1	1.1	1.8	5.7
Months of FS	7.1	3.5	4.8	6.0	8.1	2.6	3.1	7.2
Months of MA	8.2	4.0	5.7	7.5	9.5	3.5	4.2	9.4
Women	16,805				68,154			

### Other Characteristics of Those Who Disappeared

One fact that can be discerned from Table 6 is that those who disappeared have lower earnings in the year before they disappeared than in their best year. For some reason, these women were on a downward slide in earnings and in quarters worked in the year before they disappeared. Whatever the cause of their decline in work commitment and earnings, these seem to lead to disappearance from both the workforce and assistance. One might expect a reversion to assistance with less remuneration from work. But the opposite occurred: they forewent assistance and work, at least in Wisconsin. So, if one were to look for characteristics that would suggest a woman would disappear, a decline in earnings and work commitment would be two clues.

Somewhat surprisingly, there was a decline in their use of assistance in their last year before disappearing. That use was lower than in even their best year of earnings. The assistance route does not seem, on average, to be an option for those who disappear. Still, they did average somewhat more time on assistance in both their last and best years than those who stayed and worked. Similar patterns hold for both Food Stamp and Medical Assistance utilization. That is, those who disappeared used less of these in their "last year," despite having had lower earnings. Certainly, a portion, possibly a large portion, of this decline is due to their having not remained in the state for the whole year.

The one difference that can be noted between those who disappeared and those who did not is that in their first year of work those who stayed used the three forms of assistance slightly more often. For example, in the first year that they worked those who stayed were on AFDC for 8.1 months compared to 7.1 for those who subsequently disappeared. Comparable gaps exist for Food Stamps and Medical Assistance. Yet, even though those who left made less use of the various assistance programs, they still worked fewer quarters and earned less their first year of work. That mix is difficult to explain. Perhaps it will help predict who it is that will disappear.

## THE PROBABILITY OF DISAPPEARING

One of the questions that arises as we compare those who disappeared to those who stayed is the degree to which it is possible to predict who will disappear. Are there enough identifiable attributes among those who disappeared that one could predict who would leave with some certainty? That is where this paper heads next. The purpose of the exercise is to help increase the understanding as to who and how many are likely to remain in the state. The corollary that follows is the attempt to predict who will stay and who will require additional financial assistance.

### Model and Equations

To see what determines the probability of disappearing for a former welfare recipient, three probability equations (probit model) were estimated. The first two equations include only the personal characteristics of two sub-samples; those with work experience and those without work experience. For the third equation, work history variables are added to the equation for those with work experience. Presented here are the largest changes in predicted probabilities for a given change in the variable. The full results of the probit equations are given in the Appendix.

The variables used for personal characteristics include: total months of AFDC, total months of Food Stamps, total months of Medical Assistance, education level in 1990, change in education from 1990 to 1994, total amount of SSI, whether received any SSI, race dummy variables, marital status in 1990, number of children in 1990, and the age of the youngest child in 1990. Of these variables, few have a large impact on the predicted probability of disappearing. Those that matter (and few of these have much impact) are: being of some other race (that is not specified as White, African American, or Hispanic), being of mixed race, being Hispanic, received any Social Security (SSI), having a change in education, having less than a high school education, and total months of medical assistance. The rest of the significant results had less than a 0.01 change in probability and are reported in the Appendix.

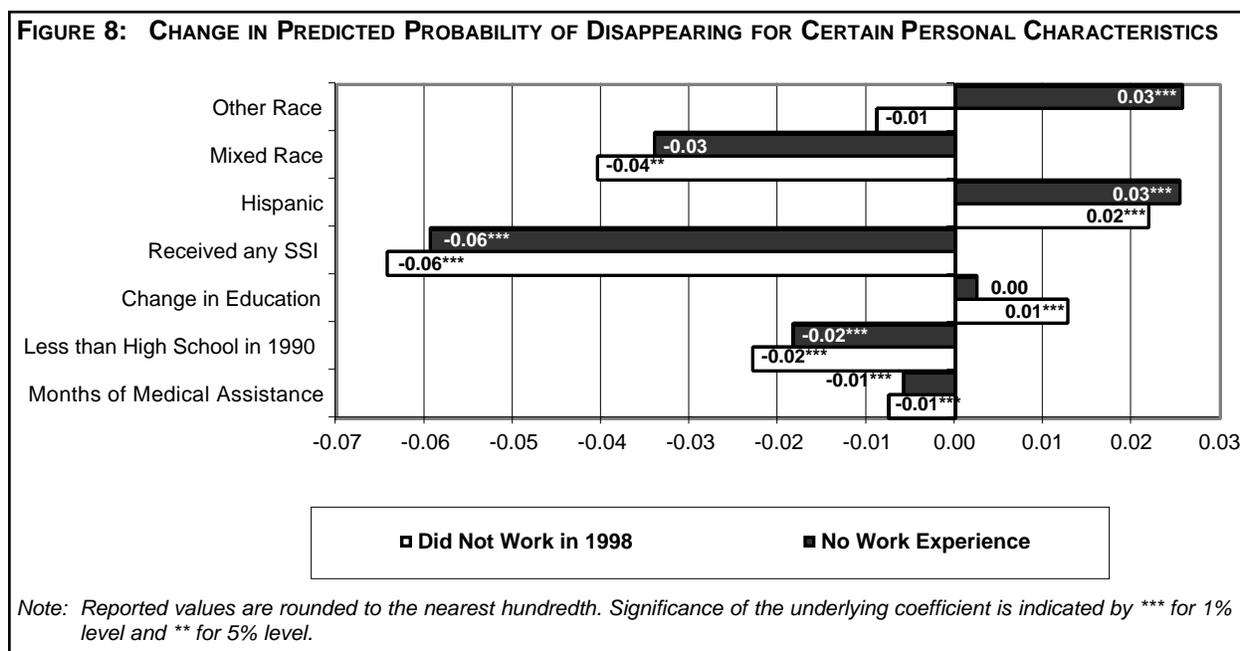
The variables used to measure the employment effects are: year employed dummy variables, number of quarters worked in each year, change in earnings from first to last job, if the earnings' change was positive, number of employers in first year of work, number of employers in last year of work, if the first and last employers were the same, size of first employer, size of last employer, if there was an increase in average firm pay between their first and last employer, the turnover rate for the first employer, and the turnover rate for the last employer. Even fewer of these

variables than the personal characteristics have a large impact on predicted probabilities. The two that matter are being employed in 1990 and employed in 1997.

### Personal Characteristics

In Figure 8, we see that receipt of SSI between 1990 and 1994 has the largest impact on the predicted probability. For those with and without work experience, receiving SSI reduces the probability of disappearing by about 0.06 or 6 percentage points. Other characteristics that decrease the probability of disappearing for both samples by the same amount are having less than a high school education in 1990 (0.02) and total months of Medical Assistance (0.01). Being mixed racially decreases the probability of disappearing by 0.04 for those with work experience and 0.03 for those without work experience. But the underlying coefficient for those without work experience is not significantly different from 0. Only being Hispanic increases the probability of disappearing for both samples, by 0.02 for those with work experience and 0.03 for those without work experience. The other two characteristics shown have mixed effects. Being of some other race decreases the probability of disappearing for those with work experience by 0.01 and increases the probability by 0.03 for those without work experience. Again the underlying coefficient for those with work experience is not significantly different from 0. The change in education from 1990 to 1994 increases the probability by 0.01 for those with work experience and has no effect for those without work experience.

The divergent results of the race variables seem puzzling. You would expect that all minorities would be more likely to disappear since discrimination may make it harder to comply with strict work requirements. We see that this is true for Hispanics and other races. Women, however, are less likely to disappear if they are racially mixed. One possible explanation is that being of two or more races, usually White and some minority, masks their minority status, thus making it harder for employers to discriminate.

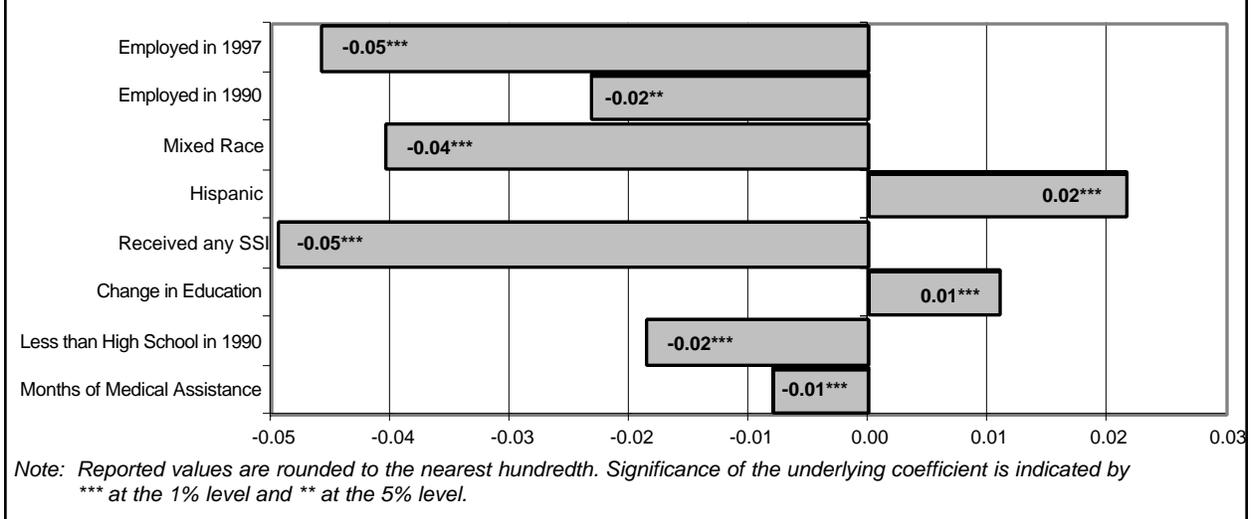


The other results are not as puzzling. For instance, just having received SSI between 1990 and 1994 does not mean the former recipient received enough SSI to support a family. This is indicated by the positive correlation of the total amount of SSI received and disappearing, although the effect is very small. Similarly, the education variables have opposite effects; those with less than high school are less likely to disappear, and those who increase their education are more likely to disappear. The argument is that the less skilled are more reliant on assistance and will receive it longer than those who have more skills and can obtain better jobs, either within the state or elsewhere. This is also supported by the negative result for the total months of medical assistance. This program is a complement to both AFDC and employment, so even if a woman stops receiving AFDC/W2, she may still continue with Medical Assistance, especially if her job does not provide health benefits.

## Employment Characteristics

Adding employment variables to the equation does not change the impact of the personal characteristics much. Having received any SSI is the only factor to have had a smaller effect. It changed from decreasing the probability by 0.06 to decreasing it by 0.05. All other personal characteristics stayed the same. Being employed in 1997 had a larger impact on disappearing than being employed in 1990. It decreases the probability by 0.05 versus 0.02. This is to be expected. If a former recipient has remained visible until 1997, the chances she will disappear should be lower.

**FIGURE 9: CHANGE IN THE PREDICTED PROBABILITY OF DISAPPEARING FOR CERTAIN VARIABLES, WOMEN WITH WORK EXPERIENCE**



## POLICY IMPLICATIONS

What is clear is that there were few mass exoduses from the state due to policy changes that emphasize work, at least for this 1990 cohort of women. Among those who did not work and disappeared, the number on AFDC/W-2 decreased steadily. Among those who worked sometime, the number who disappeared increased steadily through 1997, but it did jump in 1998. That is when W-2 began in earnest.

The fact that 25% of the 33,702 women on AFDC in 1990 who did not work in Wisconsin in 1998 were on some form of support suggests:

1. a continuing need for support, especially Medical Assistance and Food Stamps, to get these women to the point that they can become self-supporting;
2. a difficulty for members of this population to move away from support;
3. a realization that work experience is not enough by itself to move women away from assistance;
4. that there are probably women in this 1990 pool who are still in the state and in need of assistance, despite their having dropped from sight; otherwise they would be on the work roles; these are part of the “worked sometime but not 98” group;
5. that the underground economy may be larger than given credit, given the number of formerly dependent women who have disappeared from both assistance and work roles.

What really happened to the 75% of the women not working in 1998 and not on assistance in Wisconsin? That we cannot tell for sure. But we can undertake some estimates that may put this into perspective. The easiest group to assess is the 11,348 women that never worked and yet do not appear on the records in 1998. These women tend to have modest education (less than 11th grade) and no work experience. That makes them unlikely work candidates and unlikely self-employed candidates. A portion (15%) was married, so that may help to explain their disappear-

ance. A portion (maybe 15%) was likely on Social Security. But since there have been no public record of these women for between four and eight years, it seems likely that a number of them have left the state. If we guess that 70% of those not seen in work or assistance records in four or more years (6,844) have left the state, that means some 5,182 of these women have moved elsewhere. If we also assume that say 40% of those who disappeared between two and four years ago also left the state, that accounts for an additional 391 women. Thus, of those who never worked, some 5,573 women could have plausibly left the state.

Estimating how many of the women with work experience who have disappeared may also have left the state is even more difficult, since they seem quite similar to those who remained and worked. Yet those who disappeared did have low earnings, on average, before they disappeared; and they did not have strong work or education records that would suggest self-sufficiency. How could they be surviving in state without formal work and without assistance, given their limited preparation? The most likely explanation again is that at least a portion of these women left the state.

It is impossible from currently available information to know how many left. But if we do a similar set of calculations, we can derive a ballpark estimate. If we assume that half of those women who have not surfaced in the last four years have left the state, the number that left is 3,726. If we add to that an estimated 33% of those who have not been heard from in the last 2 to 4 years, this adds another 1,718 women to those who might have left. The total is then 5,444 women with work experience who likely left.

Together, it seems that at least 11,017 of these women have left Wisconsin over the 1990s. Added to those women on assistance (8,584) in Wisconsin in 1998 yields some 19,601 that might be accounted for. What this then suggests is that some 14,101 of the original 33,702 not working in Wisconsin in 1998 may still be in state. Given their modest work and education histories, some of these women may be prime candidates for more assistance or for other services that are needed to help make them truly economically independent.

This estimate is truly a guess. But it does help to suggest that the 2% of the original cohort on AFDC/W-2 in 1998 in Wisconsin may overstate the true picture on a national basis, if a portion of these women have indeed moved to other states and remained unsuccessful in the labor force. The numbers also suggest that there may be more women in Wisconsin who are not currently participating in W-2 that may need W-2 or some of the related services if they are to become independent. It is likely that these women and many others like them from more recent AFDC cohorts are on the fence in terms of independence. A downturn in the economy may bring forth a much larger pool needing further assistance than can be estimated from just the current numbers.

Learning about the characteristics of those who disappeared is a useful exercise because it helps put into perspective just what welfare reform has accomplished with its decline in service population and its efforts to move women to work. Some of the seeming gains are attributable to losses in population, be they moves out of state or deaths. Others are true gains in employment in the state.

The exercise that would really help Wisconsin and other states better understand the dynamics of welfare decline is the tracking of women by Social Security number across states. We could all then learn more about mobility and its impact. We would be better able to estimate the size of the "at risk" population that has *seemingly* disappeared from Wisconsin but may still be here. Such a study would require cooperation that has heretofore not existed. It would also have to be done with careful controls, so as not to be used for any more than its intended purpose.

### The Model and Equations

A binary probit model was used to estimate the probability of a woman "disappearing," given personal characteristics and work histories. This model was chosen because the dependent variable, whether the person disappeared or not, is coded as 0 or 1. Using a regular regression model, like ordinary least squares, will not fit the data properly. Such a model may produce estimates that are less than 0 or greater than 1. The binary probit model ensures that estimates are between 0 and 1. Two different equations were used because one group of women did not have work experience over the 9-year period. One equation included only personal characteristics, like education, race, and children and is estimated for the two groups of women. The other added variables related to work histories, like years of employment, quarters worked in each year, and earnings, as well as variables related to employers, like size, average pay increase, and turnover to the personal characteristics and is estimated for the group of women with work experience. Table A1 shows the means and definitions of the variables used in the equations and Table A2 shows the results of the three probit equations expressed as a change in predicted probability.

To read Table A1, one merely looks across the columns for each variable to differentiate between those who did not work in 1998 but worked sometime during the time period, and those who did not work over the time period. On the first variable, total number of months of AFDC received, there is very little difference. Those with prior work experience had an average of 38.3 months of AFDC, whereas those without work experience had 37.6 months. Food stamp receipt for both populations was just over 42 months. There is a substantial difference in the proportion that had less than a high school degree. Some 48% of those with prior work experience compared to almost 60% of those without work experience had less than a high school education. Similarities and differences are quite evident.

### The Results

The variables used in the first equation are: the total number of months of AFDC use, total number of months of food stamps, total number of months of medical assistance, if the person had less than a high school education in 1990, if the person had some college or more in 1990, the change in years of education the person had from 1990 to 1994, total dollar amount of SSI received between 1990 and 1994, if the person had received SSI anytime between 1990 and 1994, race dummies, if the person was married in 1990, number of children in 1990, and age of youngest child in 1990. However, to save space only significant results are presented here.

Looking at the first two columns of Table A2, we can compare the women who did not work between 1990 and 1998 (Column 1) to the women who had some work experience from 1990 to 1997 (Column 2). One thing to note is the similarities between the two groups. Both are more likely to disappear if they have more months of AFDC and higher amounts of SSI, are Hispanic, and had older children in 1990. Also, both are less likely to disappear if they have more months of Food Stamps and Medical Assistance, less than a high school education, and received any SSI from 1990 to 1994. One difference is that those of other races are more likely to disappear for the group without work experience, but the variable is insignificant for those with work experience. On the other hand, those of mixed race are less likely to disappear for the group with work experience but is insignificant for those without work experience. Other differences are that a change in education from 1990 to 1994 has a positive impact and being married has a negative impact on the disappearance for those with work experience, whereas both variables are insignificant for those without work experience.

One interpretation of the positive months of AFDC receipt result is that the women who were dependent on cash assistance left the state for other states with less strict work rules. The implications for the other assistance programs, Food Stamps and Medical Assistance, are that they are complementary to working, and working is a substitute for AFDC. Indeed many women continued to use Food Stamps and Medical Assistance while working. Similar reasoning can be used to interpret the positive "Hispanic" and "other race" variables. As AFDC ended in Wisconsin, many minorities may have found it tougher to find jobs and left the state to try and get AFDC in states that had less strict work requirements or to find employment.

Another variable that is as predicted is the "age of youngest child in 1990". Women whose youngest child was older were more likely to disappear. Basically, they did not have to support young children by either receiving AFDC

**TABLE A1: MEANS OF VARIABLES USED IN PROBIT EQUATIONS**

<b>Variable</b>	<b>No Work in 1998</b>	<b>No Work Experience</b>
Total number of months of AFDC receipt	38.282 (30.214)	37.614 (33.592)
Total number of months of Food Stamp receipt	42.663 (33.170)	42.017 (36.873)
Total number of months of Medical Assistance receipt	47.884 (33.997)	44.104 (38.131)
Has less than a high school education	0.48 (0.5)	0.595 (0.491)
Has more than a high school education	0.147 (0.354)	0.101 (0.301)
Change in years of education, 1990 to 1994	0.204 (0.691)	0.11 (0.573)
Total amount of SSI received, 1990 to 1994	1169.77 (4690.38)	4634.09 (9248.04)
Received any SSI between 1990 and 1994	0.102 (0.303)	0.318 (0.466)
African American	0.337 (0.473)	0.367 (0.482)
Hispanic	0.048 (0.213)	0.084 (0.277)
Mixed race	0.047 (0.211)	0.04 (0.197)
Other race	0.06 (0.237)	0.116 (0.32)
Married in 1990	0.118 (0.322)	0.152 (0.359)
Number of children in 1990	1.880 (1.171)	1.987 (1.332)
Age of youngest child in 1990	5.285 (4.897)	6.292 (5.582)
Number of quarters worked in 1990	1.571 (1.511)	**
Number of quarters worked in 1991	1.428 (1.582)	**
Number of quarters worked in 1992	1.340 (1.595)	**
Number of quarters worked in 1993	1.252 (1.576)	**
Number of quarters worked in 1994	1.188 (1.549)	**
Number of quarters worked in 1995	1.024 (1.481)	**
Number of quarters worked in 1996	0.823 (1.353)	**
Number of quarters worked in 1997	0.485 (1.022)	**
Change in earning from first to last year of employment	2618.569 (3797.108)	**
Earnings change was an increase	0.349 (0.477)	**
Number of employers in first year	1.606 (1.009)	**

TABLE A1 CONTINUED

Variable	No Work in 1998	No Work Experience
Number of employers in last year	1.426 (0.83)	**
First and last employers are the same	0.369 (0.483)	**
Size of first employer	1084.664 (2093.005)	**
Size of last employer	1139.589 (2239.514)	**
Average firm pay increased from first to last employer	0.379 (0.485)	**
Turnover rate of first employer	0.448 (0.406)	**
Turnover rate of last employer	0.412 (0.419)	**
<b>Sample Size</b>	<b>22,354</b>	<b>11,348</b>

Note: Standard deviations in parenthesis. \*\* indicates not available.

or by working. The education result is also as predicted. Women with less education and, therefore, less skills are less likely to disappear. These women would continue to receive assistance. Note, however, that this is their education level in 1990. Many women may have obtained further education to become employable later in the period. We do try to measure this impact by looking at the change in education between 1990 and 1994. The women who had a change in education from 1990 to 1994 were more likely to disappear. It could be that those with higher skills leave the state to find better jobs elsewhere.

Women who were married in 1990 are less likely to disappear, as are those who are mixed racially. We would expect the negative correlation between marriage and disappearing for this group because women with lower work commitment may be less independent and therefore need to be supported, either through AFDC or a husband or both. Those with a higher commitment to work are more independent and do not need outside support. The negative correlation between being racially mixed and disappearing can be explained by the fact that a majority of the mixed cases are usually a combination of minority and White, so they might seem more like Whites. The opposite signs of the SSI variables in this equation could mean that just receiving SSI does not ensure receiving amounts that one can live on. Therefore, these women will need to supplement lower amounts of SSI by either working or by receiving AFDC. The women who received higher amounts of SSI "disappeared" because they no longer needed AFDC or to work.

### Work Histories and Employer Characteristics

In order to examine the work variables and employer characteristic variables, we exclude the women who did not work over the nine years and estimate an equation that includes these variables (Table A2 - Column 3). The added variables include: dummies for year of employment from 1990 to 1997, number of quarters worked in each year 1990 to 1997, the change in best to last year of earnings, if the earnings change is positive, number of employers in first year employed, number of employers in last year employed, if employers were the same from the first year to the last year employed, the size of the first employer, the size of the last employer, if the average pay of their employer has increased from their first year to their last year (implying a move to a better employer), the turnover rate of their first employer, and the turnover rate of their last employer.

There are no changes in the personal characteristics between this equation and the previous equation (Table A2 - Column 2). The only thing that changes is the magnitude of the coefficients. For instance, when employment variables are added, women with more months of AFDC are slightly more likely to disappear than if these variables are excluded. The only employment variables that are significant are having been employed in 1990 and in 1997 and the number of quarters worked in 1990, 1992, 1994, 1995 and 1996. Those employed in 1990 and 1997 were less likely to disappear, as were those who worked more quarters in 1992. Those who worked more quarters in the other years

**TABLE A2: DETERMINANTS OF THE PROBABILITY OF FORMER WELFARE RECIPIENTS DISAPPEARING: PERSONAL CHARACTERISTICS AND WORK HISTORIES**

Variable	(1)	(2)	(3)
Months of AFDC receipt	0.0031*** (0.0002)	0.0043*** (0.0002)	0.0046*** (0.0002)
Months of Food Stamp receipt	-0.0030*** (0.0002)	-0.0031*** (0.0001)	-0.0031*** (0.0001)
Months of Medical Assistance receipt	-0.0060*** (0.0003)	-0.0077*** (0.0002)	-0.0079*** (0.0002)
Less than high School in 1990	-0.0185*** (0.0059)	-0.0231*** (0.0045)	-0.0186*** (0.0046)
Change in education, 1990 to 1994	0.0023 (0.0038)	0.0127*** (0.0026)	0.0110*** (0.0026)
Total amount of SSI receipt 1990 to 1994	1.81e-06*** (3.63e-07)	1.21e-06** (5.26e-07)	1.04e-06** (5.32e-07)
Received any SSI 1990 to 1994	-0.0595*** (0.0104)	-0.0643*** (0.0130)	-0.0494*** (0.0123)
Hispanic	0.0255*** (0.0077)	0.0218*** (0.0076)	0.0215** (0.0077)
Mixed race	-0.0341 (0.0348)	-0.0406** (0.0237)	-0.0404** (0.0240)
Other Race	0.0257*** (0.0065)	-0.009 (0.0097)	-0.0099 (0.0099)
Married in 1990	0.0003 (0.0008)	-0.002*** (0.0008)	-0.0016** (0.0008)
Age of youngest child in 1990	0.0004** (0.0002)	0.0005*** (0.0001)	0.0005*** (1.28e-04)
Number of quarters worked in 1990	--	--	0.0087*** (0.0030)
Number of quarters worked in 1992	--	--	-0.0049* (0.0029)
Number of quarters worked in 1994	--	--	0.0107*** (0.0028)
Number of quarters worked in 1995	--	--	0.0067** (0.0030)
Number of quarters worked in 1996	--	--	0.0117*** (0.0031)
Employed in 1990	--	--	-0.0232*** (0.0071)
Employed in 1997	--	--	-0.0459*** (0.0116)
Predicted P	0.94	0.93	0.93
Observations <sup>2</sup>	11,167	22,226	22,226
Pseudo R <sup>2</sup>	9004.93***	15323.96***	15525.85***
	0.69	0.61	0.62

*Note: Coefficients are the change in probability and standard errors are in parenthesis. Some variables have been repressed to save space. Full results are available from the authors. \*\*\* indicates significance at 1%, \*\* indicates significance at 5%, and \* indicates significance at 10%.*

were more likely to disappear. The lack of influence of the employment variables goes to the argument of work commitment. We would not expect these variables to matter in the decision to disappear to those who have a low work commitment, since these women are more dependent on public assistance. The variables that determine public assistance use are the personal characteristics, so these variables should have more influence on disappearing than the work variables.

## REFERENCES

- Cheng, Tyrone Chi-Wai. (1995). "The Chances of Recipients Leaving AFDC: A Longitudinal Study." *Social Work Research*, 19: 2, 67-76.
- Blank, Rebecca M. (1989). "Analyzing the Length of Welfare Spells." *Journal of Public Economics*, 39: 3, 245-273
- Ellwood, David T. and Mary Jo Bane. (1994). "Understanding Welfare Dynamics." In *Welfare Realities: From Rhetoric to Reform*, Mary Jo Bane and David T. Ellwood, eds. Harvard University Press: Cambridge, Massachusetts.
- Harris, Kathleen Mullan. (1993). "Work and Welfare Among Single Mothers in Poverty." *American Journal of Sociology*, 99: 2, 317-352.
- . (1996). "Life After Welfare: Women, Work, and Repeat Dependency." *American Sociological Review*, 61: 3, 407-426.
- Klawitter, Marieka; Robert Plotnick and Mark Edwards. (1996). "Determinants of Welfare Entry by Young Women." Institute for Research on Poverty, Discussion paper 1099-96.
- Petersen, Carol Dawn. (1995). "Female-Headed Families on AFDC: Who Leaves Welfare Quickly and Who Doesn't." *Journal of Economic Issues*, 29: 2, 619-638.
- Piskulich, C. Michelle. (1993). "Toward a Comprehensive Model of Welfare Exits: The Case of AFDC." *American Journal of Political Science*, 37: 1, 165-185.
- Sandefur, Gary D. and Steven T. Cook. (1998). "Permanent Exits from Public Assistance: The Impact of Duration, Family, and Work." *Social Forces*, 77: 2, 763-786.
- White, S. B. and Lori A. Geddes. (2001). "Economic Lessons for Welfare Mothers." *Wisconsin Policy Research Institute Report*, Vol. 14, No. 1.
- Wisconsin Department of Workforce Development. (1999). "Survey of Those Leaving AFDC or W-2 January to March 1998." Preliminary Report.

## ABOUT THE INSTITUTE

The **Wisconsin Policy Research Institute** is a not-for-profit institute established to study public-policy issues affecting the state of Wisconsin.

Under the new federalism, government policy increasingly is made at the state and local levels. These public-policy decisions affect the life of every citizen in the state. Our goal is to provide nonpartisan research on key issues affecting Wisconsinites, so that their elected representatives can make informed decisions to improve the quality of life and future of the state.

Our major priority is to increase the accountability of Wisconsin's government. State and local governments must be responsive to the citizenry, both in terms of the programs they devise and the tax money they spend. Accountability should apply in every area to which the state devotes the public's funds.

The Institute's agenda encompasses the following issues: education, welfare and social services, criminal justice, taxes and spending, and economic development.

We believe that the views of the citizens of Wisconsin should guide the decisions of government officials. To help accomplish this, we also conduct regular public-opinion polls that are designed to inform public officials about how the citizenry views major statewide issues. These polls are disseminated through the media and are made available to the general public and the legislative and executive branches of state government. It is essential that elected officials remember that all of the programs they create and all of the money they spend comes from the citizens of Wisconsin and is made available through their taxes. Public policy should reflect the real needs and concerns of all of the citizens of the state and not those of specific special-interest groups.