# Potential Employment Liabilities Among TANF Recipients: A Synthesis of Data from Six State TANF Caseload Studies<sup>1</sup>

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#### **Introduction:**

The Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA) of 1996 dramatically changed the U.S. welfare system. Most importantly, the more work-focused Temporary Assistance for Needy Families (TANF) block grants replaced the Aid to Families with Dependent Children (AFDC) entitlement program. Since that time, the number of families receiving cash welfare assistance has declined 54 percent, to less than 2.1 million families in 2003. These changes led to numerous studies of recipients who left welfare or who applied and were formally or informally diverted from welfare. The Office of the Assistant Secretary for Planning and Evaluation (ASPE) funded more than 20 such state and local area studies.

Fewer studies, however, focused specifically on individuals and families still receiving welfare. To address this research gap, ASPE funded an additional round of competitive state and local area grants in 2001 focused on the characteristics and circumstances of individuals and families receiving cash assistance from the TANF program at a given point in time. Because of the increased emphasis on work within the TANF program, the grants focused on potential employment liabilities welfare recipients may face, as well as specific skills and assets that may provide opportunities for work and future self-sufficiency.

To assess the relative effects of various human capital assets and potential personal, family and community-level employment liabilities on work for welfare recipients, each grantee – including Colorado, the District of Columbia, Illinois, Maryland, Missouri, and South Carolina – gathered and analyzed data based on a common survey instrument. Final reports are currently available for three of the six ASPE-funded studies. For this paper, we merge the survey data from all six studies to conduct a pooled analysis of employment liabilities and work among welfare recipients. Building on these comparable data projects provides a unique opportunity to examine the relationship between liabilities and employment for TANF recipients in multiple states across the country in a single study.

We begin by discussing the importance of studying potential employment liabilities within the context of TANF. We then present an overview of the current literature examining the relationship between liabilities and work among welfare recipients as well as the key contributions of our research. Next we present greater detail on data, measurement and methods used for our study. Finally, we focus on three sets of results. We present prevalence rates for potential liabilities, the descriptive relationship of each liability to work status, and results from our multivariate analysis on the

<sup>&</sup>lt;sup>2</sup> The Illinois study was completed for ASPE under contract.

<sup>&</sup>lt;sup>3</sup> For final reports see <a href="http://aspe.hhs.gov/hsp/leavers99/">http://aspe.hhs.gov/hsp/leavers99/</a>. Data from Colorado, Missouri and South Carolina are not yet public.

relationship between each liability and employment, net of other liabilities measured in our study.

## Why Study Liabilities?

Employment is a key component of the TANF Program. With the introduction of work requirements and time limits under PRWORA, states now work more closely with recipients to attain specific levels of overall work participation, encourage greater engagement in constructive activities that lead to self-sufficiency, and facilitate transitions out of welfare toward greater independence. Consequently, understanding the potential limitations or liabilities that recipients may bring to the labor market, as well as the effect that these challenges may or may not have on employment, has taken on greater importance.

PRWORA also gives states increased flexibility in their use of welfare funds. In addition to cash assistance, states may use TANF dollars to provide non-cash services to aid recipients in making the transition from welfare to work. For example, states may choose to devote some portion of their TANF funds to services that aim to reduce potential work liabilities among recipients. Data analysis on the specific challenges that are more likely to translate into work limitations in the labor market may be particularly useful for states and local areas considering the inclusion of such services in their welfare programs.

#### What Do We Know about Employment and Liabilities?

Record numbers of TANF recipients are participating in the labor market; in 2002, 25 percent of adult welfare recipients were working, compared to only 7 percent in 1992 (U.S. Department of Health and Human Services 2004). Indeed, many current TANF recipients work despite the presence of specific personal, family and community-level barriers. For some, however, these challenges may impede employment efforts. For example, human capital deficits, such as low levels of education or job skills, personal issues, such as health problems or substance dependence, and logistical challenges, such as problems with transportation or childcare, may make it more difficult to gain employment and work toward attaining greater self-sufficiency.

A growing literature addresses the prevalence of varied challenges as well as the potential effect these issues may have on employment status. The National Survey of America's Families (NSAF) provides national information on potential barriers to work among TANF recipients. Recent NSAF research shows that human capital and health-related difficulties are common among welfare recipients. More than one-third of TANF recipients had very poor mental or physical health, about two-fifths had less than a high school education, and over one-quarter had not worked within the past three years. NSAF data also show that these challenges are related to employment. Recipients with no measured barriers or limitations were more likely to be employed than those with at

least one potential employment liability, and the share of recipients who were employed was even smaller among those with two or more potential barriers to work (Zedlewski 2003). These results are helpful in thinking about TANF recipients nationwide; however, the measures of barriers or challenges included in the NSAF are less precise than those used in other surveys and the breadth of liabilities covered is limited.

The Women's Employment Study (WES), conducted by researchers at the University of Michigan, offers a key advantage over the NSAF for studying employment limitations among TANF recipients because it includes a more extensive battery of rigorous employment liability measures including several diagnostic scales. For example, the WES researchers collected data on complex challenges such as major depression, post-traumatic stress disorder, generalized anxiety disorder and chemical dependence using validated scales from the Composite International Diagnostic Interview (CIDI), which are based on definitions of disorders found in the Diagnostic and Statistical Manual, revised third edition (DSM-III-R).

Recent WES research shows that several potential work liabilities or challenges were present in at least 20 percent of the single-parent welfare caseload in one urban Michigan County: low education levels, few common job skills, mental health problems, caring for a child with a health problem, and transportation problems. Several additional challenges were present for 15 percent or more of recipients, including low levels of work experience, physical health problems, the possible presence of a learning disability, and domestic violence. Potential work barriers with low prevalence levels were alcohol and drug dependence, at about 2 to 3 percent of the single parent caseload (Danziger et al. 2000; Danziger and Seefeldt 2002; Corcoran 2001).

WES research also addresses the relationship between many of these conditions and work. Independent of the effects of other measured challenges, TANF recipients in the WES were significantly less likely to be employed if they had no high school diploma, few job skills, low work experience, transportation problems, health problems, or if they experienced major depression (Danziger and Seefeldt 2002; Danziger et al. 2000). Further, a majority of women in the sample had several barriers, and the probability of employment decreased significantly as the number of potential barriers to work increased (Danziger et al. 2000). Results from the WES provide a wealth of information not previously available on the relationship between employment and barriers for welfare recipients; however, studying welfare recipients in only one county presents a limitation in generalizing the results to the broader welfare population.

In addition to WES, several individual states or local areas have conducted their own studies of employment liabilities among TANF recipients. These studies offer important data on recipients in additional geographic areas, but make use of different survey instruments with only limited overlap in specific measures of potential employment liabilities. Hence, direct comparisons across these studies are not straightforward. For example, an examination of welfare clients in Nebraska based on a diagnostic measure of mental health<sup>4</sup> shows that 33 percent of clients had a major

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<sup>&</sup>lt;sup>4</sup> Measure based on the Composite International Diagnostic Interview (CIDI).

depressive disorder (Ponza et al. 2002). In contrast, researchers studying TANF clients in Alameda County, California used a symptom-based mental health measure<sup>5</sup> and found that only 14 percent of welfare recipients in their study experienced depression (DaSinger et al. 2002). In further contrast, a study of individuals remaining on welfare in Missouri used a non-specific psychological distress screening scale<sup>6</sup> and showed that 22 percent of TANF recipients had probable serious mental illness (Dunton et al. 2003). Due to varying reference periods as well as differences in scales and measurement, it is challenging to use these results together in an effort to provide a meaningful picture of mental health problems among TANF recipients.

We address these research needs by analyzing comparable, detailed data on a wide range of potential employment limitations gathered using a single common survey instrument across multiple sites. The data used for this research provide greater specificity in the measurement of potential employment liabilities relative to other national-level studies used to study TANF recipients. Further, including data from six comparable TANF studies provides broader coverage of the TANF population than other sub-national studies of employment-related liabilities among the welfare caseload. Still, it is important to note that the six states and localities were selected through competitive research grants and were not selected to be nationally representative.

## Data for the Current Study:

This paper is based on data from statewide (or district-wide) surveys of TANF recipients in Colorado, the District of Columbia, Illinois, Maryland, Missouri, and South Carolina. All studies are based on random samples of the population of single-parent TANF recipients in one given month. As shown in Table 1, most samples were drawn during the summer of 2002. Sample sizes range from about 500 to 1,400, and response rates range from near 60 percent to over 75 percent across all sites.

We combine the data from all six surveys for our analysis. To work with this pooled sample, we weight the data to adjust for the population of single parent TANF recipients in each site and correct for potential survey non-response bias. Our final person weights also include adjustments for population coverage where possible. Thus, our final sample is weighted to represent the population of 111,893 single parent TANF cases in the six areas studied. Because our data are not drawn from one simple random sample, we conduct our analyses and all statistical tests using sampling procedures in STATA. These procedures account for complex survey design when estimating standard errors for statistical tests.

<sup>6</sup> Measure based on the Kessler K-6 non-specific psychological distress scale.

<sup>&</sup>lt;sup>5</sup> Measure adapted from the SCL-90 (Symptom Checklist-90-R).

<sup>&</sup>lt;sup>7</sup> Colorado, Illinois, Maryland, and South Carolina drew stratified random samples. We exclude child-only TANF cases because of our interest in employment among adult recipients.

<sup>&</sup>lt;sup>8</sup> We include population coverage adjustments for Illinois, Colorado, and Missouri (see Appendix B for greater detail on weighting).

	Table 1 – Survey and Sampling Background										
	CO	DC	IL	MD	MO	SC					
Sample month	7/02	8/02	11/01	6/02	11/02	6/02					
TANF population <sup>9</sup>	5,824	11,918	33,495	15,867	33,592	11,197					
Sample size	786	581	532	1,146	571	1,493					
Response rate	66%	72%	78%	72%	57%	75%					
Completed interviews	521	420	416	819	323	1120					

## **Measuring Work and Potential Employment Liabilities:**

The six states gathered comparable survey data, using a common survey instrument, on a wide range of personal and family characteristics, community-level experiences, and employment outcomes among TANF recipients in 2002. ASPE, Mathematica Policy Research (MPR), and the individual state grantees developed the common instrument collaboratively, focusing on common factors or barriers other studies found to be related to employment. Whenever possible, we used validated scales to measure some of the more complex challenges that recipients may face. <sup>10</sup>

To identify specific challenges or liabilities in our study we draw on a range of measures within three general domains: (1) human capital deficits, (2) personal and family-related liabilities, and (3) logistical or situational challenges.

Human Capital Deficits. To capture human capital liabilities we include three measures of education and skill deficits. We define low education as less than a high school education and no GED, and low work experience as working for pay for less than half of the years since the recipient turned 18. To measure specific job skills, we included a series of questions on recipients' performance of ten common job tasks in any job they had ever held. The job skills include reading, writing letters or memos, filling out forms, talking with customers by phone or face to face, watching gauges or instruments, mathematical skills, computer use, and use of other electronic instruments. Recipients with low "job task" skills are those who performed fewer than four common job tasks. This job skill measure was used in the WES (Danziger et al. 2000), as adapted from Holzer (1996).

<sup>10</sup> For a copy of the survey development report and common survey instrument see: http://aspe.hhs.gov/hsp/leavers99/library.htm#caseload

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<sup>&</sup>lt;sup>9</sup> Total single parent TANF population in sample month comes directly from each state.

**Personal and Family-Related Liabilities**. Under our second broad domain, we include several variables that identify the presence of personal and family-level issues that may impede employment efforts: poor physical or mental health, pregnancy, caring for a child with special health or behavioral needs, chemical dependency, learning disabilities, a criminal record, and severe physical domestic violence. As mentioned above, when possible, we used validated scales and diagnostic assessments to measure the presence of particular employment liabilities. The use of tested scales and diagnostic screening batteries enables consistent measurement for complex challenges across all recipients.

We measure physical health problems using self-reports of overall health and the physical functioning subscale of the Short-Form Health Survey or SF-36. Recipients are considered to have physical health problems if they reported fair or poor health (as opposed to excellent, very good or good) *and* they were in the lowest age-specific quartile of physical functioning as defined using the SF-36 physical functioning scale (Ware et al. 2000).

For mental health, we consider recipients to have a mental health problem if they experienced major depression in the past year *or* experienced serious psychological distress in the past 30 days. We measure depression using the diagnostic screening battery for major depression in the Composite International Diagnostic Interview Short-Form (CIDI-SF). We measure serious psychological distress using the Kessler K-6 non-specific psychological distress scale.

We measure chemical dependency using the Composite International Diagnostic Interview Short-Form (CIDI-SF) for alcohol and substance dependence. This diagnostic tool includes a battery of questions that identify a probable dependence on drugs or alcohol. It is important to note that this scale is more restrictive than other screening tools in that it does not measure use or even abuse, both of which are much more common, but only measures whether a respondent is likely to be chemically *dependent*<sup>11</sup> (Jayakody et al. 2000).

The survey included a modified Conflict Tactics Scale (CTS) to measure domestic violence including moderate and severe violence, and physical and coercive threats. The CTS is a widely used measure of family violence (Strauss and Gelles 1986). For the purposes of our study, we look at those recipients who reported severe physical domestic violence (including hitting, beating, choking, using or threatening use of a weapon, or forcing sexual activity) in the past year.

We identify probable learning disabilities using the Washington State Learning Needs Screening Tool. This screener uses a series of questions about prior learning

time spent getting/recovering, important activities given up etc.).

<sup>&</sup>lt;sup>11</sup> *Abuse* is defined based on reports of recurrent use that results in at least one specific problem (such as, failure to fulfill major obligations, hazardous situations, legal problems, interpersonal problems etc.). For *dependence* a respondent must report 3 or more additional symptoms (such as, increased tolerance, experiences of withdrawal, using more/longer than intended, desire to cut down unsuccessful, considerable

problems and specific skills to assess the possible presence of a learning disability. Finally, we use self-reports directly from the surveys to measure pregnancy, caring for a child with special health or behavioral needs, and having a past criminal record.

**Logistical and Situational Challenges**. To improve our understanding of logistical challenges that may reduce the employability of TANF recipients, the survey included questions regarding transportation problems, childcare problems, unstable housing, and neighborhood conditions. Transportation and childcare problems are both self-reported problems that prevented a casehead from participating in work, education or training. Unstable housing is measured as having been evicted or moving two or more times in the past 12 months. Respondents with neighborhood problems are those who reported that at least one problem in their neighborhood (such as unemployment, drugs, or crime) was a big problem.

## **Research Questions and Methodology:**

We use both descriptive and multivariate statistical analysis to assess the extent to which various characteristics, experiences, and potential challenges explain variation in work status among TANF recipients. We address three broad research questions:

- (1) What are the prevalence rates for specific employment liabilities among TANF recipients?
- (2) Which of these liabilities are related to work?
- (3) Do particular liabilities or challenges affect the employment status of welfare recipients taking other liabilities and demographic characteristics into account?

To answer these research questions, we begin by examining each potential employment liability to determine the proportion of TANF recipients who have experienced the condition or problem. We conduct this descriptive analysis separately for each state as well as for the total pooled sample.

Next, we examine whether each specific liability or challenge is related to employment. For this analysis, we use pooled data to compare the employment rates of recipients who experience a specific challenge to the employment rates of those without the challenge. We use t-tests to test for significant differences between the employment rates for those with and without each liability.

Finally, we use multivariate logistic regression methods to examine the effects of potential employment liabilities on work status, net of all other liabilities measured in the study as well as important demographic characteristics (i.e., age, race/ethnicity and the presence of young children). Our models also include controls that identify each site so that we may examine the relationship between work and liabilities net of any site-specific differences in the likelihood of employment.

#### **Prevalence Rates:**

Figures 1 through 6 display prevalence rates of specific employment liabilities within three broad domains:

- human capital deficits,
- personal and family-related liabilities, and
- logistical or situational challenges.

To aid in summarizing these results, we highlight liabilities that are more common in the total pooled sample – that is, liabilities with prevalence rates of 20 percent or more.

Human Capital Liabilities. Figure 1 presents human capital-related deficits that may reduce employability. Low education levels, low levels of past work experience, and little experience with specific job skills are fairly common among TANF recipients. Nearly one-quarter of respondents in the total sample reported working less than half of their adult years, and a similar proportion had previously used fewer than four of the ten job skills identified in the survey. Based on research using the same job skill measure, a similar share of TANF recipients in Michigan (21 percent) had little experience with common job tasks (Danziger et al. 2000). Figure 1 also shows that low educational attainment is particularly common; two-fifths of respondents in the total sample did not graduate from high school nor did they earn a GED. This rate compares to 42 percent of welfare recipients nationally (Zedlewski 2003) and only 14 percent of all women regardless of TANF receipt (U.S. Bureau of the Census 2003). The overall pattern for prevalence rates among human capital deficits is similar across the individual state samples.

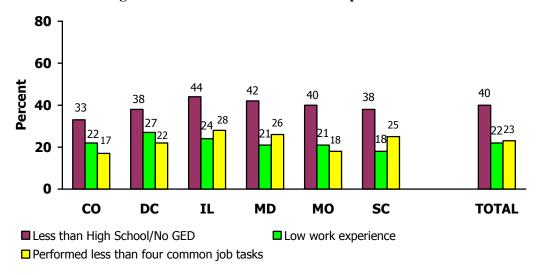


Figure 1 – Prevalence of Human Capital Liabilities

**Personal and Family Liabilities.** A range of personal and family issues may present liabilities for employment. We provide results for this domain in three separate figures, beginning with personal health issues. As displayed in Figure 2, physical health limitations and mental health problems each affect at least 20 percent of TANF recipients in the total sample. Mental health problems are especially common, with nearly onethird of all respondents across the six sites meeting the diagnostic criteria for major depression or experiencing serious psychological distress. This result is similar to other studies of TANF recipients (Danziger et al. 2000; Zedlewski 2003) and much higher than that for women in the general population. National Co-Morbidity Study (NCS) data show that only 13 percent of women ages 15 to 54 met the criteria for major depression (Danziger et al. 2000), and National Health Interview Survey (NHIS) data show that only 4 percent of women ages 18 to 44 experienced serious psychological distress in the past 30 days (National Center for Health Statistics 2003). Compared to other liabilities, pregnancy is much less common among current TANF recipients. Only 6 percent of respondents in the total sample reported that they were pregnant at the time of the interview. As with human capital liabilities, the pattern is generally similar across states; however, site variation in levels of mental health conditions is more evident.

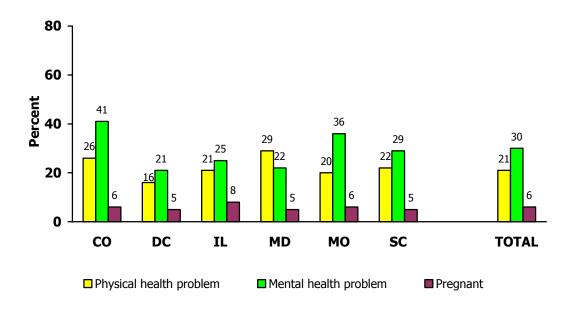


Figure 2 – Prevalence of Personal & Family Liabilities (1 of 3)

Figure 3 presents prevalence rates for several additional personal-related liabilities: chemical dependency, learning disabilities, and past criminal record. <sup>12</sup> In contrast to human capital deficits and physical and mental health limitations, these potential work barriers are somewhat less common among TANF recipients. For each of the liabilities listed, no site shows a prevalence rate over 20 percent. In particular, rates

<sup>12</sup> The prevalence of criminal records would likely be higher if using administrative data rather than self-reports. Administrative data in Illinois show 18 percent of TANF recipients have a criminal conviction, compared with only 8 percent reporting a criminal record in the survey (Kirby et al. 2003).

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of chemical dependency are very low at 3 percent<sup>13</sup> for the total sample. This rate is comparable to national rates for all adults using the same scale, but lower than recent national estimates of dependency among welfare recipients (Jayakody et al. 2004).

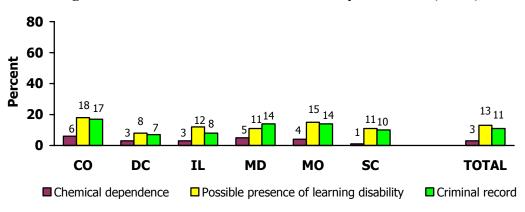


Figure 3 – Prevalence of Personal & Family Liabilities (2 of 3)

Our remaining personal and family liabilities are presented in Figure 4. Examining prevalence rates for these family-level issues shows that caring for a child with special health or behavioral needs is more common, while domestic violence is somewhat less common. Nearly one-third of respondents in the total sample had a child with health problems, and 14 percent experienced severe physical domestic violence in the past year. Data from the WES show a similar level of domestic violence among welfare recipients in Michigan. Estimates are much lower for all adult women in the general population (Danziger et al. 2002).

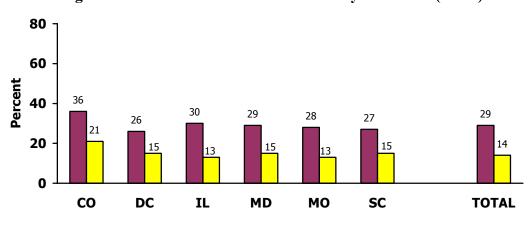


Figure 4 – Prevalence of Personal & Family Liabilities (3 of 3)

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<sup>■</sup> Child with a health problem/special need ■ Severe physical domestic violence in past year

<sup>&</sup>lt;sup>13</sup> A Nebraska study using the CAGE alcohol or drug abuse screener found 17 percent of TANF recipients had a problem with chemical abuse (Ponza et al. 2002). Our diagnostic scales do not measure *abuse*; however, they do measure alcohol and drug *use*, which was higher than dependence in our survey (12 percent report the use of any illegal drug and 10 percent report heavy alcohol use).

**Logistical and Situational Challenges.** Our third category of potential employment liabilities centers on logistical and situational challenges TANF recipients may face. Under this domain, we present results on potential structural barriers to employment such as difficulty with transportation, problems with childcare, housing instability and neighborhood problems. Figure 5 shows that both transportation issues and problems with childcare<sup>14</sup> are common among TANF recipients -- more than 20 percent of respondents face each of these challenges. Similarly, Figure 6 shows that difficulties with housing and neighborhoods are also common. In particular, more than half of respondents in the total sample reported that at least one specific neighborhood issue, such as unemployment, drugs, crime, or run-down buildings and yards, was a big problem in their neighborhood.

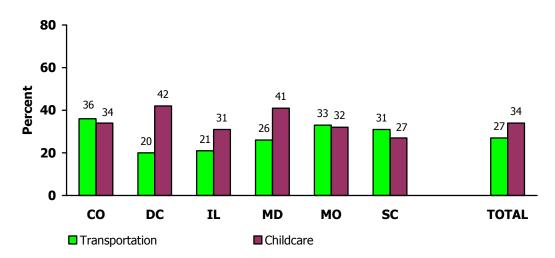
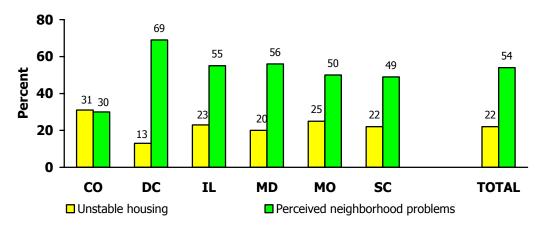


Figure 5 – Prevalence of Logistical & Situational Challenges (1 of 2)





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<sup>&</sup>lt;sup>14</sup> The most common childcare problem identified across the sites was "Couldn't find childcare for times you needed." The second most common was "Caregiver not available or not reliable."

## The Relationship Between Specific Liabilities and Employment:

As Congress works on welfare reauthorization, understanding the relationship between employment liabilities and work has remained of interest to many groups, including policymakers, state welfare administrators and researchers. In the next two sections, we examine this relationship in detail using the pooled survey data and the same set of liabilities previously presented. In the first section, we look at the difference in employment rates for those with or without a particular employment liability. <sup>15</sup> In the second part of our analysis, we consider the same set of liabilities to see if there is still a significant effect on employment status while simultaneously taking other liabilities and relevant characteristics into account.

Table 2 shows the employment status, at the time of the interview, for the combined sample as well as for each individual site. Overall, we find that almost all respondents have worked for pay at some point in time, with 34 percent employed at the time of the interview. In general, this rate is fairly consistent with the rate of 28 percent found in a comparable national sample (Zedlewski 2003) and will be used to measure employment status in this analysis.

Table 2 – Employment Status at Time of Interview (percents)									
CO DC IL MD MO SC TOTAL									
Employed	32	25	39	25	37	33	34		
Not employed; worked during the past year	37	32	35	37	31	30	34		
Not employed; worked more than a year ago	30	38	22	37	31	34	30		
Not employed; never worked	1	5	3	2	1	3	3		

Human Capital Deficits and Employment. In the previous section, we show that human capital deficits are fairly common. Figure 7 shows that employment rates among TANF recipients are consistent across all three liabilities, with about one-fifth of those with low work experience and one-quarter of those performing less than four job skills working. When we look at the relationship between human capital deficits and employment, we find all three human capital liabilities significantly related to work status. For example, one-quarter of recipients with less than a high school diploma and no GED are employed compared 39 percent of recipients who have at least a high school diploma or GED. Other studies that used similar measures of education, work experience and job skills also find all three of these liabilities to be significantly related to employment (Danziger et al. 2000).

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<sup>&</sup>lt;sup>15</sup> For this analysis of employment rates, we controlled only for state of residence.

80 60 Percent 39 38 40 36 27 26 18 20 0 Low work experience\*\* Performed less than 4 Less than HS/GED\*\* iob skills\*\*

■ Without Liability

Figure 7 – Significance of Human Capital Deficits on Employment

\* significant at p < .05\*\* significant at p < .01

Personal and Family Liabilities and Employment. The range of liabilities in the personal and family domain is extensive with greater variation in employment rates compared to human capital deficits (Table 3). In general, differences in employment rates for those with or without a particular liability range from 3 to 19 percentage points. Looking more closely at the relationship between each personal or family liability and employment, we find only three of the personal health liabilities - physical health problem, mental health problem and pregnancy - have a significant relationship with employment status. Similar studies of TANF recipients also reported a significant relationship between employment and physical and mental health problems (Danziger et al. 2000).

In our analysis, we did not find a statistically significant difference in employment status for the remaining personal and family liabilities: chemical dependence, presence of a learning disability, criminal record, child with a special health care need and domestic violence. These findings are generally comparable to other studies of TANF recipients that used similar measures for these personal and family liabilities. For example, studies in Nebraska and Michigan found no statistically significant association between work status and chemical dependence, criminal record and domestic violence (Ponza et al. 2002; Danziger et al. 2000). 16

■ With Liability

<sup>&</sup>lt;sup>16</sup> Having a child with a special health need was significantly related to work status in both Nebraska and Michigan.

Table 3 – Significance of Family &	Personal Lia	bilities on Em	ployment
	With Liability	Without Liability	Significant Difference
Physical health problem	22	37	**
Mental health problem	27	36	**
Pregnant	16	35	**
Chemical dependence	23	34	NS
Possible presence of learning disability	29	34	NS
Criminal record	31	34	NS
Child with a health problem/special need	32	35	NS
Severe physical domestic violence in past year	32	34	NS

Logistical and Situational Challenges and Employment. The logistical and situational liabilities are common among TANF recipients in our sample and all of these liabilities are significantly related to employment status, except for perceived neighborhood problems (Figure 8). Overall, childcare problems are more prevalent than transportation problems and unstable housing (see Figures 5 and 6) and the difference in current employment status for those with and without the particular liability is larger for childcare problems (11 percentage points) than for transportation issues (7 percentage points) or unstable housing (5 percentage points).

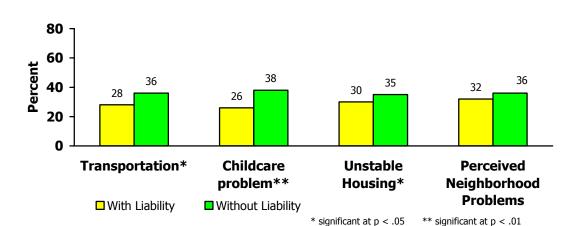


Figure 8 – Significance of Logistical & Situational Challenges on Employment

## **Independent Effect of Liabilities on Employment:**

Our final set of results examines the relationship between each specific liability and employment status, net of all other liabilities measured in the study. Table 4 displays the results of our logistic regression model where employment status at the time of the interview is regressed on the 15 potential employment liabilities included in our study. Although not presented in the table, the model also includes controls for site and demographic characteristics.

While descriptive results in the previous section show that nine separate liabilities are related to employment status, fewer are associated with work independent of other factors. Human capital deficits remain key. While experience with few common job tasks is not significantly related to employment net of other factors, both low education levels and low levels of past work experience remain associated with reduced employment. Within the personal and family domain, health status remains important. This is consistent with our earlier descriptive findings (see Table 3); however, our results show that personal physical health issues, such as physical functioning limitations and pregnancy, are associated with lower employment rates net of other liabilities, while mental health problems are not. Finally, for logistical and situational challenges, only problems with childcare are associated with a lower likelihood of employment net of other relevant factors.

Table 4 – Logistic Regression Model Examining the Independent Effects of								
Particular Employm	Particular Employment Liabilities on Work Status							
<b>Human Capital Deficits:</b>	Coefficient	Standard Error						
Less than High School/No GED	-0.314*	.132						
Low work experience	-0.889***	.188						
Few job tasks	-0.275	.165						
Personal and Family Liabilities:								
Poor physical health	-0.638**	.185						
Mental health problems	-0.296	.161						
Pregnant	-1.327***	.365						
Chemical dependence	-0.517	.391						
Learning disability	0.211	.216						
Criminal record	-0.140	.222						
Child with special health needs	0.023	.143						
Domestic violence	-0.001	.184						
Logistical Challenges:								
Transportation problems	-0.154	.154						
Childcare problems	-0.518**	.142						
Housing instability	0.069	.157						
Neighborhood problems	-0.005	.131						
Constant	0.655*	.282						
Number of observations	2,904	•						

Note: Model includes site-specific controls and demographic controls for age, race/ethnicity and children under age 6. None of the demographic controls are significant in the model. Model is based on data that are weighted to represent the single parent TANF caseload in all six sites and significance testing takes complex survey design into account. Number of observations presented is based on unweighted data.

<sup>\*</sup> Significant at the .05 level

<sup>\*\*</sup> Significant at the .01 level

<sup>\*\*\*</sup> Significant at the .001 level

## **Summary and Conclusion:**

Our research examines the prevalence of 15 potential employment liabilities within three broad domains, and explores the relationship between these liabilities and employment status both descriptively and within a multivariate framework. Table 5 summarizes our findings across all three sets of results. Column 1 identifies prevalence rates of 20 percent or more among the total sample. Columns 2 and 3 indicate a significant descriptive relationship between each liability and work and a significant independent relationship between each liability and work, respectively.

Prevalence of Liability Liability related Independent 20% or more to work effect on work LT High School/No GED Low work experience NS Few job tasks √ Physical health  $\sqrt{}$ Mental health √ NS No  $\sqrt{}$ Pregnant Chemical dependence No NS NS Learning disability No NS NS No NS NS Criminal record  $\sqrt{}$ NS NS Child w/special needs No NS NS Domestic violence **Transportation**  $\sqrt{}$  $\sqrt{}$ Childcare  $\sqrt{}$ √ Housing NS  $\sqrt{}$ NS NS Neighborhood

Table 5 – Summary of Results

Our analyses of prevalence rates shows that all three human capital deficits, three of the more health-related personal and family problems, and all four logistical or situational challenges are more common than other liabilities among TANF recipients in our study.

Fewer of these liabilities, however, are significantly related to work status. Both work experience and education remain critical. Among personal and family issues, physical health remains an important factor; however, while 30 percent of respondents have mental health problems, these problems are not significantly related to employment in our final model. Similarly, the presence of a child with special health needs is fairly common among respondents; yet this family-level responsibility is not significantly related to work for TANF recipients in the study. In contrast, while prevalence rates for pregnancy are low, pregnancy is significantly related to work independent of other liabilities and characteristics.

While we have highlighted several differences between prevalence rates and the relationship between liabilities and work, it is important to discuss consistencies across the three sets of results as well. Which liabilities have higher prevalence rates *and* are significantly associated with employment net of other factors? Of the liabilities that are most consistently related to work in our study, human capital deficits, poor physical health and childcare problems are also among those liabilities that are more common among TANF recipients. In contrast, while pregnancy is related to work status, only a small share of the caseload reports being pregnant.

Overall, our results reinforce the importance of building up employment assets such as work experience and education among TANF recipients. To achieve this, however, our results also suggest that screening and understanding more about physical health issues among recipients, as well as understanding the range of childcare issues that recipients may face, is also very important.

#### References

Danziger, Sandra K., Mary Corcoran, Sheldon Danziger, Colleen Heflin, Ariel Kalil Judith Levine, Daniel Rosen, Kristin Seefeldt, Kristine Siefert, and Richard Tolman. 2000. "Barriers to the Employment of Welfare Recipients." In *Prosperity for All? The Economic Boom and African Americans*, edited by Robert Cherry and William M. Rodgers III. New York: Russell Sage Foundation.

Danziger, Sandra K., Ariel Kalil and Nathaniel J. Anderson. "Human Capital, Health and Mental Health of Welfare Recipients: Co-Occurrence and Correlates." *Journal of Social Issues*, 54 (4): 637-656.

Danziger, Sandra K. and Kristin S. Seefeldt. 2002. "Barriers to Employment and the "Hard to Serve": Implications for Services, Sanctions, and Time Limits." *Focus*, 22 (1): 76-81.

Dasinger, Lisa K., Richard Speiglman, and Jean C. Norris. 2002. *Alameda County CalWORKS Needs Assessment and Outcomes Study: The Relationship of Barriers, Supportive Services, Income, and Health Insurance with Work and Welfare over 27 Months*. Berkeley, CA: Public Health Institute.

Dunton, Nancy. 2003. Economic Status and Barriers to Work Missouri TANF Leavers and TANF Recipients: Findings from the 2001-2002 Survey. Missouri Department of Social Services.

Holzer, Harry. 1996. What Employers Want: Job Prospects for Less Educated Workers. New York: Russell Sage Foundation.

Jayakody, Rukmalie, Sheldon Danziger and Harold Pollack. 2000. "Welfare Reform, Substance Use, and Mental Health." *Journal of Health Politics, Policy and Law*, 25 (4): 623-651.

Jayakody, Rukmalie, Sheldon Danziger, Kristin S. Seefeldt and Harold Pollack. 2004. "Substance Abuse and Welfare Reform." *National Poverty Center Policy Brief Number* 2. Ann Arbor, Michigan: Gerald R. Ford School of Public Policy.

Kirby, Gretchen, Thomas Fraker, LaDonna Pavetti, and Martha Kovac. 2003. *Families on TANF in Illinois: Employment Assets and Liabilities*. Washington DC: Mathematica Policy Research.

National Center for Health Statistics. 2003. "Early Release of Selected Estimates Based on Data from the January-March 2003 National Health Interview Survey." <a href="http://www.cdc.gov/nchs/about/major/nhis/released200406.htm#13">http://www.cdc.gov/nchs/about/major/nhis/released200406.htm#13</a>.

Ponza, Michael, Alicia Meckstroth, and Jennifer Faerber. 2002. *Employment Experiences and Challenges Among Urban and Rural Welfare Clients in Nebraska*. Princeton, NJ: Mathematica Policy Research.

Straus, M.A. and R. J. Gelles. 1986. "Societal Change and Change in Family Violence from 1975 to 1985 as Revealed by Two National Surveys." *Journal of Marriage and the Family*, 48: 465-479.

U.S. Bureau of the Census, "Educational Attainment in the United States: March 2003," *Current Population Report* P20-550.

U.S. Department of Health and Human Services. 2004. *Indicators of Welfare Dependence Annual Report to Congress 2004*. Washington, DC.

Ware, John E., Kristin K. Snow, Mark Kosinski, and Barbara Gandek. 2000. *SF-36 Health Survey: Manual and Interpretation Guide*. Lincoln, Rhode Island: QualityMetric Incorporated.

Zedlewski, Sheila. 2003. "Work and Barriers to Work among Welfare Recipients in 2002." *Snapshots of America's Families III Number 3*. Washington DC: The Urban Institute.

Zedlewski, Sheila R. and Donald Alderson. 2001. "Do Families on Welfare in the Post-TANF Era Differ from Their Pre-TANF Counterparts?" Assessing the New Federalism Discussion Paper. Washington, DC: The Urban Institute.

## Appendix A

**Table A1 - Characteristics of the Heads of Single-Parent TANF Cases** 

	CO	DC	IL	MD	MO	SC	All States
Gender							
Female	96.0%	98.0%	99.1%	96.7%	94.7%	98.1%	97.1%
Age							
Younger than 25							
years	37.0%	29.0%	35.5%	33.9%	32.7%	41.0%	34.4%
25 to 34 years	34.5%	37.7%	34.7%	34.4%	44.6%	36.7%	38.1%
35 years or older	28.0%	33.2%	29.6%	31.6%	22.6%	22.0%	27.4%
Race/Ethnicity							
White, non-Hispanic African American,	35.6%	0.5%	10.2%	11.9%	39.1%	24.1%	20.8%
non-Hispanic Other/multi-ethnic,	18.2%	96.1%	78.6%	81.8%	52.7%	71.9%	69.3%
non-Hispanic	9.8%	2.3%	1.9%	4.1%	5.1%	2.1%	3.7%
Hispanic	36.5%	1.1%	9.3%	2.2%	2.4%	1.8%	6.0%
Marital Status							
Never married Married or living with	46.0%	80.2%	69.4%	69.8%	53.5%	64.7%	64.3%
partner Separated, divorced,	21.0%	11.0%	31.1%	12.5%	27.1%	8.3%	16.8%
or widowed	32.5%	8.8%	17.4%	17.7%	19.3%	27.0%	18.8%
Has a child under the							
age of 6	71.1%	70.6%	73.7%	65.2%	71.4%	67.9%	70.7%
Sample Size	521	420	416	819	323	1120	3619

## Appendix B

This appendix describes the weights used for our pooled data analysis. For all six sites, administrative data on sample respondents and non-respondents were available. Administrative data on characteristics of the *full population*, however, were only available for half of the sites (Colorado, Illinois, and Missouri). Hence, slightly different weighting procedures were used for those sites with more limited data (the District of Columbia, Maryland, and South Carolina).<sup>17</sup>

We followed three basic steps in creating weights for each of the six sites. First, we created sampling adjustments to account for the number of TANF recipients in the full population represented by each individual survey respondent. Second, we adjusted for potential non-response bias, and third, we constructed post-stratification weighting adjustments for potential population non-coverage. The final weights are a product of these three steps.

#### Colorado:

**Step 1 Sampling Adjustment.** Step 1 adjusts the survey sample to the sampling frame by taking the inverse of the probability of selection. Colorado over sampled long-term TANF recipients and accordingly we calculate separate sampling adjustments for long-term recipients (4.12) and all other recipients (10.29).

**Step 2 Response Rate Adjustment.** This step adjusts for cases in the sample that did not complete an interview. We calculate four separate adjustments based on residence in Denver or the rest of the state and whether or not the respondent was a long-term TANF recipient. These variables were chosen based on a model that regressed recipient characteristics on the probability of survey response. By taking the inverse of the survey response rate for these four cells we calculate four adjustments:

- 1. Rest of Colorado & not a long-term recipient = 1.64
- 2. Rest of Colorado & long-term recipient = 1.76
- 3. Denver & not a long-term recipient = 1.49
- 4. Denver & long-term recipient = 1.29

**Step 3 Post-Stratification Adjustment.** To adjust for population coverage issues, we calculate the ratio of cases in the sampling frame to the weighted survey respondents (based on the product of step 1 and step 2 above) within 4 cells defined by two variables: residence in Denver or the rest of the state, and having 0 or 1 children or 2 or more children. The values for the post-stratification adjustment range from .86 to 1.21.

**Final Weight.** The final survey weights for Colorado are the product of step 1, step 2, and step 3 adjustments as shown in Tables B1 and B2.

<sup>17</sup> For the District of Columbia, Maryland, and South Carolina, only population totals by study strata were available.

Table B1 – Final Weight Adjustments for Long-Term Recipients in Colorado Long-Term Recipients Denver Metro Area Rest of State <2 Kids 2+ Kids <2 Kids 2+ Kids Sampling Adjustment 4.12 4.12 4.12 4.12 Response Rate 1.29 1.29 1.76 1.76 Adjustment Post-Stratification .99 .86 .97 1.21 Adjustment Final Weight<sup>18</sup> 4.57 5.26 7.03 8.77

Table B2 – Final Weig	ht Adjustmen	ts for Other Reci	ipients in Colorad	0				
_	Other Recipients							
_	Denver N	Ietro Area	Rest of	f State				
	<2 Kids	2+ Kids	<2 Kids	2+ Kids				
Sampling Adjustment	10.29	10.29	10.29	10.29				
Response Rate Adjustment	1.49	1.49	1.64	1.64				
Post-Stratification Adjustment	.86	.99	.97	1.21				
Final Weight <sup>18</sup>	13.19	15.18	16.37	20.42				

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<sup>&</sup>lt;sup>18</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

#### Illinois:

**Step 1 Sampling Adjustment.** Step 1 adjusts the survey sample to the sampling frame by taking the inverse of the probability of selection. Cook County was sampled at a higher rate than downstate resulting in two adjustments: 62.93 and 63.09, respectively.

**Step 2 Response Rate Adjustment.** This step adjusts for cases in the sample that did not complete an interview. Two adjustments are calculated based on whether or not a TANF recipient was sampled from Cook County or Downstate. By taking the inverse of the survey response rate for these two areas, we have two separate adjustments factors:

- 1. Cook County = 1.28
- 2. Downstate = 1.25

**Step 3 Post-Stratification Adjustment.** To adjust for population coverage issues, we calculate the ratio of cases in the sampling frame to the weighted survey respondents (based on the product of step 1 and step 2 above) within 5 cells based on the following variables: Positive or zero TANF benefit, residence in Cook County or Downstate, and respondents younger than 29 years or 29 years and older. For the purposes of calculating this adjustment, the recipients with zero TANF benefits are collapsed into only one cell because the number of cases is too small to support additional stratification.

**Final Weight.** The final survey weights for Illinois are the product of step 1, step 2, and step 3 adjustments as shown in Tables B3 and B4.

Table B3 – Final Weight Adjustments for Recipients in Cook County Illinois								
_	Cook County							
_	Zero TAI	NF Benefit	Positive TA	NF Benefit				
	Age<29	Age 29+	Age<29	Age 29+				
Sampling Adjustment	62.93	62.93	62.93	62.93				
Response Rate Adjustment	1.28	1.28	1.28	1.28				
Post-Stratification Adjustment	1.19	1.19	.86	1.16				
Final Weight <sup>19</sup>	95.96	95.96	69.17	93.60				

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<sup>&</sup>lt;sup>19</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

Table B4 – Final Weight Adjustments for Recipients in Downstate Illinois									
_	Downstate								
_	Zero TAI	NF Benefit	Positive TA	NF Benefit					
_	Age<29	Age 29+	Age<29	Age 29+					
Sampling Adjustment	63.09	63.09	63.09	63.09					
Response Rate Adjustment	1.25	1.25	1.25	1.25					
Post-Stratification Adjustment	1.19	1.19	.89	1.25					
Final Weight <sup>20</sup>	93.48	93.48	70.38	98.24					

#### Missouri:

**Step 1 Sampling Adjustment.** Step 1 adjusts the survey sample to the sampling frame by taking the inverse of the probability of selection. In Missouri, the sampling adjustment value is 58.83.

**Step 2 Response Rate Adjustment.** This step adjusts for cases in the sample that did not complete an interview. We calculate four separate adjustments based on whether or not a case was active and if a case had 2 or more children or less than 2 children. These variables were chosen based on a model that regressed recipient characteristics on the probability of survey response. By taking the inverse of the survey response rate for these four cells we calculate four adjustments:

- 1. Case is not active & 2 or more kids = 2.09
- 2. Case is not active & 0 or 1 kids = 2.04
- 3. Case is active & 2 or more kids = 1.43
- 4. Case is active & 0 or 1 kids = 1.87

**Step 3 Post-Stratification Adjustment.** To adjust for population coverage issues, we calculate the ratio of cases in the sampling frame to the weighted survey respondents (based on the product of step 1 and step 2 above) within 6 cells. Three variables define these cells: age less than 29 or age equals 29 years or older, urban or rural residence, and having 0 or 1 children or 2 or more children. For this step, respondents age 29 or older

2

<sup>&</sup>lt;sup>20</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

are collapsed into only urban or rural categories because the number of cases is too small to support additional stratification.

Final Weight. The final survey weights for Missouri are the product of step 1, step 2, and step 3 adjustments as shown in Tables B5 and B6.

				Uı	rban			
		Case is	Active			Case is N	Not Activ	ve
	Age	<29	Age	29+	Ag	ge<29	Age 29+	
	<2 Kids	2+ Kids	<2 Kids	2+ Kids	<2 Kids	2+ Kids	<2 Kids	2+ Kids
Sampling Adjustment	58.83	58.83	58.83	58.83	58.83	58.83	58.83	58.83
Response Rate Adjustment	1.87	1.43	1.87	1.43	2.04	2.09	2.04	2.09
Post-Stratification Adjustment	.95	.92	.92	.92	.95	.92	.92	.92
Final Weight <sup>21</sup>	104.5	77.4	101.2	77.4	114.0	113.1	110.4	113.1

<sup>&</sup>lt;sup>21</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

Table B6 – Final Weig	ght Adju	ıstment	s for Ru	ıral Reci	pients in	Missou	ri		
				R	ural				
	Ze	ero TAN	F Benef	ĭt	Po	sitive TA	ANF Ber	Benefit	
	Age	<29	Age	29+	Ag	Age<29		e 29+	
	<2 Kids	2+ Kids	<2 Kids	2+ Kids	<2 Kids	2+ Kids	<2 Kids	2+ Kids	
Sampling Adjustment	58.83	58.83	58.83	58.83	58.83	58.83	58.83	58.83	
Response Rate Adjustment	1.87	1.43	1.87	1.43	2.04	2.09	2.04	2.09	
Post-Stratification Adjustment	1.06	1.01	1.28	1.28	1.06	1.01	1.28	1.28	
Final Weight <sup>22</sup>	116.6	85.0	140.8	107.7	127.2	124.2	153.6	157.2	

#### **District of Columbia:**

**Step 1 Sampling Adjustment.** Step 1 adjusts the survey sample to the sampling frame by taking the inverse of the probability of selection. In the District of Columbia, the sampling adjustment factor is 20.48.

**Step 2 Response Rate Adjustment.** This step adjusts for cases in the sample that did not complete an interview. We calculate five separate adjustments based on the probability of survey response. The five survey response probability cells were chosen based on a model that regressed available recipient characteristics on the probability of survey response. By taking the inverse of the survey response rate for these five cells we calculate the following five adjustments:

- 1. Survey Response Probability Strata 1= 1.23
- 2. Survey Response Probability Strata 2= 1.34
- 3. Survey Response Probability Strata 3= 1.37
- 4. Survey Response Probability Strata 4= 1.47
- 5. Survey Response Probability Strata 5= 1.69

2

<sup>&</sup>lt;sup>22</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

**Step 3 Post-Stratification Adjustment.** To adjust for population coverage issues, we calculate the ratio of cases in the sampling frame to the weighted survey respondents (based on the product of step 1 and step 2 above). For DC the ratio is 1.

**Final Weight.** The final survey weights for DC are the product of step 1, step 2, and step 3 adjustments as shown in Table B7.

Table B7 – Final Weight Adjustments for Recipients in the District of Columbia									
	Survey Response Probability Strata 1	Survey Response Probability Strata 2	Survey Response Probability Strata 3	Survey Response Probability Strata 4	Survey Response Probability Strata 5				
Sampling Adjustment	20.48	20.48	20.48	20.48	20.48				
Response Rate Adjustment	1.23	1.34	1.37	1.47	1.69				
Post-Stratification Adjustment	1	1	1	1	1				
Final Weight <sup>23</sup>	25.16	27.43	28.00	30.18	34.65				

## Maryland:

**Step 1 Sampling Adjustment.** Step 1 adjusts the survey sample to the sampling frame by taking the inverse of the probability of selection. Maryland stratified their sample by geography. Accordingly, we calculate separate sampling adjustments for recipients in Baltimore City (17.86) and recipients in the rest of the state (9.83).

**Step 2 Response Rate Adjustment.** This step adjusts for cases in the sample that did not complete an interview. We calculate five separate adjustments based on the probability of survey response. The five survey response probability cells were chosen based on a model that regressed available recipient characteristics on the probability of survey response. By taking the inverse of the survey response rate for these five cells we calculate the following five adjustments:

- 1. Survey Response Probability Strata 1= 1.29
- 2. Survey Response Probability Strata 2= 1.32
- 3. Survey Response Probability Strata 3= 1.40
- 4. Survey Response Probability Strata 4= 1.44

Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

## 5. Survey Response Probability Strata 5= 1.60

Step 3 Post-Stratification Adjustment. To adjust for population coverage issues, we calculate the ratio of cases in the sampling frame to the weighted survey respondents (based on the product of step 1 and step 2 above) within each original survey strata. For Maryland the ratio is 1.01 for recipients in Baltimore and .99 for recipients in the rest of the state.

Final Weight. The final survey weights for Maryland are the product of step 1, step 2, and step 3 adjustments as shown in Tables B8 and B9.

			Baltimore		
	Survey Response	Survey Response	Survey Response	Survey Response	Survey Response
	Probability Strata 1	Probability Strata 2	Probability Strata 3	Probability Strata 4	Probability Strata 5
Sampling Adjustment	17.86	17.86	17.86	17.86	17.86
Response Rate Adjustment	1.29	1.32	1.40	1.44	1.60
Post-Stratification Adjustment	1.01	1.01	1.01	1.01	1.01
Final Weight <sup>24</sup>	23.41	23.84	25.30	26.01	28.96

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<sup>&</sup>lt;sup>24</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

Table B9 – Final Weight Adjustments for Maryland Recipients in the Rest of State								
	Rest of State							
	Survey Response Probability Strata 1	Survey Response Probability Strata 2	Survey Response Probability Strata 3	Survey Response Probability Strata 4	Survey Response Probability Strata 5			
Sampling Adjustment	9.83	9.83	9.83	9.83	9.83			
Response Rate Adjustment	1.29	1.32	1.40	1.44	1.60			
Post-Stratification Adjustment	.99	.99	.99	.99	.99			
Final Weight <sup>25</sup>	12.53	12.76	13.54	13.92	15.50			

#### **South Carolina:**

**Step 1 Sampling Adjustment.** Step 1 adjusts the survey sample to the sampling frame by taking the inverse of the probability of selection. South Carolina stratified their sample by TANF case type. Accordingly, we calculate separate adjustments for timelimited recipients with fewer than 24 months on TANF (14.00), recipients with temporary exemptions from the work requirements (3.77), recipients with extensions of the state's 24-month time limit (1.00), and recipients of unknown status (3.72).

**Step 2 Response Rate Adjustment.** This step adjusts for cases in the sample that did not complete an interview. We calculate six separate adjustments based on the probability of survey response. The six survey response probability cells were chosen based on a model that regressed available recipient characteristics on the probability of survey response. By taking the inverse of the survey response rate for these six cells we calculate six adjustments:

- 1. Survey Response Probability Strata 1= 1.20
- 2. Survey Response Probability Strata 2= 1.26
- 3. Survey Response Probability Strata 3= 1.31
- 4. Survey Response Probability Strata 4= 1.41
- 5. Survey Response Probability Strata 5= 1.49
- 6. Survey Response Probability Strata 6= 1.80

<sup>25</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

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**Step 3 Post-Stratification Adjustment.** To adjust for population coverage issues, we calculate the ratio of cases in the sampling frame to the weighted survey respondents (based on the product of step 1 and step 2 above) within each original survey strata. For time-limited recipients with fewer than 24 months on TANF the ratio is 1.00. For recipients with temporary exemptions from the work requirements the ratio is also 1.00. For recipients with extensions of the state's 24-month time limit the ratio is 1.03, and for recipients of unknown status the ratio is .93.

**Final Weight.** The final survey weights for South Carolina are the product of step 1, step 2, and step 3 adjustments as shown in Tables B10, B11, B12 and B13 below.

	Time-Limited Recipients							
	Survey	Survey	Survey	Survey	Survey	Survey		
	Response	Response	Response	Response	Response	Response		
	Probability	Probability	Probability	Probability	Probability	Probability		
	Strata 1	Strata 2	Strata 3	Strata 4	Strata 5	Strata 6		
Sampling Adjustment	14.00	14.00	14.00	14.00	14.00	14.00		
Response Rate Adjustment	1.20	1.26	1.31	1.41	1.49	1.80		
Post- Stratification Adjustment	1.00	1.00	1.00	1.00	1.00	1.00		
Final Weight <sup>26</sup>	16.68	17.55	18.26	19.69	20.73	25.12		

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<sup>&</sup>lt;sup>26</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

Table B11 – Final Weight Adjustments for South Carolina Recipients with Exemptions Recipients with Temporary Exemptions from Work Requirements Survey Survey Survey Survey Survey Survey Response Response Response Response Response Response Probability Probability Probability Probability Probability Probability Strata 2 Strata 4 Strata 6 Strata 1 Strata 3 Strata 5 Sampling 3.77 3.77 3.77 3.77 3.77 3.77 Adjustment Response Rate 1.20 1.26 1.31 1.41 1.49 1.80 Adjustment Post-Stratification 1.00 1.00 1.00 1.00 1.00 1.00 Adjustment Final 4.52 4.76 4.95 5.34 5.62 6.81 Weight<sup>27</sup>

Table B12 – Final Weight Adjustments for South Carolina Time-Limit Extensions								
	Recipients with Time-Limit Extensions							
	Survey Response Probability Strata 1	Survey Response Probability Strata 2	Survey Response Probability Strata 3	Survey Response Probability Strata 4	Survey Response Probability Strata 5	Survey Response Probability Strata 6		
Sampling Adjustment	1.00	1.00	1.00	1.00	1.00	1.00		
Response Rate Adjustment	1.20	1.26	1.31	1.41	1.49	1.80		
Post- Stratification Adjustment	1.03	1.03	1.03	1.03	1.03	1.03		
Final Weight <sup>27</sup>	1.23	1.30	1.35	1.46	1.53	1.86		

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<sup>&</sup>lt;sup>27</sup> Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.

Table B13 – Final Weight Adjustments for South Carolina Recipients of Unknown Status								
	Recipients of Unknown Status							
	Survey Response Probability Strata 1	Survey Response Probability Strata 2	Survey Response Probability Strata 3	Survey Response Probability Strata 4	Survey Response Probability Strata 5	Survey Response Probability Strata 6		
Sampling Adjustment	3.72	3.72	3.72	3.72	3.72	3.72		
Response Rate Adjustment	1.20	1.26	1.31	1.41	1.49	1.80		
Post- Stratification Adjustment	.93	.93	.93	.93	.93	.93		
Final Weight <sup>28</sup>	4.16	4.37	4.55	4.91	5.17	6.26		

Due to rounding, the final weights presented in the table may not equal the product of the sampling adjustments, response rate adjustments and post-stratification adjustments presented in the table.