Meeting Welfare's Work Participation Requirements and Transitioning into the Labor Market

A Study of the Outcomes of TANF Recipients

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1. Executive Summary

The primary goal of the federal welfare program known as Temporary Assistance for Needy Families (TANF) is to provide temporary financial assistance to families with very low incomes under the condition that recipients will engage in activities designed to assist them in transitioning into employment and self-sufficiency. However, those in TANF constitute a population generally acknowledged as "hard-to-serve" due to the large number of barriers that prevent individuals from satisfying work participation requirements and entering into employment. These two problems, the low work participation rate and the low rate of successful transitions into economic self-sufficiency, served as the foci for the research contained in this report.

Although most of the policy discussion surrounding TANF tends to focus on the behavior of TANF recipients during their time within the program, the broader intention of the TANF statute is the attainment of economic self-sufficiency. Becoming economically self-sufficient depends not only on securing employment, but on earning wages that are high enough to afford the basic necessities associated with a minimum standard of living. Accordingly, determining which TANF-related services have the greatest impacts on earnings is a policy issue of central importance. The major findings from the research were the following:

- The on-the-job training service had the largest impact on the two-year sum of earnings after TANF, producing an expected increase of $3,433 for a person with the average number of hours in the service.

- Two of the educational job training services, AS/BS degree and occupational training, led to positive increases in expected wages with increases of $1,760 and $1,014, respectively.

- The service groups of life skills, problem solving assessments, and general assessments all exhibited significant negative relationships to future earnings. These services are not countable toward satisfying work participation, but they do indicate some of the barriers to employment that TANF recipients face.

- Child care services received during the two years after TANF were associated with a large positive increase in future earnings, helping the average person earn an additional $10,477 over two years.

While the problem of facilitating economic self-sufficiency continues to be an important policy issue, even greater attention has recently focused on the problem of low work participation rates. All states are required to have at least 50 percent of their TANF recipients meet the work participation requirements. Very few states have been able to achieve this rate. At stake is the possible loss of a portion of the TANF block grant for states that do not achieve this standard. With the aim of finding a solution to the problem of low work participation, this study examined a large number of factors to discover which were strongly associated with successfully meeting the participation requirements. The most important findings were the following:

- The job search and job readiness services, which are typically associated with "work-first" welfare-to-work strategies, demonstrated a strong, positive relationship to meeting work participation requirements.

- Two of the educational job training services, AS/BS degree and occupational training, and the unpaid internship training service all exhibited significant positive impacts of the probability of satisfying work participation.

- Receiving child care services while in TANF had by far the strongest impact on the probability of meeting the participation requirements, increasing the probability for the average person by 26.6 percentage points.

- The work participation rate was found to be strongly related to future employment with a 100 percent participation rate leading to an expected increase in employment of 14 weeks over those who never meet the requirements.

The research in this report was undertaken to gain a better understanding of Utah's TANF population and to determine the impacts of services provided by Utah's Department of Workforce Services (DWS) on customer outcomes in order to better inform policy. The most significant policy implications were the following:

- Receiving child care services is strongly associated with successfully meeting participation and higher levels of earnings after TANF. Of all the services examined, expanding the availability of child care services is predicted to make the largest positive impacts on these outcomes.

- The two job training services associated with formal classroom training, AS/BS degrees and occupational training, both improved the probability of meeting participation and increased future earnings.

- Given the large percentage of individuals in need of physical, mental, substance abuse, or domestic violence treatment and the strong negative correlations between these treatments and labor market outcomes suggest that many of these individuals may not be "work ready." Including these individuals lowers the work participation rate and the rate of successful transitions into employment below a level consistent with the true "work ready" population.

2. Overview

When TANF became law in 1996, welfare recipients were required to engage in work participation activities and states were required to have 50 percent of their TANF cases meet these participation requirements. The intention of requiring individuals to engage in these activities was to assist individuals in gaining employment and becoming economically self-sufficient. However, the rates at which TANF recipients meet the participation requirements and transition into employment consistent with economic self-sufficiency are disappointingly low. This chapter provides an overview that begins with a more detailed characterization of these issues in order to provide a context that highlights the importance of the questions this research seeks to answer. The data used in this research essentially constitutes a census of first-time TANF recipients in Utah and some of the aspects of this data set are subsequently described. Finally, the TANF population is compared to the general population in Utah for the purpose of illustrating the significant differences between these populations.

2.1   Context of the Research

Welfare reform was effectively achieved in 1996 when the original welfare program that dated back to the Great Depression, Families with Dependent Children (AFDC), was replaced by TANF. Among the new features introduced through this reform was the requirement that recipients engage in work-related activities intended to assist them in securing employment. In the language of the TANF statute, this requirement is referred to as the work participation requirement and the ratio of recipients who meet the requirement to the total caseload is referred to as the work participation rate. Individuals who do not satisfy the work participation requirements can be sanctioned.[1] At the state level, if the overall work participation rate falls below 50 percent, states can be penalized through a reduction in their TANF block grant.

The vast majority of states have never had a work participation rate of 50 percent or higher from the inception of the program to the present. In the most recent data from the U.S. Department of Health and Human Services (2011), only eight states

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[1] The severity of sanctions varies by state. At time this report was written, Utah's initial sanction for noncompliance with the participation requirements is a one-month suspension in benefits for the entire family with reinstatement conditional on satisfying work requirements for a trial period.

Figure 2.1. TANF Caseload for Utah, January 1990 – June 2012
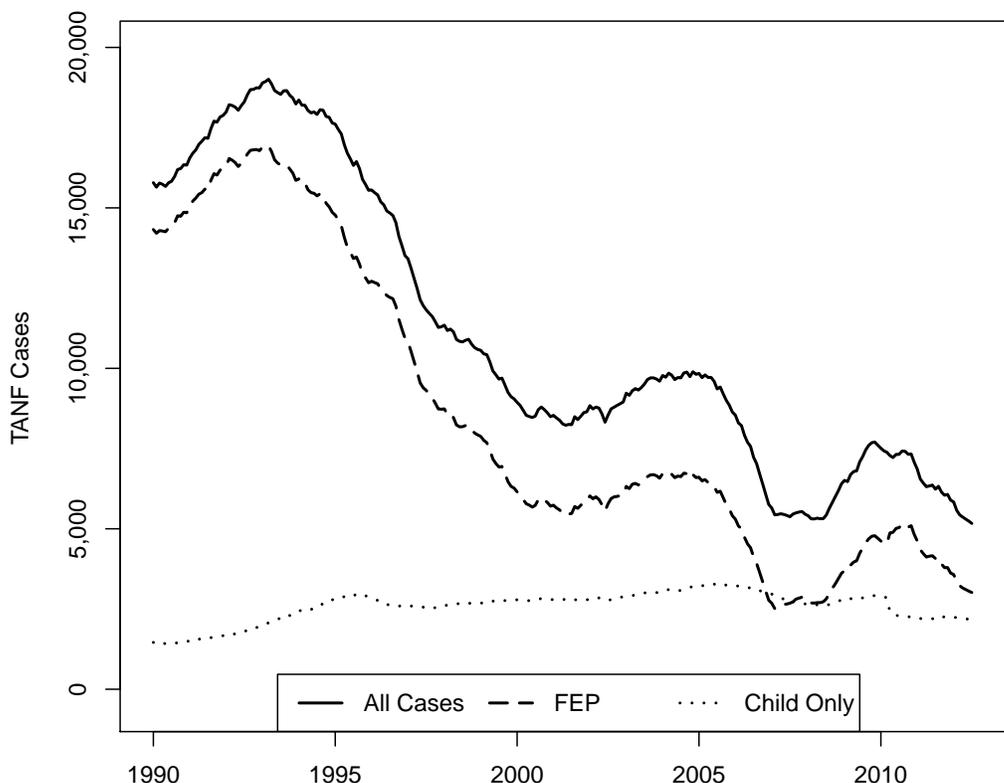
had achieved a work participation rate of 50 percent or higher during the fiscal year 2009. In that same year, Utah's rate was just under 33 percent (DHHS, 2011). More generally, in the 13 years from 1997 to 2009, the average work participation rate for the United States has never been above 40 percent and in most years it is below 35 percent.[2]

In light of the fact that work participation rates are generally below the 50 percent requirement, it might be puzzling that only a small number of states have ever faced the threat of losing a portion of their block grant. The explanation for this apparent paradox is that states are given a caseload reduction credit that is essentially added to the actual work participation rate. Figure 2.1 shows the overall downward trend in Utah's TANF caseload. In Utah, those who are considered capable of working are enrolled in a Family Employment Plan (FEP), so the dashed line in Figure 2.1 approximates the portion of TANF recipients subject to the work participation requirements. The year originally chosen as the base year for measuring the reduction

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[2]A complete listing of the work participation rates for all states can be found at the following link: http://www.acf.hhs.gov/programs/ofa/particip/indexparticip.htm

in caseload was 1995. As the figure reveals, it is easy to see how Utah could satisfy its federal program requirements even when having an actual work participation rate that was well below 50 percent.

While satisfying the work participation rate for the majority of states has been a challenge, it has become even more difficult over the last six years. When TANF was reauthorized through the Deficit Reduction Act of 2005, the base year for measuring caseload reduction was moved to 2005 (Pavetti et al., 2008). With the rise in unemployment due to the Great Recession, which increased the caseloads in most states, the size of the caseload reduction credit was dramatically reduced. Furthermore, the Deficit Reduction Act required states to implement strict verification procedures to ensure that TANF recipients were actually engaging in the required activities in their employment plans. These verification procedures became effective in Utah in October 2006. These modifications to the TANF statute have effectively made it more difficult for states to meet the federal requirements of the program. The State of Ohio was recently threatened with a significant deduction to their future block grant for not meeting the participation requirements (Ohio changing welfare, 2011). In the future, more states will likely face penalties as a result of these new rules.

Given that states face significant penalties if they cannot achieve a work participation rate of at least 50 percent and the fact that very few states have been able to meet the required rate, determining how to improve the work participation rate is an issue of crucial importance for state TANF administrators. This problem is one of the primary questions this research seeks to address. Using administrative data on TANF recipients collected by DWS, a large number of variables capturing information on demographic and economic characteristics as well as services received from DWS were analyzed to determined their relationships to the satisfaction of participation requirements. One of the primary interests was to discover which DWS services are most strongly associated with successfully meeting work participation requirements. The results of this part of the study are explicated in Chapter 4.

While having TANF recipients meet the work participation requirements is one goal, an ultimately more important goal is to assist recipients in securing employment in jobs with wages that can accommodate economic self-sufficiency. The question of what factors are associated with improving the earnings of TANF recipients after leaving the program was the other one this research sought to answer. A full discussion of the analysis of DWS services and post-TANF earnings is found in Chapter 3.

2.2   Data Used for the Research

In order to capture the largest number of individuals possible while utilizing only the highest quality data, a data set was formed that included all first-time TANF recipients who had entered the program between January 1, 2003 to December 31, 2007. All individuals were enrolled in FEP (i.e., they were subject to the work participation requirements). It was desirable to restrict the data to only first-time recipients be-

cause this eliminated the possibility that some individuals left the program because their benefits were exhausted. This narrows the reasons for leaving the program to explanations that are more closely aligned with individual determination rather than exclusion due to exhaustion of benefits.

For each person who entered TANF during this time, data was compiled over a five-year observation period starting two years prior to entering TANF and extending three years beyond this entry point. This data consisted primarily of observations on formal wage and salary employment and earnings, receipt of public assistance (i.e., food stamps, child care, and Medicaid), unemployment insurance benefits payments, and various pre-TANF services provided by DWS. The information collected two years prior to entry into TANF was used to control for the effects of past services received and past labor force attachment. Because a central concern of this research is to gauge the impacts of DWS services on employment and earnings, it is necessary to observe labor market outcomes for several years after receiving services in order to measure their true long-term impacts. Thus, for individuals who entered TANF in December 2007, their employment and earnings data extends to the end of 2011, which was the most recent information available when this data set was compiled. Demographic and social characteristics were collected when individuals were initially assessed upon entering the program.

All of the individuals were essentially centered at the point of entry into TANF so that every person would have a full five years of observational data, thereby making them comparable. The data was used in different ways depending on the nature of the question of interest. In the analysis of earnings, the primary interest was looking at formal wage and salary earnings after leaving TANF. In the examination of the relationships between various characteristics and satisfying the participation requirements, the focus was on the participation indicator while the individuals were in the program. Because the main questions of interest were distinctly different, they required different analytic strategies and relied upon different subsets of data.

2.3   Characteristics of the TANF Population

While administrators and policy analysts associated with the TANF program understand the uniqueness of the TANF population, a large share of the public may not know how different these individuals are in comparison to the general population. It is not an overstatement to say that the TANF population is the most economically disadvantaged group in society. Even though many of these demographic differences are not directly associated with why this group is disadvantaged, several characteristics, particularly previous labor market attachment and earnings, are strongly associated with their current economic situation.

Welfare, whether under AFDC or TANF, has always been primarily intended to provide assistance to single mothers with dependent children. As Table 2.1 indicates, roughly 84 percent of all first-time TANF recipients between 2003 and 2007 were

Table 2.1. Demographics of TANF Recipients in Utah

	First-Time TANF Recipients 2003–07	Utah Population ACS 2006–08
Gender		
Female	83.6%	49.5%
Male	16.4%	50.5%
Race		
White	78.6%	90.0%
Black	4.9%	1.0%
Asian	1.3%	2.0%
Native American	5.2%	1.1%
Pacific Islander	1.8%	0.8%
Two or More Races	2.5%	2.0%
Other Race or Unknown	5.8%	3.1%
Ethnicity		
Hispanic	13.6%	11.5%
Age	Median	Median
At start of TANF	25.0	28.5
Household Size	Mean	Mean
Number of occupants	2.8	3.1

Sources: Utah Department of Workforce Services; U.S. Census Bureau

women. This is largely the result of single women being more frequently the custodial parent. Some TANF recipients are single male parents, but, as the table reveals, these individuals make up a much smaller proportion of the TANF population.

Racial and ethnic characteristics are in some cases different between TANF recipients and the general population. Blacks, Native Americans, and Hispanics are slightly more likely to find themselves in TANF than other groups, but these differences are relatively small. As the statistics in Table 2.1 show, the notion that the vast majority of TANF recipients in Utah is non-white is a myth. Of the 13,515 individuals represented in the table, over 10,600 were white.

The average age and average household size of TANF recipients are lower than the corresponding averages for the general population of Utah. Very few elderly people are in TANF. Only four individuals in the data set were older than 65, which explains in part the lower average age. One reason for this is that few elderly individuals have dependent children. Another reason is that the elderly can qualify for Social Security, which exempts them from TANF eligibility. The smaller average household size is explained by the fact that there is a much higher percent of single-parent households within TANF compared to the general population. As Table 2.2 reveals, only about 12 percent of females 15 or older in TANF are married, while approximately 56 percent

Table 2.2. Marital Status of TANF Recipients in Utah

	First-Time TANF Recipients 2003–07	Utah Population ACS 2006–08
Males 15 Years or Over		
Married	52.4%	56.9%
Never Married	16.6%	32.2%
Separated	11.9%	1.1%
Widowed	1.2%	1.6%
Divorced	18.0%	8.2%
Females 15 Years or Over		
Married	11.6%	56.4%
Never Married	46.1%	25.9%
Separated	24.0%	1.4%
Widowed	0.7%	6.2%
Divorced	17.7%	10.1%

Sources: Utah Department of Workforce Services; U.S. Census Bureau

of the females in the general population are married. Another major difference is that 46 percent of women in TANF have never been married as compared to only 26 percent in the general population. The percent of married men in TANF is close to that of the general population, but a larger share of them have been married at some previous time with their marriages ending in divorce or separation. Similarly, women in TANF have a higher rate of marriages ending in divorce or separation as compared to the total population.

In contrast to the characteristics mentioned above, the employment and earnings data offer some of the strongest explanatory reasons for why these individuals end up in TANF. In each quarter two years before entering into TANF, less that 45 percent of all TANF recipients are employed. Earnings for those with at least some employment never average above $3,000 per quarter in the two years before TANF. By comparison, a full-time worker earning minimum wage will receive $15,080 per year. Even at full-time employment, the minimum wage is not sufficient to raise a single mother with one dependent child under 18 above the 2011 U.S. Census Bureau's poverty threshold of $15,504. The rate of employment does increase slightly in the three years after entering TANF, but it never rises about 52 percent in any quarter. The average wage for those with some employment does increase to nearly $4,000 by the 12th quarter after entering TANF, but this is still only approximately equivalent to earning a minimum wage as a full-time employee.

The generally weak labor force attachment and low earnings of TANF recipients are major problems that explain why so few of these individuals are able to successfully transition into economic self-sufficiency. The next chapter seeks to discover what factors contribute to higher earnings for TANF recipients.

3. Earnings After Welfare:
Do Program Services Matter?

3.1 Data

The earnings analysis uses a subset of the larger data described in Chapter 2. The subset includes 8,080 individuals who had received benefits for some length of time between one month and one year and had not returned to TANF during the two years subsequent to leaving. Data measuring economic, demographic, and TANF-related characteristics begin two years before and continue until two years after leaving TANF.

The main outcome of interest is a leaver's post-TANF earnings and how TANF employment plan activities are associated. Planned participation hours in employment plan activities during TANF tenure were aggregated into one variable for each activity. The public assistance variables measuring the number of months the individual was eligible during the two years after TANF exit are also included as controls.[1]

3.2 Descriptive Statistics

Demographics

Table 3.1 provides some descriptive statistics for the individuals in the earnings analysis subset. Females represent the majority of TANF recipients in this subset, which is consistent with Utah's TANF population, as demonstrated by Table 2.1 in Chapter 2. The distributions of other characteristics, such as race, ethnicity, and marital status, are also representative of the larger Utah TANF population, indicating that inferences can be drawn from this subset about the population.

The proportion of individuals who attained a high school diploma or GED in this subset was almost 60 percent.[2] In addition, around 13 percent were pregnant at the

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[1]Variable descriptions are provided in Table C.1 in Appendix C and measurement descriptions in Appendix A.

[2]A table of additional demographic statistics is in Table A.2 in Appendix A.

Table 3.1. Demographics for the Earnings Analysis Subset

	Counts	Percent of Total
Gender		
Female	6,594	81.6%
Male	1,482	18.4%
Race		
White	6,386	83.7%
Black	374	4.9%
Asian	111	1.5%
Native American	434	5.7%
Pacific Islander	149	2.0%
More than one race	179	2.3%
Ethnicity		
Hispanic	1,013	12.5%
Marital Status		
Married	1,415	20.4%
Never married	2,649	38.1%
Separated	1,613	23.2%
Widowed	52	0.7%
Divorced	1,215	17.5%

time of their initial enrollment, 11 percent reported a disability, and just over 16 percent were homeless.

The break-down of participation in post-exit social assistance is also listed, with the majority of sample members receiving food stamps and Medicaid benefits, and over one-fifth receiving child care financial assistance.

Economic Characteristics

The economic characteristics of TANF recipients in this subset are provided in Table 3.2. Aggregates of annual earnings before and after TANF indicate higher mean wages after TANF, but only a temporary improvement in the employment rate. The employment rate peaks during the first year after TANF, but returns to pre-TANF levels during the second year with 61.2 percent employed.[3] The decline might be an indication that for many individuals employment outcomes after TANF are temporary. If that is the case, this may suggest a risk of welfare dependency. That question, which is not addressed in this report, is a topic for future research. Nonetheless, this employment rate is consistent with estimates from other states which indicate that approximately two-thirds of TANF beneficiaries were employed during their first years

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[3]A description of how employment is defined is available in Appendix A.

Table 3.2. Economic Characteristics for the Earnings Analysis Subset

	Counts	Percent of Total
Industry Employment		
Agriculture and mining	47	0.6%
Construction	275	3.4%
Manufacturing	452	5.6%
Trade, transportation, utilities	1,546	19.1%
Information	147	1.8%
Finance and real estate	312	3.9%
Professional and business services	1,608	19.9%
Education and health care	929	11.5%
Leisure and hospitality	1,214	15.0%
Other services	138	1.7%
Public administration	134	1.7%
No formal employment or unknown	1,274	15.8%
Employment		
Second year prior to TANF	4,574	56.6%
First year prior to TANF	4,945	61.2%
First year after entering TANF	5,471	67.7%
Second year after entering TANF	4,942	61.2%
Earnings	Mean	Median
Second year prior to TANF	$5,383	$1,079
First year prior to TANF	$4,914	$700
First year after entering TANF	$7,366	$3,247
Second year after entering TANF	$7,944	$2,337

after leaving (Cancian et al., 2002).

Industries in which individuals were most likely to be employed for five years of employment data (two years before, one year in, and two years after TANF) show that of the former TANF recipients who had a history of employment, the largest proportion were in the professional and administrative support industry. Most of these fell into the sector which includes facilities support services, temporary employment services, landscaping and waste management. Almost equally proportionate is the trade, transportation and utilities industry. Leisure and hospitality is the next most-frequent industry. Over 15 percent had no associated industry, meaning they had no employment history during this time, or unknown employment status. Although the remaining share had some industry association, it does not necessarily mean employment was persistent or steady. In fact, only 4 percent were employed every quarter during this time period.

3.3   Research Questions and Methodology

Whether enrollment in employment plan activities results in higher earnings for TANF leavers is the question studied here. Since these activities are required by the federal government for work-eligible individuals and intended to facilitate transition from TANF into the labor force, this analysis examines if enrollment in the activities actually translates to higher post-TANF earnings. Of particular interest is which activities, if any, demonstrate a relationship with earnings. Employment plan activities prior to and during TANF were included. Participation hours in TANF activities are the planned hours taken from employment plans that recipients had negotiated with employment counselors and were expected to fulfill. The effects of the activities are estimated using ordinary least squares regression and include socioeconomic characteristics along with employment and earnings patterns.

3.4   Results

The TANF and pre-TANF employment plan activities that have a statistically significant relationship with post-TANF earnings are presented in Table 3.3 along with their expected impact on earnings based on the average number of enrolled hours in each activity and the parameter estimates from the regression model. The expected impact reveals how enrollment in an activity is related to an increase or decrease in wages.

Table A.1 in Appendix A presents the full list of results of a multivariate linear regression, showing the impact of TANF estimates on two-year aggregated post-TANF earnings with statistical significance denoted by symbols.

Employment Plan Activities

On-the-job training had the largest positive influence on after-TANF earnings of all the TANF employment plan activities. For the average number of planned hours in this activity, earnings tend to increase by $3,435 over the two years after leaving TANF. Likewise, the education activities of AS/BS degree and occupational skills had positive significant relationships, but to a lesser degree than on-the-job training. Registration in these activities produces gains of $1,762 and $1,013, respectively.

Employment plan activities exhibiting a negative relationship with post-exit earnings indicate an association between enrollment in an activity and lower post-exit wages. These were general assessments, problem-solving, and life skills, which are all non-countable activities.

It is worth noting here that to assume causation where only correlation exists would be a mistake. In other words, while it appears that enrollment in an activity leads to decreased wages, there is often an underlying component whose effects are causing the negative relationship. With enrollment in any of the negatively-related

Table 3.3. Expected Earnings for Employment Plan Activities

	Parameter Estimate	Average Hours	Expected Change in Earnings
TANF Countable Services Variables			
On-The-Job Training	6.22	552	$3,435
Education - AS/BS Degree	3.38	521	$1,762
Education - Occupational Skills	2.75	369	$1,013
TANF Non-Countable Services Variables			
General Assessments	−7.75	34	−$263
Problem-Solving	−22.31	17	−$379
Life Skills	−17.98	59	−$1,061
Pre-TANF Services Variables			
Pre-TANF Education - AS/BS Degree	11.27	124	$1,397
Pre-TANF Education - Occupational Skills	7.88	149	$1,175

Note: All services listed above are measured in terms of plan hours.

activities, lower earnings are expected. However, it was not participation in an activity that caused lower earnings. Rather, the negative relationships imply barriers that TANF recipients faced that are addressed by these activities. As such, the negatively-related activities reflect the burden of the problems for which they are prescribed.

The activities of job search and unpaid internships each have high frequencies of welfare recipients, but neither demonstrated any significant relationship with earnings.

Pre-TANF Activities

Studying past participation in activities allows us to control for their effect on future earnings and removes the risk of incorrectly assigning the effect for higher earnings to in-TANF participation or other variables. It does not have a policy effect since the participation occurred before individuals began receiving TANF. However, participation in certain activities prior to welfare is associated with higher earnings after leaving welfare. Those activities are education-AS/BS degree and education-occupational skills, which are also positive and significant for participation during TANF.

Demographic, Economic, and Assessment Variables

Besides employment plan activities, the linear regression model also includes various demographic and assessment characteristics.[4] These have no policy implications but are important as controls and depictions of the sample members. An individual who had earnings during the two years before TANF could expect to make 37 percent of

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[4]The demographic and assessment variables are listed in Table A.1 in Appendix A.

those wages in the two years after, holding everything else constant. But, of course, other factors affect earnings and the model confirms that. Marriage is one such factor, indicating an increase in two-year post-exit earnings on average by $1,395 for individuals who were married at the time of TANF entry. Age on average added to two-year earnings by $114 for each additional year of age and when an individual had access to a vehicle, he/she could expect an increase of $1,427. Those who reside in the relatively urban Wasatch Front South economic service area, which includes Tooele and Salt Lake counties, could expect $2,198 more. A large proportion of the state's jobs are concentrated in this area. This result might be indication of hardship in finding jobs outside of Wasatch Front South. But the largest magnitude of positive effect is from employment in a goods-producing industry, which generally adds $5,001 to two-year post-TANF earnings. The largest negative effect is for the TANF assessment of disability, which will decrease earnings by $5,702.

Variables that display no relationship with earnings are race (using an indicator for white) and pregnancy. Contrary to these findings, previous research indicates white women in California, a more racially diverse state, earn higher wages than black or Hispanic women (Harknett, 2001). One reason for race being downplayed might be the distribution of race in this data set, with a large proportion comprised of white individuals. While an overrepresentation of white individuals is consistent with Utah's population, it may subdue the effect that other races have on earnings. On the other hand, this result might in fact be indication of parity in earnings by the various races.

Post-TANF Public Assistance

The model includes public assistance benefits that were received after leaving TANF which are summations of the number of months an individual was eligible to receive them.[5] Table A.2 provides frequency of social assistance among sample members. Looking at assistance concurrent with earnings acts as a control for the effect they have on earnings in the same period.

About 23 percent of individuals received child care benefits. Child care benefits had the largest magnitude of impact, with an additional $954.20 for each month payments were received. Along with child care assistance comes opportunity for women, the population which uses TANF the most, to enter employment opportunities that might have otherwise been unfeasible. For women with children, especially single mothers, child care benefits can make the difference between being able to work and not. A stipulation requiring employment in order to receive child care benefits provides another explanation. Each of the child care recipients would have to be employed to continue their benefits.

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[5]The public assistance variables are listed in Table A.2.

4. Meeting Participation Requirements and Finding Employment

In considering the problem of low work participation rates and seeking ways to increase participation, two issues were of primary interest. The first issue was the question of what factors influence whether individuals meet the work participation requirements. The results show that several countable TANF services and activities are associated with higher levels of work participation, but not all countable services show positive relationships. Furthermore, several other variables including non-countable TANF services, demographic characteristics, and past labor market attachment show strong relationships to work participation.

The second issue was the question of whether meeting work participation requirements has any impact on employment. A regression model was used to estimate the effect of work participation on employment after TANF. The results indicated a strong positive relationship between participation and employment.

4.1   Determining Who Meets the Work Participation Requirements

The TANF statute requires that states achieve a work participation rate of 50 percent among their TANF recipients, but very few states are able to meet this requirement (Pavetti et al., 2008). Even when the economy has performed well, most states' work participation rates remained below the 50 percent standard. The law also stipulates that states that do not meet the work participation rate of 50 percent (adjusted for caseload reduction) face reductions in their TANF block grants. Given the potential loss of a portion of the block grant, states have a strong incentive to promote work participation among their TANF populations. Nevertheless, most states have consistently failed to achieve the 50 percent benchmark.

As a first step toward solving the problem of low work participation, an explanation for why individuals do not satisfy their participation requirements needs to be found. An ideal strategy would be to administer a survey to a random sample

of one-time TANF recipients that had failed to meet the participation requirements and ask them a series of questions designed to elicit the explanation. To administer such a survey, though, would be costly and still subject to non-sampling errors. The strategy adopted in this research was to use DWS administrative data to identify relationships between work participation and a wide range of information about the individuals in TANF.

The approach of explaining why individuals do not meet work participation through the use of administrative data is indirect and requires careful interpretation. The warning in Chapter 3 against inferring causation is also applicable to the results in this chapter. In some instances a "cause-effect" explanation may be valid, while in other cases it would clearly be invalid. For example, if individuals enrolled in a substance abuse treatment service are found to have a low work participation rate, it would not be correct to infer that enrollment in the service causes low work participation. Instead, a more likely explanation is that drug or alcohol addiction is responsible for both the person being enrolled in the service and the person having a low rate of work participation. While this indirect approach requires careful interpretation, it nevertheless produces useful information concerning the factors that are most strongly associated with the satisfaction of work participation requirements.

4.2   The Data and Methodology

The data used to discover the factors associated with meeting the work participation requirements consisted of 1,451 first-time TANF recipients who entered the program between the fourth quarter of 2006 and the fourth quarter of 2007. This group was chosen because verification of service and activity hours only began in October 2006 and these hours are more accurate indicators of actual participation. The group was restricted to the end of 2007 to allow for the examination of a full three-years worth of employment and earnings outcomes after the individuals first entered TANF. The data set was further restricted to only those individuals who stayed on TANF for 12 months or less, and never returned to TANF in the two years after leaving. The reason behind this last restriction was that it was of interest to focus only on those who were in a position to be fully engaged in the labor market and were not receiving additional services during the employment observation period. This last restriction was primarily imposed for the purpose of measuring the effect of participation on employment, which is discussed in a subsequent section of this report.

This group of 1,451 individuals had an average length of stay on TANF of approximately three months. This produced a total 4,419 observations of whether these individuals had satisfied their monthly work participation requirements. Because the dependent variable was binary, a logistic regression model was used to estimate the impacts of different variables on work participation. The result is a probability model that shows how the independent variables or explanatory variables influence the probability that an individual will satisfy the participation requirements. The ex-

planatory variables included demographic information, past labor market experience, past DWS services received, past receipt of public assistance, and DWS services and public assistance associated with time spent in TANF.[1]

4.3   Results of the Work Participation Analysis

The estimates from a logistic regression, whether expressed as coefficients or odds ratios, are not easy to interpret for those unacquainted with the modeling technique. To facilitate a clearer understanding of the results, the most important factors affecting work participation were summarized in two tables as marginal effects. The marginal effect is the change in the probability of meeting participation given a one-unit change in one of the independent variables. The marginal effects were calculated at the mean values for all of the independent variables, so the effects can be interpreted as the changes in the probability of meeting work participation for the average individual in TANF.

The first set of marginal effects found in Table 4.1 involve demographic and TANF assessment variables. All of these variables were found to be significant at the five percent level, except for GED, which was significant at the ten percent level. Beginning with the demographic variables, older TANF recipients were found to be less likely to meet participation requirements, while females were generally much more likely to satisfy the requirements. Individuals with either a high school diploma, a GED, or some amount of post-secondary education were all more likely to satisfy participation requirements as compared to those with less than a high school diploma or equivalent. The education results suggest that individuals with greater motivation to achieve higher levels of education may also be more motivated to satisfy program requirements. And individuals in the more rural Eastern Region[2] were less likely to meet participation compared to individuals living along the urban Wasatch Front.

The majority of TANF assessment variables that exhibited a statistically significant effect on work participation tended to lower the probability of meeting participation. The largest impacts were for those with a disability, those who were the primary caregiver for a disabled person, and those undergoing physical treatment. In each case, these individuals were at least 11.5 percentage points less likely to meet participation. TANF recipients undergoing mental treatment were 9.2 percentage points less likely to meet participation while those who had received a visit from Protective Services regarding their children were 8.1 percentage points less likely. From a policy point of view, these results may not hold as much interest as compared to the impact of services and activities on work participation. However, given the large proportion of the TANF population that has one or more of these characteristics, it is important to understand how many of these individuals face significant barriers to meeting

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[1]For the complete details of the model specification and estimates, see Appendix B.

[2]See Appendix C for a list of all of the Eastern Region counties.

Table 4.1. Marginal Effects: Demographics and TANF Assessments

Independent Variable	Marginal Effect	Description
Age	-0.007	A person 10 years older is 7 percentage points less likely to meet participation.
Female	0.120	Females are 12 percentage points more likely to meet participation than males.
HS Diploma	0.097	A high school graduate is 9.7 percentage points more likely to meet participation than a person with less than HS or equivalent.
GED	0.048	A person with a GED is 4.8 percentage points more likely to meet participation than a person with less than HS or equivalent.
Post-Secondary Education	0.077	A person with some post-secondary education is 7.7 percentage points more likely to meet participation than a person with less than HS or equivalent.
Eastern Region	-0.125	Individuals in the Eastern Region are 12.5 percentage points less likely to meet participation versus those in the Wasatch Front counties.
Disability	-0.115	A person with a disability is 11.5 percentage points less likely to meet participation.
Health Insurance	-0.054	A person with health insurance is 5.4 percentage points less likely to meet participation.
Caregiver	-0.131	A person who is the primary caregiver for a disabled person is 13.1 percentage points less likely to meet participation.
Health Excellent/Good	0.081	A person who self-reports excellent or good health is 8.1 percentage points more likely to meet participation than a person with fair or poor health.
Physical Treatment	-0.139	An individual undergoing physical treatment is 13.9 percentage points less likely to meet participation.
Mental Treatment	-0.092	An individual undergoing mental treatment is 9.2 percentage points less likely to meet participation.
Protective Svcs Visit	-0.081	A person whose home has been visited by Protective Services is 8.1 percentage points less likely to meet participation.

participation and securing employment. Of the 1,451 individuals used to model work participation, 29.6 percent were receiving physical treatment, 19.7 percent had a visit from Protective Services, 10.8 percent had a disability, and 9.0 percent were receiving mental treatment. Even though these individuals were classified as "work eligible" or, in other words, subject to the work participation requirements, many of these individuals were living in difficult circumstances that lowered the chances that they will be able to meet the participation requirements.

The marginal impacts for the TANF countable and non-countable services and activities that were statistically significant are listed in Table 4.2. The one service that is not measured in terms of verified or plan hours is child care. This variable was measured as a binary variable indicating whether the individual had child care services corresponding to a month in TANF. Child care services had the largest impact of all of the variables on whether a TANF recipient would meet participation in a given month. Receiving child care services improved the probability of meeting participation by 26.6 percentage points. As for the results for the countable TANF services and activities, these were measured as verified hours and the marginal effects were multiplied by 10 hours to provide a clearer interpretation. Among the countable services, individual job search had the largest impact with 10 more hours in the service leading to a 5.0 percentage point increase in the probability of meeting participation. Occupational skills training and unpaid internships both increase the probability of meeting participation by 4.0 percentage points for 10 additional service hours. Verified service hours associated with job readiness and the pursuit of an associate's or bachelor's degree also improved the probability of satisfying participation, but the impacts are somewhat smaller. The other countable TANF services were not found to be significant at the five percent level.

Four non-countable TANF services were found to be strongly related to work participation and in each case they reduced the probability of meeting participation. The life skills service group had the largest negative impact with 10 additional hours of this service associated with a 15 percentage-point decline in the probability of meeting participation. While life skills services should presumably assist individuals in meeting participation requirements and in transitioning into the labor force, the reason that this service group has a negative impact is largely a consequence of how it was defined. The life skills service group includes three services: cultural integration, family counseling, and pursuing disability income. Approximately 90 percent of individuals in this service group were pursuing disability income, which means these individuals were found to be essentially unemployable. Therefore, it should be expected that these individuals will typically not meet participation nor will they generally enter into formal employment. The licensed clinical therapist (LCT) assessments also had a large impact on the probability of meeting participation, reducing it by 11.0 percentage points for 10 additional hours. Individuals enrolled in 10 more hours of general assessments or treatment services saw a decline in the probability of meeting participation of 5.0 percentage points.

Table 4.2. Marginal Effects: TANF Services and Activities

Independent Variable	Marginal Effect	Description
Child Care (during TANF)	0.266	An individual receiving child care services during TANF is 26.6 percentage points more likely to meet participation.
Job Search	0.005	A person with 10 more hours per month of job search is 5 percentage points more likely to meet participation.
Job Readiness	0.003	A person with 10 more hours per month of the job readiness service is 3 percentage points more likely to meet participation.
Education-AS/BS Degree	0.002	A person with 10 more hours per month of the AS/BS degree service is 2 percentage points more likely to meet participation.
Education-Occupational Skills	0.004	A person with 10 more hours per month of the occupational skills service is 4 percentage points more likely to meet participation.
Unpaid Internships	0.004	A person with 10 more hours per month of the unpaid internship service is 4 percentage points more likely to meet participation.
General Assessments	−0.005	A person undergoing 10 more hours per month of general assessments is 5 percentage points less likely to meet participation.
LCT Assessments	−0.011	A person undergoing 10 more hours per month of LCT assessments is 11 percentage points less likely to meet participation.
Life Skills	−0.015	A person with 10 more hours per month of the life skills service is 15 percentage points less likely to meet participation.
Treatment Services	−0.005	A person undergoing 10 more hours per month of treatment service is 5 percentage points less likely to meet participation.

Ascribing a causal interpretation to the non-countable TANF services results discussed above would be incorrect. Enrollment in service hours for assessments, treatments, or life skills services does not cause individuals to not participate. Instead, these services should be understood as being merely associated with lower levels of satisfying participation. It is the presence of characteristics such as a physical or mental disability, a low level of educational attainment, or a substance abuse problem that explain both the number of hours enrolled in these services and the low level of participation among these individuals.

4.4   Does Meeting Participation Matter?

A considerable amount of effort has been spent structuring TANF's work participation requirements to ensure that recipients are fully engaged in services and activities designed to address their job-readiness issues, improve their skills, and match them with potential employers. Given all of this effort, an important practical question naturally arises: Do those individuals who satisfy the work participation requirements have better labor market outcomes than those who do not? If both groups were to have roughly the same employment outcomes, it becomes difficult to make sense of the effectiveness of work participation services and the role of sanctions. These potential difficulties, however, were found to be merely inconsequential conjectures as work participation demonstrated a strong relationship to future employment. And while participation exhibits a strong positive relationship with employment, caution should be exercised regarding the interpretation of this result as the behavioral explanation of this relationship is not addressed in this study.

A linear regression model was used to measure the effect of the participation requirements on employment.[3] The model was fitted using the data from the same 1,451 individual used in determining who meets the work participation requirements. Employment was measured as the number of quarters in which an individual had formal wage and salary employment over the two years after leaving TANF. The employment variable, which is the dependent variable for the model, ranges from zero to eight. In this model, work participation was coded as a rate because each individual could have anywhere from one to twelve months in TANF. The participation rate was defined as the number of months the individual met participation over the total number of months in TANF then multiplied by 100. The complete employment model specification included the participation rate along with a large number of control variables such as demographic variables, TANF assessment variables, and TANF services and activities variables.

The model revealed that meeting the work participation requirements showed a strong positive relationship with future employment, producing a coefficient of 0.011. Because the participation rate was multiplied by 100 and the employment variable was expressed in quarterly employment, this can be interpreted to mean that an individual who met the participation requirements 100 percent of the time is expected to be employed 1.1 quarters more than an individual with a participation rate of zero. Given that TANF recipients were only employed an average of four quarters after leaving TANF, the expected increase in employment of 1.1 quarters (roughly 14 weeks) for an individual who satisfies the participation requirements every month is a rather large impact.

As mentioned previously, caution should be used in interpreting this result because the correct behavioral explanation is not easy to ascertain. Specifically, a causal interpretation asserting that satisfying participation requirements causes higher employ-

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[3]See Appendix B for the full model specification and estimates.

ment does not necessarily follow. An unmeasured characteristic, such as motivation, could produce both high rates of satisfying participation and high levels of future employment among those who are highly motivated. Another possibility is that a large number of individuals do not meet participation and have poor employment outcomes because of physical disabilities, mental health issues, or substance abuse problems. In such a situation, even if large amounts of administrative resources were allocated toward ensuring that these individuals met the work participation requirements, health-related issues could still lead to lower levels of employment among these individuals. While this research shows that meeting participation is associated with better employment outcomes, the correct behavioral interpretation is uncertain, which implies that the policy implications of this result are also uncertain.

5. Commentary and Policy Implications

5.1   Commentary

This report examines how participation in work activities affects satisfaction of the work participation rate and the earnings outcomes of Utah's TANF recipients. Examining the outcomes of leavers offers insights into the effectiveness of the TANF employment plan activities, which Utah's welfare program uses, in meeting TANF's goals of assisting individuals towards economic self-sufficiency after leaving. Separate multivariate analyses were conducted for each outcome.

The study's outcomes reveal many barriers for TANF recipients in fulfilling employment plan commitments and achieving stable employment. Among those barriers is the need for various counseling and treatment interventions, the prevalence of health issues, as well as the pervasive reliance on public assistance measures. Incidences of these difficulties are often reflected in assignments to specific employment plan activities that are designed to resolve them. And as a result of the underlying problem, these activities tend to be negatively associated with outcomes, which is a reflection of the impediment created by the individual's underlying work-limiting issue.

In contrast, the findings also show participation in some employment plan activities to be helpful toward meeting the work participation requirement, increasing post-exit wages, or both. The following section summarizes the work activities that had statistically significant relationships with both results.

Significant Activities for Both Participation Rate and Earnings Results

Four activities were found to demonstrate statistically significant relationships with both the analysis of work participation and earnings, two of which are countable and have a positive impact. Those two are the classroom education training activities: AS/BS degree and occupation skills training. A TANF recipient who participates in either of these activities is more likely to achieve the participation requirements. Additionally, enrollment in these activities is expected to produce higher earnings because it improves the marketable skills of trainees. Individuals pursuing an associate's or bachelor's degree can use hours from their first year of study toward participation

in the AS/BS degree activity. Occupations that require degrees tend to be higher-paying and perhaps having even some college provides an individual enough valuable skills to induce higher compensation.

Occupational skills provides training towards a particular trade or job, often through short-term certificate programs at career and technical education school, vocational centers, community colleges, and universities. This activity does not include the pursuit of degree. Rather, participants work toward certifications and licensures. Receiving training for a specific occupation that requires certification may guarantee the individual higher wages than typical entry-level wages, which is often the default for those with little or no marketable skills. And since time in the program counts towards participation hours, involvement in this activity improves the likelihood of meeting the participation requirement.

General assessment, an evaluation that every TANF recipient experiences, was found to have a negative relationship with both participation rate fulfillment and higher post-TANF earnings. A TANF recipient might have more hours in this service than is typical if he/she has any variety of issues that can only be resolved through counseling. Additionally, if the assessment was standard, and not required for someone with issues, it might not even be recorded on a person's employment plan. Thus, the presence of it on a plan and/or the incidence of more-than-average hours for the activity might be indication of an individual who is unable to meet participation and employment outcomes without the intervention of a counselor. Until the related issues get solved, that person would be expected to earn less than someone who underwent a standard assessment. Likewise, the existence of behavioral complications can hinder that person's achievement of the participation requirement.

Life skills, the other negatively-related activity, contains cultural integration, family counseling, and pursuing disability income. However, the vast majority of individuals with this activity on their employment plan fall into the last category. The proportion of people in the life skills activity that were pursuing disability income was around 92 percent in 2007. Individuals in this activity are pursuing Supplemental Security Insurance (SSI) and will be expected to have a prolonged detachment from the labor force. An individual on track for SSI likely has enduring impediments that hinder long-term involvement in the labor force. High employment earnings, or any earnings for that matter, would not be expected from such individuals. Neither would a chronically-disabled person easily participate in work-related TANF activities that are required to complete participation requirement hours.

Significant Activities for Participation Rate Outcomes

While some activities significantly influence both participation rate and earnings outcomes, some are specific to just the participation rate. Among those are the "work first" services, which include job search and job readiness. These activities display a positive relationship with meeting the participation rate requirement. These activi-

ties require very little by way of investment in individual TANF recipients and are designed to expedite employment. While these activities are relatively low in cost to administer and effective for meeting participation, they have no relationship to earnings. So although these people get employed quickly, they fail to attain high wages. Participation in unpaid internships also results in a higher likelihood for TANF recipients to meet the participation rate. This training service helps to develop marketable skills through job experience. But again, it has no relationship to earnings after TANF.

LCT Assessment had a negative relationship with meeting participation rate. The interpretation is much like that for General Assessment. To require LCT Assessment, which involves conflict resolution with a social worker or licensed clinical therapist, is indicative of burdensome behavioral or relational conflicts that likely hinder participation in required activities.

Significant Activities for Earnings Outcomes

Two activities were associated with earnings outcomes, but had no significant impact on participation rate outcomes. They were on-the-job training, with a positive relationship, and problem-solving, with a negative relationship.

On-the-job training involves DWS paying a portion of an individual's wages during the training period after they get hired. With this benefit, an employer might hire an individual who otherwise might not have been competitive enough for a position. But because of the incentive of a temporarily lower labor cost, the TANF recipient's likelihood of getting hired can increase, providing him/her entry into the workforce and the potential to gain valuable skills. Oftentimes, it is the former benefit that plays a role in future earnings and employment. Research, including this analysis, tends to show that a strong predictor of future earnings is past earnings.

Since problem-solving consists of problem-solving assessment and non-participation assessment it should come as no surprise that this activity is related to negative earnings. Problem-solving assessment is prescribed when there is a need for initial problem solving or mediated intervention to resolve barriers that might prevent a TANF recipient from fulfilling the participation requirement, going to appointments, or fulfilling some commitment that had been negotiated in the employment plan. With this activity, the individual's employment counselor will provide meaningful resources to help him/her satisfy commitments. It is also prescribed for individuals that persistently fail to meet the participation requirement and require a review of their employment plan. Non-participation assessment is the activity that individuals are prescribed if the problems that originally warranted problem-solving assessment go unresolved. If an individual demonstrates an inability to meet appointments, participation, and other commitments due to unresolved issues, it is likely those issues will cause similar problems once the individual enters the labor force and he/she will have lower earnings than someone who did not require this employment plan activity. However, if a

TANF-leaver retains unresolved issues as described here, he or she may not even be able to gain employment. In either scenario, the barriers to successful employment will likely produce lower earnings.

5.2   Policy Implications

The value of this report is its policy-related results. The implications of the findings act as an assessment of Utah's TANF policies, namely the requirements of work activities participation. If the goals of TANF are to encourage full participation, employability, and high earnings after leaving, an appraisal of the program's ability to satisfy those goals is imperative.

The main policy implications this report reveals are related to the allocation of resources. Findings presented here can advise the distribution of resources to effective work activities, diverting important funds away from those that have no observable effect on meeting participation or higher earnings.

Findings from this report support at least a partial shift in focus to skills development, not just employment; in other words, from "work first" to training activities. All of the training activities increase the likelihood of completing participation and most are related to higher earnings outcomes after TANF. In contrast, the "work first" activities only support participation. And while the job readiness activity has a positive relationship with employment, there is no evidence in this analysis of a relationship between "work first" activities and higher earnings. Their scope of impact is limited and fails to accomplish anything meaningful in the way of post-TANF earnings. Additional resources diverted to the training activities of AS/BS degree and occupation skills can play a role in helping TANF recipients complete participation and compete for higher earnings after they leave. On-the-job training also influences earnings. The training, skills, and education resulting from these activities will help leavers avoid low-wage employment that is common for former TANF recipients and attain self-sufficiency. Because of the success of these activities, recipients might benefit from continuing training even after leaving TANF, implying a modification in policy to allow leavers connection to valuable training resources.

The duration of education and training activities is restricted to 12 months. After that, time spent in education or training exercises will not count toward those TANF activities. Since these categories have been found to be important in achieving TANF goals, participation in them should be encouraged and rewarded. In keeping with that aim, time restrictions could be eliminated or eased. While it would be costly to implement, that kind of policy could encourage completion of degree or certification programs once a trainee begins.

A large proportion of Utah's TANF population is considered "hard-to-serve." These individuals are unable to easily transition into the labor force. As noted in Table 3.2, nearly one-third of that sample's members were unemployed during the first two years after TANF. Clearly there are barriers in place that obstruct a leaver's

employability. Such barriers need to be identified and addressed for this group of individuals to successfully transition. Otherwise, they are at high risk of poverty and returning to TANF. Along the lines of addressing barriers, this group, probably requires flexibility of countable treatment activities. Individuals that cannot realistically meet their participation requirements will routinely register low participation rates. A better approach might be to allow recipients to "ease into" participation requirements until they have the remedial skills to realistically consider full time participation and employment.

Besides the "hard-to-serve" cluster, there is also a group within Utah's TANF population that is wholly unprepared to work. In one of the samples used in this report, 30 percent of recipients were in physical treatment and 20 percent were in mental treatment. These individuals receive treatment in association with the noncountable activities of general assessment, LCT assessment, life skills, and treatment services, all of which had negative associations with meeting participation or earning higher wages. This suggests that not all of these work eligible recipients are, in fact, ready to work. The prevalence of the need for treatment implies a necessity to reevaluate the standards by which individuals are classified as work eligible.

Child care financial assistance is an important factor in determining whether a TANF recipient will meet participation and if a leaver will have high earnings. In order for low-income welfare parents to sustain employment after leaving, they need child care assistance. Additionally, while the need for child care financial assistance could span the entire range of TANF recipients, it is especially important for recent leavers who need to alter lifestyle patterns and establish work as part of their family's routine. As pointed out in a previously published study (Wood et al, 2008), child care assistance is among the challenges that might be most poignant for newly-employed welfare recipients. Such conclusions suggest a policy change to expand the availability of this service during and after TANF receipt, especially for low-income families, since it clearly relates to positive TANF outcomes. The same study recommends rewarding those who find jobs and leave TANF by providing follow up measures and continuing public assistance like a child care subsidy to promote employment retention. Those recommendations are also supported by the findings in this report.

There is a dire need to ensure that once someone is employed, he/she will not return to TANF again. For that reason, many of the policy recommendations have included a follow-up component that allows leavers to stay connected to resources that helped to establish employment in the first place. Because so many in the TANF population are unaccustomed to long-term employment, and because TANF recipients are at the highest risk of job loss during their first few months of employment (Wood et al, 2003), resources should be extended after welfare departure. Long-term monitoring of welfare recipients and intervention through needs-based resource provision can increase the likelihood of successful and sustained transition from welfare to economic self-sufficiency.

Waivers Discussion

A welfare policy change allowing states to apply for waivers of TANF requirements, including the participation requirement, has recently been made available.[1] One such state advocating for waivers is Utah (McAuliff, 2012). While waivers do not lift welfare's work requirements, they do grant states more latitude in executing the program by easing work-participation rules. But states receiving the waivers must promote a transition to employment, with or without participation rules, and meet established performance measures.

Along with the flexibility comes a relief from the arduous process of verifying recipients' participation hours in activities. Former executive director of DWS, Kristen Cox, in a recommendation letter to DHHS wrote that "the lack of focus on outcomes makes the program less about the need to help parents find and retain work and more about the need to assure that parents are active in prescribed activities."[2] Emphasizing the need to shift focus to outcomes, she continued, "DWS is anxious to discover the most effective activities that lead to employment. Waivers will allow experimentation in finding effective pathways." The same letter recommends that DHHS "Allow waivers where the measurement of employment is the primary reportable data to the federal government and allow Utah to expand the definitions of priority activities from the current narrow definitions of countable hours and provide relief from the prescriptive verification processes."

The implementation of waivers of Utah's TANF policy can serve towards the flexibility needed to implement this report's policy recommendations. For example, many work activities, even ones that are found to be useful in this report, have limits to the maximum number of hours allowed. Easing such restrictions and allowing individuals to utilize important work activities is one application. Another is to concentrate resources on those work activities that make a difference in either meeting participation or establishing higher wages.

Waivers can give clearance to direct individuals into those work activities that are likely to serve a beneficial outcome and to avoid those that have no discernable benefit. One example is the frequency of TANF recipients in the unpaid work experience activity, which neither increases probability of participation rate completion nor contributes towards post-exit earnings. The flexibility that will be afforded by waivers can resolve the problem of "activities to nowhere." Additionally, many TANF recipients undergo treatment through one of various non-countable activities to address issues that hinder participation and/or employment. None of these activities is currently countable towards the participation rate of an individual. Therefore, while someone might need large amounts of time in treatment, under the current rules he/she will not be able to use that time towards the requirement and is still expected to complete other activities during the week that will count towards the requirement.

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[1]http://www.acf.hhs.gov/programs/ofa/policy/im-ofa/2012/im201203/im201203.html
[2]http://www.scribd.com/doc/100023383/Utah-Administrative-Flexibility-Letter

Such conditions can be counterproductive and unrealistic. Without treatment, some individuals will never be able to transition away from welfare. Those measures should be commended and counted toward the work participation requirement, a move that can be made possible through waivers.

A. Appendix: Regression Model for Wages

To better understand and more easily interpret the coefficients of the regression model in Table A.1, several groups of variables are described below. The pre-TANF services variables measure the total hours enrolled in a service during the eight quarters prior to starting TANF. The participation hours can be 0 if an individual was not enrolled in the activity. The TANF services variables are aggregates of planned participation hours in services during TANF, which is a year or less in this analysis. The planned hours can be 0 if an individual has not enrolled in the activity. Regarding the employment and employment rate variables, an individual is considered employed if he/she earned any non-zero amount of wages. Time periods before and after TANF are considered. Anyone with zero earnings during any of these time periods is considered unemployed. Finally, for the post-TANF public assistance variables, general descriptions of the public assistance variables can be found in Table C.1 of Appendix C. This analysis uses the total of two years of post-TANF public assistance, which is measured beginning in the quarter immediately after a TANF recipient has left the program.

Table A.1. Linear Regression Model for Wages

Independent Variable	Estimate	Std. Error	t value	p value	
Demographic Variables:					
Age	113.80	24.00	4.74	< 0.001	***
Female	−3,792.87	566.77	−6.69	< 0.001	***
White	56.37	464.46	0.12	0.903	
Less Than HS/GED	−2,270.67	513.05	−4.43	< 0.001	***
WFS ESA	2,198.47	381.77	5.76	< 0.001	***
Married	1,395.18	535.52	2.61	0.009	**
TANF Assessment Variables:					
Disability	−5,701.53	609.31	−9.36	< 0.001	***
Homeless	−2,482.02	498.07	−4.98	< 0.001	***
Access to Vehicle	1,427.11	391.00	3.65	< 0.001	***
Pregnant	−710.01	571.92	−1.24	0.215	
Past Criminal Activity	−1,236.76	470.76	−2.63	0.009	**
Economic Variables:					
Pre-TANF 2-Year Earnings	0.37	0.01	28.58	< 0.001	***
Goods Industry	5,001.35	661.06	7.57	< 0.001	***
Post-TANF Public Assistance:					
Post-TANF 2-Year Food Stamps Total	−214.54	28.85	−7.44	< 0.001	***
Post-TANF 2-Year Child Care Total	954.20	35.02	27.25	< 0.001	***
Post-TANF 2-Year Medicaid Total	−88.35	30.16	−2.93	0.003	**
Post-TANF 2-Year UI Total	1.67	0.14	11.70	< 0.001	***
Pre-TANF Services Variables:					
Pre-TANF Job Search	−1.14	5.03	−0.23	0.820	
Pre-TANF Job Readiness	2.39	14.59	0.16	0.870	
Pre-TANF Basic Job Skills	66.35	155.00	0.43	0.669	
Pre-TANF English as a Second Language	12.57	12.71	0.99	0.323	
Pre-TANF On-The-Job Training	−23.65	180.55	−0.13	0.896	
Pre-TANF Education - GED/HS Diploma	1.77	5.09	0.35	0.729	
Pre-TANF Education - AS/BS Degree	11.27	6.86	1.64	0.100	+
Pre-TANF Education - Occupational Skills	7.88	3.47	2.27	0.023	*
Pre-TANF Paid Internships	−15.37	26.86	−0.57	0.567	
Pre-TANF Unpaid Internships	6.57	12.80	0.51	0.608	
Pre-TANF General Assessments	15.34	22.60	0.68	0.497	
Pre-TANF LCT Assessment	7.21	47.08	0.15	0.878	
Pre-TANF Problem-Solving	−108.35	197.29	−0.55	0.583	
Pre-TANF Life Skills	22.02	38.24	0.58	0.565	
Pre-TANF Life Skills (Other)	−13.01	20.41	−0.64	0.524	
Pre-TANF Treatment Services	−11.53	8.26	−1.40	0.163	
Pre-TANF Supportive Services	6.62	31.21	0.21	0.832	
Pre-TANF Youth Services	−1.99	30.97	−0.06	0.949	
TANF Countable Services Variables:					
Job Search (plan hours)	2.07	1.34	1.55	0.121	
Job Readiness (plan hours)	−0.43	3.10	−0.14	0.889	
Basic Job Skills (plan hours)	2.33	6.90	0.34	0.735	
English as a Second Language (plan hours)	−3.00	3.28	−0.92	0.360	
On-The-Job Training (plan hours)	6.22	3.66	1.70	0.089	+
Education - GED/HS Diploma (plan hours)	3.01	1.91	1.58	0.115	

Table A.1 (Continued)

Independent Variable	Estimate	Std. Error	t value	p value	
Education - AS/BS Degree (plan hours)	3.38	1.52	2.22	0.026	*
Education - Occupational Skills (plan hours)	2.75	1.18	2.33	0.020	*
Paid Internships (plan hours)	−5.21	21.83	−0.24	0.812	
Unpaid Internships (plan hours)	−1.40	1.84	−0.76	0.447	
TANF Non-Countable Services Variables:					
General Assessments	−7.75	4.30	−1.80	0.072	+
LCT Assessment	−20.90	16.59	−1.26	0.208	
Problem-Solving	−22.31	7.90	−2.82	0.005	**
Life Skills	−17.98	6.59	−2.73	0.006	**
Life Skills (Other)	−2.31	4.81	−0.48	0.631	
Treatment Services	−1.22	1.58	−0.77	0.440	
Supportive Services	−166.28	826.84	−0.20	0.841	
Youth Services	5.61	6.41	0.88	0.381	
Constant	10,362.00	1,081.06	9.59	< 0.001	***
Adjusted R-Squared	0.277				

Note: $N = 8,076$. Residual standard error: 16,281 on 8,022 degrees of freedom.

F-statistic: 59.24 on 53 and 8,022 DF, p-value: < 0.0001.

$+p < 0.1$, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$

Table A.2. Descriptive Statistics: Additional Demographics

	Counts	Percent of Total
Age		
Less than 18	44	0.5%
18 − 24	3,328	41.2%
25 − 34	2,861	35.4%
35 − 44	1,326	16.4%
45 − 54	448	5.6%
55 − 64	66	0.8%
65 or older	3	0.0%
Median age	26	
Educational Attainment		
Less than high school diploma	1,305	16.2%
GED	1,178	14.6%
High school diploma	3,603	44.6%
Some college	133	1.7%
Associate's or post-secondary certificate	1,382	17.1%
Bachelor's degree or higher	109	1.4%
Unknown	366	4.5%
Offender Status		
Misdemeanor or felony	1,629	20.2%
Access To Vehicle		
Access	4,123	51.1%
No access	3,953	48.9%
Social Assistance		
Food stamps	5,362	66.4%
Child care	1,816	22.5%
Medicaid	4,698	58.2%
Unemployment insurance	741	9.2%
Other Demographics		
Disability	918	11.4%
Pregnant	1,010	12.5%
Homeless	1,356	16.8%

B. Appendix: Regression Models for Participation and Employment

The logistic regression model for work participation (Table B.1) is intended to determine the factors that are most directly associated with an individual's meeting the participation requirements for TANF eligibility. Because TANF service and activity hours were only recorded as verified hours starting in the fourth quarter of 2006, the data prior to that time is of questionable reliability with respect to measuring the actual participation of individuals in services and activities. In order to more accurately measure the relationships between actual participation in TANF services and activities and meeting the work participation requirements, only those individuals with verified services and activities hours were included in modeling the work participation rate.

The data used to model work participation consists of 1,451 first-time TANF recipients who entered the program between the fourth quarter of 2006 and the fourth quarter of 2007. Whether an individual successfully met the participation requirements was determined monthly and coded as a binary variable. This work participation variable served as the dependent variable for the regression model. For these 1,451 individual TANF recipients, there were a total of 4,419 months in which they were required to engage in various services and activities in order to satisfy participation expectations. This produced a data set with a total of 4,419 observations for modeling participation.

The data was arranged as a pooled panel data set with each individual's months of enrollment in TANF listed as observations. Because the number of months in TANF varied across individuals, the data set forms an unbalanced panel. The time-dependent variables include the countable TANF service/activity hours (i.e., verified hours), non-countable TANF service/activity hours, monthly unemployment insurance benefit payments, and monthly eligibility for food stamps, Medicaid, and child care services. All other variables were independent of time. A pooled logistic regression model was used to model the probability that an individual will satisfy the work participation requirements. A total of 59 independent variables were included, the bulk of which were countable and non-countable TANF service/activity hours and pre-TANF service/activity hours used as control variables. The model had a pseudo R-squared of 0.18 and correctly predicted 70.7 percent of the data.

Table B.1. Logistic Regression Model for Work Participation

Independent Variable	Estimate	Std. Error	z value	p value	
Demographic Variables:					
Age	−0.026	0.005	−5.224	< 0.001	***
Female	0.481	0.115	4.176	< 0.001	***
White	0.082	0.088	0.928	0.353	
Hispanic	0.122	0.105	1.158	0.247	
HS Diploma	0.389	0.093	4.192	< 0.001	***
GED	0.194	0.117	1.656	0.098	+
Post-Secondary Education	0.312	0.114	2.740	0.006	**
Eastern Region	−0.504	0.149	−3.386	< 0.001	***
Western Region	0.048	0.129	0.367	0.713	
Never Married	−0.230	0.088	−2.605	0.009	**
TANF Assessment Variables:					
Disability	−0.462	0.137	−3.382	< 0.001	***
Health Insurance	−0.216	0.075	−2.856	0.004	**
Caregiver	−0.530	0.157	−3.381	< 0.001	***
Health Excellent or Good	0.329	0.093	3.529	< 0.001	***
Physical Treatment	−0.559	0.079	−7.091	< 0.001	***
Mental Treatment	−0.368	0.125	−2.950	0.003	**
Substance Abuse Treatment	0.032	0.190	0.168	0.866	
Domestic Violence Treatment	1.262	0.501	2.520	0.012	*
Protective Services Visit	−0.323	0.090	−3.598	< 0.001	***
Pre-TANF Employment and Assistance:					
Pre-TANF 2-Year Employment	0.028	0.013	2.185	0.029	*
Pre-TANF 2-Year Food Stamps Total	−0.015	0.007	−2.235	0.025	*
Pre-TANF 2-Year Medicaid Total	0.018	0.006	2.815	0.005	**
Pre-TANF 2-Year Child Care Total	0.027	0.012	2.260	0.024	*
Pre-TANF 2-Year UI Total	0.000	0.000	−0.082	0.935	
Pre-TANF Services Variables:					
Pre-TANF Job Search	0.006	0.002	2.418	0.016	*
Pre-TANF Job Readiness	0.023	0.009	2.669	0.008	**
Pre-TANF Basic Job Skills	−0.052	83.170	−0.013	0.990	
Pre-TANF English as a Second Language	1.944	1.093	1.778	0.075	+
Pre-TANF Education - GED/HS Diploma	−0.012	0.007	−1.589	0.112	
Pre-TANF Education - AS/BS Degree	−0.001	0.003	−0.316	0.752	
Pre-TANF Education - Occupational Skills	0.000	0.001	0.538	0.590	
Pre-TANF Unpaid Internships	0.002	0.001	1.479	0.139	
Pre-TANF General Assessments	0.003	0.010	0.317	0.752	
Pre-TANF LCT Assessment	0.075	0.079	0.959	0.338	
Pre-TANF Problem-Solving	−0.068	0.111	−0.618	0.536	
Pre-TANF Life Skills	−0.074	0.047	−1.572	0.116	
Pre-TANF Life Skills (Other)	−0.020	0.017	−1.178	0.239	
Pre-TANF Treatment Services	0.002	0.004	0.378	0.705	
Pre-TANF Youth Services	0.004	0.009	0.473	0.636	
Assistance Concurrent with TANF:					
Food Stamps	−0.012	0.103	−0.114	0.909	
Medicaid	0.121	0.102	1.182	0.237	
Child Care	1.144	0.100	11.407	< 0.001	***

Table B.1 (Continued)

Independent Variable	Estimate	Std. Error	z value	p value	
Unemployment Insurance	0.000	0.001	0.661	0.509	
TANF Countable Services Variables:					
Job Search (verified)	0.020	0.004	4.905	< 0.001	***
Job Readiness (verified)	0.011	0.005	2.380	0.017	*
Basic Job Skills (verified)	−0.001	0.013	−0.077	0.938	
English as a Second Language (verified)	0.014	0.008	1.766	0.077	+
On-The-Job Training (verified)	0.406	8.219	0.049	0.961	
Education - GED/HS Diploma (verified)	0.003	0.004	0.837	0.403	
Education - AS/BS Degree (verified)	0.010	0.005	2.043	0.041	*
Education - Occupational Skills (verified)	0.015	0.002	5.825	< 0.001	***
Unpaid Internships (verified)	0.016	0.003	6.306	< 0.001	***
TANF Non-Countable Services Variables:					
General Assessments	−0.018	0.005	−3.873	< 0.001	***
LCT Assessment	−0.044	0.022	−1.999	0.046	*
Problem-Solving	−0.021	0.014	−1.485	0.137	
Life Skills	−0.059	0.029	−2.034	0.042	*
Life Skills (Other)	−0.008	0.007	−1.178	0.239	
Treatment Services	−0.019	0.003	−6.681	< 0.001	***
Youth Services	0.015	0.012	1.241	0.214	
Constant	0.152	0.246	0.619	0.536	
Correctly Classified	70.7%				
Pseudo R-Squared	0.1802				

Note: $N = 4,419$. $+p < 0.1$, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$

The linear regression model for employment (Table B.2) was motivated by question of whether meeting participation requirements makes any difference with respect to future employability. The dependent variable for this model measures the level of employment that each individual achieves subsequent to leaving TANF. The dependent variable records the total numbers of quarters in which an individual had formal wage and salary employment in the two years after TANF and it ranges from zero to eight. The same 1,451 individuals used in the work participation model were used to examine the relationship between meeting participation and future employment. For the employment model, the data was not arranged as a pooled panel data set because the interest was in examining employment after leaving TANF. Therefore, the total number of observations used in the employment model equals 1,451.

The post-TANF employment variable was treated as a continuous variable and ordinary least squares regression was used to estimate the coefficients. The model specification differs from the participation model and includes a few predictors that were more relevant to modeling employment. Nevertheless, the two models included nearly all of the same service variables. The employment model included 44 variables and had an adjusted R-squared of 0.252.

Table B.2. Linear Regression Model for Employment

Independent Variable	Estimate	Std. Error	t value	p value	
Participation Rate	0.011	0.002	6.139	< 0.001	***
Demographic Variables:					
Age	0.003	0.009	0.368	0.713	
Female	0.258	0.224	1.150	0.250	
White	0.098	0.181	0.540	0.589	
Hispanic	0.119	0.221	0.537	0.591	
HS Diploma	0.505	0.189	2.669	0.008	**
GED	0.601	0.247	2.434	0.015	*
Post-Secondary Education	0.905	0.234	3.865	< 0.001	***
TANF Assessment Variables:					
Disability	−1.065	0.253	−4.211	< 0.001	***
On Time to Work	0.100	0.341	0.293	0.769	
Worked Scheduled Hours	1.101	0.352	3.132	0.002	**
Health Excellent or Good	0.090	0.186	0.484	0.629	
Pre-TANF Employment and Services:					
Pre-TANF 2-Year Employment	0.360	0.025	14.519	< 0.001	***
Pre-TANF Job Search	−0.001	0.005	−0.314	0.753	
Pre-TANF Job Readiness	0.009	0.012	0.760	0.447	
Pre-TANF Basic Job Skills	−0.120	0.198	−0.606	0.545	
Pre-TANF English as a Second Language	−3.306	1.926	−1.716	0.086	+
Pre-TANF Education - GED/HS Diploma	0.020	0.011	1.859	0.063	+
Pre-TANF Education - AS/BS Degree	0.007	0.008	0.962	0.336	
Pre-TANF Education - Occupational Skills	0.001	0.001	0.807	0.420	
Pre-TANF Unpaid Internships	0.004	0.003	1.289	0.198	
Pre-TANF General Assessments	0.008	0.017	0.450	0.653	
Pre-TANF LCT Assessment	0.231	0.122	1.895	0.058	+
Pre-TANF Problem-Solving	0.151	0.311	0.485	0.628	
Pre-TANF Life Skills	−0.056	0.029	−1.911	0.056	+
Pre-TANF Life Skills (Other)	0.017	0.035	0.468	0.640	
Pre-TANF Treatment Services	0.004	0.006	0.572	0.567	
Pre-TANF Youth Services	−0.020	0.021	−0.938	0.348	
TANF Countable Services Variables:					
Job Search (verified)	0.000	0.004	−0.095	0.924	
Job Readiness (verified)	0.011	0.004	2.392	0.017	*
Basic Job Skills (verified)	0.014	0.012	1.116	0.264	
English as a Second Language (verified)	−0.005	0.005	−0.960	0.337	
On-The-Job Training (verified)	0.010	0.006	1.858	0.063	+
Education - GED/HS Diploma (verified)	0.003	0.003	0.929	0.353	
Education - AS/BS Degree (verified)	0.001	0.001	0.430	0.667	
Education - Occupational Skills (verified)	0.000	0.001	0.041	0.967	
Unpaid Internships (verified)	−0.001	0.001	−0.676	0.499	
TANF Non-Countable Services Variables:					
General Assessments	−0.004	0.003	−1.048	0.295	
LCT Assessment	0.027	0.013	2.005	0.045	*
Problem-Solving	0.004	0.012	0.360	0.719	
Life Skills	−0.011	0.007	−1.626	0.104	
Life Skills (Other)	−0.001	0.004	−0.305	0.761	

Table B.2 (Continued)

Independent Variable	Estimate	Std. Error	t value	p value	
Treatment Services	−0.003	0.001	−2.481	0.013	*
Youth Services	0.003	0.008	0.334	0.739	
Constant	0.319	0.487	0.656	0.512	
Adjusted R-Squared	0.252				

Note: $N = 1,451$. Residual standard error: 2.703 on 1,406 degrees of freedom.
F-statistic: 12.07 on 44 and 1,406 DF, p-value: $< 2.2e − 16$.
$+p < 0.1$, $*p < 0.05$, $**p < 0.01$, $***p < 0.001$

C. Appendix: Descriptions of Selected Variables

Table C.1. Descriptions of Selected Variables

Variable Name	Description
Countable TANF Services:	
Job Search	Enrolled in the individual job search service. This service is measured separately for plan hours and verified hours.
Job Readiness	Includes "choose to work" expanded services, intensive employment services, job readiness/connection activities, and pre/post-employment training workshops. This service group is measured separately for plan hours and verified hours.
Basic Job Skills	Enrollment in basic skills and/or educational remediation services. This service is measured separately for plan hours and verified hours.
English as a Second Language	Enrollment in an English as a Second Language course. This service is measured separately for plan hours and verified hours.
On-The-Job Training	A service providing subsidized employment, usually in a full-time position. This service is measured separately for plan hours and verified hours.
Education - GED/HS Diploma	Includes education services toward a GED or high school diploma and youth tutoring/dropout prevention services. This service group is measured separately for plan hours and verified hours.
Education - AS/BS Degree	Enrollment in educational services to acquire an associate's or a bachelor's degree. This service group is measured separately for plan hours and verified hours.
Education - Occupational Skills	Includes occupational skills training and youth occupational skills training. This service is measured separately for plan hours and verified hours.

Table C.1 (Continued)

Variable Name	Description
Paid Internships	A service group providing subsidized employment which includes paid youth internships and summer youth employment opportunities. This service is measured separately for plan hours and verified hours.
Unpaid Internships	Unpaid, unsubsidized work experience services which include unpaid youth internships. This service is measured separately for plan hours and verified hours.
Non-Countable TANF Services:	
General Assessments	Includes assessments, formal assessments, youth assessments, and youth formal assessments. This service group is measured in plan hours only.
LCT Assessment	Assessment by a DWS social worker or licensed clinical therapist. Measured in plan hours only.
Problem-Solving	A problem-solving assessment or non-participation assessment. This service group is measured in plan hours only.
Life Skills	Includes cultural integration, family counseling, and pursuing disability income. This service group is measured in plan hours only.
Life Skills (Other)	Includes money management, parenting, and food and nutrition courses. This service is measured in plan hours only.
Treatment Services	Includes treatment for family violence, mental health, physical difficulties, and substance abuse. This service group is measured in plan hours only.
Supportive Services	Includes child care, relocation assistance, transportation, and other support services. This service group is measured in plan hours only.
Youth Services	Includes alternative school, comprehensive guidance and counseling, employment mentoring, leadership development, and youth mentoring. This service group is measured in plan hours only.
Demographic Variables:	
Less than HS/GED	Those who reported having less than a high school diploma or GED in an assessment. Measured as a binary variable.
HS Diploma	Those who reported having a high school diploma in an assessment. Measured as a binary variable.

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Table C.1 (Continued)

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Variable Name	Description
GED	Those who reported having a GED in an assessment. Measured as a binary variable.
Post-Secondary Education	Those who reported having at least some college in an assessment. Measured as a binary variable.
WFS ESA	Indicates those residing in the Wasatch Front South Economic Service Area, which includes Salt Lake and Tooele counties. Measured as a binary variable.
Eastern Region	Indicates those residing in either Carbon, Daggett, Duchesne, Emery, Grand, San Juan, or Uintah counties. Measured as a binary variable.
Western Region	Indicates those residing in either Beaver, Garfield, Iron, Kane, Millard, Piute, Sanpete, Sevier, Washington, or Wayne counties. Measured as a binary variable.
TANF Assessment Variables:	
Disability	Indicates whether the individual had a disability. Measured as a binary variable.
Health Insurance	Indicates whether the individual had any form of health insurance. Measured as a binary variable.
Pregnant	Indicates if the individual was pregnant at time of the assessment. Measured as a binary variable.
Past Criminal Activity	Indicates if the individual had a prior misdemeanor or felony conviction. Measured as a binary variable.
Access to Vehicle	Indicates whether the individual had access to any vehicle. Measured as a binary variable.
Caregiver	Indicates whether the individual is the primary caregiver to a disabled person in the household. Measured as a binary variable.
Health Excellent or Good	Indicates whether the individual's health is excellent or good, compared to fair, poor, or unassessed. Measured as a binary variable.
Physical Treatment	Indicates whether the individual is receiving physical treatment at time of assessment. Measured as a binary variable.
Mental Treatment	Indicates whether the individual is receiving mental treatment at time of assessment. Measured as a binary variable.
Domestic Violence Treatment	Indicates whether the individual is receiving domestic violence treatment at time of assessment. Measured as a binary variable.

Table C.1 (Continued)

Variable Name	Description
Substance Abuse Treatment	Indicates whether the individual is receiving substance treatment at time of assessment. Measured as a binary variable.
Protective Services Visit	Indicates whether the individual has ever been contacted by Protective Services regarding a child in the individual's care. Measured as a binary variable.
On Time to Work	Indicates whether the individual regularly arrived at work on time. Measured as a binary variable.
Worked Scheduled Hours	Indicates whether the individual worked the majority of the scheduled hours. Measured as a binary variable.
Public Assistance Variables:	
Food Stamps	Indicates the individual was receiving foods stamps. Measured as a monthly indicator, the variable was defined as the sum of pre-TANF, concurrent with TANF, or post-TANF monthly food stamps depending on the particular model specification.
Child Care	Indicates the individual was receiving child care services. Measured as a monthly indicator, the variable was defined as the sum of pre-TANF, concurrent with TANF, or post-TANF monthly child care services received depending on the particular model specification.
Medicaid	Indicates the individuals was eligible for Medicaid. Measured as a monthly indicator, the variable was defined as the sum of pre-TANF, concurrent with TANF, or post-TANF monthly Medicaid eligibility depending on the particular model specification.
Unemployment Insurance (UI)	Receipt of unemployment insurance payments. Measured as a monthly benefit amount, the variable was defined as the sum of pre-TANF, concurrent with TANF, or post-TANF monthly UI benefits depending on the particular model specification.
Economic Variables:	
Employment	An indicator of quarterly wage and salary employment. Measured as a binary, the variable was defined as the sum of pre-TANF, concurrent with TANF, or post-TANF quarterly wage and salary employment depending on the particular model specification.

Table C.1 (Continued)

Variable Name	Description
Earnings	The amount of wage and salary earnings received. Measured as a quarterly wage total in dollars, the variable was defined as the sum of pre-TANF, concurrent with TANF, or post-TANF quarterly wages depending on the particular model specification.
Goods Industry	Indicates if the individual was employed in a goods-sector industry prior to entering TANF. Measured as a binary variable.

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