

RESEARCH REPORT

The Impact of SNAP Able-Bodied Adults Without Dependents (ABAWD) Time Limit Reinstatement in Nine States

Final Report

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June 2021



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Acknowledgments

This report was funded by the USDA Food and Nutrition Service. We are grateful to them and to all our funders, who make it possible for Urban to advance its mission.

The views expressed are those of the authors and should not be attributed to the Urban Institute, its trustees, or its funders. Funders do not determine research findings or the insights and recommendations of Urban experts. Further information on the Urban Institute's funding principles is available at urban.org/fundingprinciples.

We would like to thank the staff at the State agencies who invested their time to provide the data upon which this study is based and the Regional SNAP Directors for sharing their insights about ABAWD time limit reinstatement. Many people at the Urban Institute and Westat contributed to the study. We thank Sybil Mendonca, Kelly Dwyer, Benjamin Goehring, Allyssa Harris, and Katie Shantz (Urban Institute) and Yong Lee (Westat) for programming support; Neil Damron, Benjamin Goehring (Urban Institute) and Chinedum Orji (Westat) for research assistance; and Michael Marazzi for editing support. Elaine Waxman (Urban Institute) served as the quality-control reviewer for the study and we are grateful for her advice and input throughout the study. We also thank Doug Wissoker, Gregory Acs, and Caroline Ratcliffe (Urban Institute) and Laurie May (Westat) for advising the development of the methodological approach. Finally, we thank the many FNS staff who contributed their time and expertise to the study. We are grateful to the study's project officers, Andy Burns and Barb Murphy, for their guidance and support throughout the project; to Kathryn Law, Wesley Dean, Arpan Dasgupta, Miles Patrie, Moira Johnston, Marcie Foster, and Rachel Gragg for their review and comments on prior versions of the report; and to Sasha Gersten-Paal, Casey McConnell, Robert Ek, John Knaus, Melanie Meisenheimer, and Loretta Robertson for providing answers to our policy questions.

Cover image by Tim Meko.

Executive Summary

This report examines the reinstatement of the time limit for able-bodied adults without dependents (ABAWDs) in the Supplemental Nutrition Assistance Program (SNAP) following the Great Recession. SNAP participants who are subject to the time limit are limited to 3 months of participation in a 36-month period unless they meet the work requirement. We find that the time limit reduced SNAP participation for participants potentially subject to the time limit but does not substantially increase work or earnings.

SNAP is the nation's largest food assistance program; it provided benefits to more than 35 million low-income people in the average month of 2019, including low-income working and nonworking families and individuals, children, and people who cannot work because of age or disability.

To receive SNAP, adults between the ages of 16 and 59 must comply with general work requirements unless they are exempt because of disability or another reason; these requirements include registering for work, accepting a job if offered, participating in Employment and Training (E&T) if assigned by the State, and not quitting a job or reducing hours below 30 hours a week without good cause.

The ABAWD time limit affects a subset of work registrants who are between the ages of 18 and 49, live in households without children, are not pregnant, and are not identified as being mentally or physically unfit for work. These participants have an additional work requirement (the ABAWD work requirement) that they can meet by working and/or participating in a qualifying work program at least 20 hours a week or by complying with a workfare program.

Participants who are subject to the ABAWD work requirement lose eligibility for SNAP once they have received 3 months of benefits in a 36-month period without meeting the work requirement. States may request waivers from the ABAWD time limit for areas with high unemployment or limited jobs and are provided discretionary exemptions to cover a limited number of participants who are at risk of losing eligibility because of the work requirement.

The ABAWD time limit was enacted by the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) and went into effect late that year. The American Reinvestment and Recovery Act (ARRA) suspended the ABAWD time limit between April 1, 2009, and September 30, 2010, in response to the Great Recession. The ABAWD time limit continued to be waived in most States in the following years because of continuing high unemployment. It was not

until 2016 (the main reference period for our analysis) that the ABAWD time limit was reinstated in most States. Beginning in April 2020, the ABAWD time limit was partially and temporarily suspended by the Families First Coronavirus Response Act in response to the economic downturn caused by the COVID-19 pandemic.

The ABAWD time limit is of considerable policy interest, yet research on the topic is relatively limited. In this report, we focus on the reinstatement of the time limit following the Great Recession. We contribute to the literature by documenting the challenges of administering ABAWD policy as reported in interviews with SNAP Regional Directors in November and December 2016 and by analyzing administrative caseload data provided by nine States—Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont. We describe the demographic and economic characteristics of people potentially subject to the ABAWD time limit, show trends in SNAP participation, and estimate the impact of reinstating the ABAWD time limit on SNAP participation in each of the nine States. We investigate the impact of ABAWD time limit reinstatement on employment in three States—Colorado, Missouri, and Pennsylvania—using linked SNAP administrative data and Unemployment Insurance (UI) wage records.

We analyze two different groups of counties in Colorado: one group that was operating a mandatory E&T program before time limit reinstatement, and another group that introduced mandatory E&T at the same time as the ABAWD time limit. If a State operates a mandatory (rather than voluntary) E&T program, then a SNAP participant who is assigned to E&T and does not comply with the E&T requirement is sanctioned, losing at least one month of SNAP benefits for the first occurrence of noncompliance, at least three months of SNAP benefits for the second occurrence, and at least six months of SNAP benefits for the third occurrence. Thus, a SNAP participant can lose eligibility for noncompliance with mandatory E&T before the ABAWD time limit is reached.

A key goal of the ABAWD time limit is to encourage employment. However, we find no evidence that application of the ABAWD time limit substantially increases employment as measured for a cohort of people who were participating in SNAP shortly before time limit reinstatement. Our primary analysis finds small statistically significant negative impacts of the ABAWD time limit on employment. As an additional check, we perform sensitivity analyses that compare outcomes for ABAWDs just under age 50 with outcomes for SNAP participants just above 50 who are not subject to the time limit because of their age but who otherwise meet the definition of ABAWD. The sensitivity analysis finds no statistically significant impact of the ABAWD time limit on employment in two States and a 3 percentage-point increase in employment for this age group in one State.

Although we do not find substantial employment impacts, we do find that the ABAWD time limit substantially reduces SNAP participation by ABAWDs in eight of the nine study States. We find a smaller reduction in SNAP participation in the two groups of Colorado counties included in the analysis. We consider the possibility that Colorado’s mandatory E&T program reduces the impact of the ABAWD time limit but cannot reach definite conclusions within the scope of this study. Our findings are consistent with most other studies in a small but growing body of research that finds that the ABAWD time limit does not lead to a meaningful increase in employment but does substantially reduce SNAP participation.

In this Executive Summary, we provide insights from interviews with the regional SNAP directors, describe the study States, and highlight key results of our descriptive analysis of the characteristics and trends in SNAP participation of people potentially subject to the time limit. We then summarize our findings of the impact of ABAWD time limit reinstatement on SNAP participation, employment, and combined annual SNAP benefits and earnings. We conclude with a discussion of the study’s implications and areas for further research.

Insights from Interviews with Regional SNAP Directors

We interviewed the United States Department of Agriculture (USDA) Food and Nutrition Service (FNS) Regional SNAP Directors for all seven FNS regions over the course of late November and early December 2016. FNS Regional Offices ensure States are complying with federal program requirements and provide oversight and technical assistance to the States. Twenty-one States reinstated the ABAWD time limit in 2016, so the interviews reflect insights obtained shortly after transition from waivers to the ABAWD time limit in many States.

Over the course of our seven interviews, four primary themes emerged.

First, ABAWD policy is complex and challenging. This complexity creates confusion among people subject to the ABAWD time limit as well as among the State (and regional) staff who provide them with services and benefits. Transitioning from a time period in which statewide waivers were in place and States generally did not identify people subject to the ABAWD time limit, to one in which they again became a separate, unique group, introduced a number of challenges. These challenges were particularly acute for new staff who required training on ABAWD rules and new data or management systems. Those policies and rules—who qualifies for ABAWD status, when and for how

long they are eligible for benefits, how to contact and notify them, and how to provide them with other services such as E&T—were new to both State staff and program participants.

Second, though people potentially subject to the ABAWD time limit make up a fraction of all SNAP participants, they are a challenging group to serve. They tend to be more disconnected from the workforce and from traditional means of communication such as phone, email, and regular mail than other SNAP recipients. They have higher rates of homelessness as well as mental and physical limitations that, while not qualifying as a full disability, may nevertheless render them unable to work. Although being identified as unfit for work exempts a participant from ABAWD status, eligibility workers and participants must be aware that these exemptions apply. Thus, although ABAWDs are one of the groups in most need of SNAP, they are also one of the more difficult groups to communicate with and ultimately provide with services.

Third, when it comes to implementing new rules or new systems, every region emphasized the importance of starting early. Building new data and intake systems, training staff, and communicating with clients take time. States that prepared early for time limit reinstatement were the better for it. By identifying and notifying ABAWDs about the ABAWD time limit and work requirement in advance, States can reduce the likelihood of confusion and questions when ABAWDs lose benefits. By having state systems and eligibility procedures up and ready to go, States can reduce the possibility that ABAWDs will receive benefits in error.

Finally, some States are working to expand SNAP E&T to help serve ABAWDs, but job search and job search training remain the most common items offered and only partially count toward the ABAWD work requirement. Most SNAP E&T programs focus on job search and job search training, which must constitute less than half of an ABAWD's countable hours. States face challenges in funding and targeting E&T opportunities to ABAWDs and in increasing ABAWD participation in these opportunities. ABAWDs who live in areas of high unemployment also face challenges in finding employment once training has been completed. Some States do nothing to help ABAWDs meet the work requirement; others are working to expand their SNAP E&T programs to better serve ABAWDs and are actively pursuing partnerships with other agencies and organizations to provide work program and workfare opportunities to help ABAWDs retain eligibility, improve job skills, and move toward self-sufficiency.

Study States

We consulted with FNS to select a diverse set of States for the quantitative analysis, drawn from all regions of the country. Minnesota and Vermont were the first of the study States to reinstate the time limit, with implementation occurring in most areas in November 2013. Although Colorado chose to administer the ABAWD time limit in several counties before 2016, our analysis focuses on two sets of Colorado counties that reinstated the time limit in January 2016—one that was operating a mandatory E&T program when the time limit was reinstated, and another that implemented mandatory E&T and the ABAWD time limit simultaneously. We examine the two groups of counties separately because some people potentially subject to the ABAWD time limit in counties with mandatory E&T may have already lost SNAP eligibility because of noncompliance with mandatory E&T requirements, so the effects of ABAWD time limit reinstatement may differ.

The remaining study States had statewide waivers through the end of 2015. Missouri reinstated the ABAWD time limit statewide in January 2016. Alabama implemented the time limit for much of the State in January 2016 and for remaining areas in January 2017. Maryland, Oregon, Pennsylvania, and Tennessee had a mix of waived and nonwaived areas in 2016 and 2017, although Tennessee lacked a waiver for the first two months of 2016 and Pennsylvania reinstated the ABAWD time limit in March rather than January.

We obtained administrative data from each study State for SNAP participants in each month beginning two years before time limit reinstatement and extending through at least the 18th month after time limit reinstatement. We also obtained UI wage data for SNAP participants in Colorado, Missouri, and Pennsylvania.

Descriptive Analysis

We used the administrative caseload data to examine the characteristics and trends in participation of two groups of people: a broadly defined group of participants who are “potentially subject to the time limit” and a more narrowly defined group of participants who are “ABAWDs subject to the time limit.” We define SNAP participants as “potentially subject to the time limit” if they are 18 to 49, subject to the general work requirements, and in a household without a child under age 18. We classify participants as “subject to the time limit” if they are “potentially subject to the time limit,” live in an area where the time limit is in effect, and are not pregnant or determined by the State to be unfit for work. We use the broader group of participants “potentially subject to the time limit” to examine

results across areas and time periods with and without the time limit. We refer to the narrower group of participants “subject to the time limit” in areas and time periods where the time limit is in effect, because it is only then that exclusions from ABAWD status because of pregnancy and being identified as unfit for work are available in the administrative data.

We focus on the characteristics of participants in the month in which the State reinstated the time limit, referring to this as the “first month of time limit reinstatement.” The earliest that a participant can lose eligibility because of the ABAWD time limit is the fourth month of time limit reinstatement. Therefore, the first month provides a picture of the characteristics of SNAP participants before any have lost eligibility because of the time limit.

We present some estimates for participants in the eighth month of time limit reinstatement. We find that in most States, the number of ABAWDs participating in SNAP drops substantially between the third and fourth month of time limit reinstatement and then continues a more gradual decline before stabilizing by around the seventh month. The eighth month therefore provides a picture of the characteristics of participants after the initial departure from SNAP of those made ineligible by the time limit. ABAWDs who participate in the eighth month of time limit reinstatement include those who meet the work requirement, are covered by a discretionary exemption, have recently transitioned to ABAWD status and not yet reached the time limit, or are a new entrant who has not yet reached the time limit. We provide results for both the first and eighth months in the appendices.

Although we requested the same set of demographic and SNAP related variables from each State, the States varied with respect to the information that they were able to provide to the study. In some cases, we received a requested variable, but the data were missing for most participants. Rather than dropping a characteristic from the analysis if data are not available for all States, we report information for the States where the data are available.

Demographic Characteristics

When reviewing demographic characteristics across the States, some common themes emerge:

SNAP participants potentially subject to the ABAWD time limit are a small share of all participants. Between 4 and 9 percent of SNAP participants in the study States were potentially subject to the time limit in the month of time limit reinstatement. Participants ages 18 to 49 make up 34 to 42 percent of SNAP participants in the study States, but most are exempt from the ABAWD

time limit because they have children in the household, have a disability, or are exempt from the general work requirements for other reasons.

People potentially subject to the ABAWD time limit are more likely to be male and tend to have lower income than the broader group of SNAP participants ages 18 to 49, but this is partly by definition. Men are less likely to have children living with them than women, so they are more likely to be subject to the ABAWD time limit. People subject to the ABAWD time limit are also more likely to be never married, homeless, less educated, have no earned or unearned income, have income below 50 percent of the federal poverty guideline (FPG), and receive benefits as a single-person household than other participants in their age range. Their lower rates of earnings stem in part from the fact that people who work 30 or more hours a week are exempt from the general work requirements and, therefore, are excluded from ABAWD status. Their lower rates of unearned income can be explained by the fact that, by definition, they do not receive disability income or unemployment compensation and are unlikely to receive retirement benefits. Because income eligibility limits rise with household size, people subject to the ABAWD time limit (who are mainly in single-person households) tend to lose SNAP eligibility at lower levels of income than participants ages 18 to 49 living with children, making their average income lower than the overall average for participants ages 18 to 49.

SNAP participants potentially subject to the time limit are generally similar in race and ethnicity to all SNAP participants ages 18 to 49 in their State. However, a somewhat higher share are Black in Alabama, Minnesota, Missouri, Pennsylvania, and Tennessee. The largest difference is in Missouri, where 40 percent of participants potentially subject to the time limit are Black, compared with 30 percent of all participants ages 18 to 49. In Colorado, Hispanic participants make up 38 percent of all participants ages 18 to 49 but 31 percent of those potentially subject to the time limit. The racial and ethnic composition of ABAWDs is affected by the racial and ethnic composition of the areas in which the time limit is reinstated.

Meeting the Work Requirement and Other Ways to Maintain Eligibility

We use the SNAP administrative data to identify the extent to which ABAWDs meet the work requirement, the ways they meet the work requirement, characteristics of ABAWDs most likely to meet the work requirement, and other ways for this group of participants to maintain eligibility. Because of data limitations, we do not report findings for Colorado, Maryland, or Missouri. Based on our review, the following key findings emerge.

Relatively few participants subject to the ABAWD time limit meet the work requirement, though the share rises with the departure of those who lose eligibility. Between 5 and 12 percent of people subject to the ABAWD time limit meet the work requirement in the first month of time limit reinstatement. A higher share (18 to 35 percent) meet the work requirement in the eighth month of time limit reinstatement. However, this is mainly because of the large reduction in the overall number of participating ABAWDs rather than because of increases in the number of participants who meet the work requirement.

Most participants who meet the ABAWD work requirement do so through work. Over three-quarters of people subject to the ABAWD time limit who meet the work requirement in the eighth month of time limit reinstatement do so by working 20 or more hours a week. Of those who meet the work requirement, 23 percent do so through volunteer or unpaid work in Alabama, and 11 percent do so through workfare in Vermont. Eighteen percent of participants who meet the ABAWD work requirement in Oregon do so through work programs, as do 7 percent in Pennsylvania and Tennessee, and 5 percent in Minnesota.

Women subject to the time limit are more likely to meet the work requirement than men. The largest difference is in Vermont, where 43 percent of women and 29 percent of men meet the ABAWD work requirement in the eighth month of time limit reinstatement.

Homeless participants are less likely to meet the work requirement. For example, ten percent of homeless participants meet the work requirement in Oregon and Tennessee in the eighth month of time limit reinstatement, compared with 29 percent and 24 percent of participants who are not homeless, respectively.

The share of participants who meet the ABAWD work requirement rises with educational attainment. For example, in Minnesota, 14 percent of participants without a high school degree meet the ABAWD work requirement in the eighth month of time limit reinstatement compared with 19 percent of those with a high school degree (but no more) and 24 percent who have attended college.

The share of participants who meet the work requirement varies differently by geographic area across States. The share of participants who meet the work requirement in the eighth month of time limit reinstatement is highest in the fringe areas of major metropolitan areas in Oregon, in small metropolitan areas in Minnesota and Pennsylvania, and in “noncore areas” (typically rural) in Alabama, Tennessee, and Vermont. Differences across geographic areas vary by no more than 10 percentage points within most States but differ markedly in Tennessee, where the share meeting the work requirement ranges from 12 percent in the center of large metropolitan areas to 46 percent in

noncore areas. This variation across States suggests that geography alone may be insufficient to draw conclusions about the likelihood that participants will meet the ABAWD work requirement.

Participants subject to the ABAWD time limit primarily retain eligibility through use of time-limited months. Of the four States with available data, the share of participants using a time-limited month of benefits in the eighth month of time limit reinstatement ranges from 34 percent in Pennsylvania to 68 percent in Minnesota. Twenty-nine percent of Pennsylvania's and 4 percent of Tennessee's participants subject to the ABAWD time limit are covered by a discretionary exemption in the eighth month of time limit reinstatement. Two States provided data that enabled us to determine if an ABAWD is receiving a partial benefit for a first month of participation (these partial-benefit months do not count toward the time limit). In these two States, between 9 and 10 percent of participants subject to the ABAWD time limit in the eighth month of time limit reinstatement are in a first partial month of benefits.

Trends in Participation

We examine trends in participation for people potentially subject to the ABAWD time limit, beginning with the first month of available data (two years before time limit reinstatement in most States) and extending through the last month of data (18 or more months after time limit reinstatement). We then examine patterns of entry, exit, "churn" (the process of leaving and returning to SNAP with no more than four months without benefits), and reentry to SNAP after a spell of churn. Finally, we show the number of months on SNAP for ABAWDs who exit SNAP at various points following time limit reinstatement. Because of data limitations, we exclude Oregon from these estimates, except when analyzing the number of months on SNAP. We present our key findings below.

The number of SNAP participants potentially subject to the time limit fell substantially after time limit reinstatement in most States. The numbers of participants who are potentially subject to the time limit and live in a time-limited area fell at least 50 percent by the 12th month of time limit reinstatement in Alabama, Maryland, and Tennessee and by at least 70 percent in Minnesota, Missouri, and Vermont. Participation fell 31 percent in Pennsylvania, 37 percent in Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit, and 9 percent in Colorado counties that already had mandatory E&T when the time limit was reinstated.

The largest reduction in the number of participants typically occurred between the third and fourth month of time limit reinstatement, the point at which participants who do not meet the ABAWD work requirement could first lose eligibility because of the time limit. The number of

participants in some States began to fall before the fourth month. This might reflect a behavioral effect, if some people who would have recertified or applied for SNAP in this period decide not to because of the ABAWD time limit. The simultaneous implementation of mandatory E&T and the ABAWD time limit in Minnesota, Vermont, and one group of Colorado counties may also contribute to a decline in participation before the fourth month because of loss of eligibility arising from sanctions for noncompliance with mandatory E&T requirements.

In contrast to the other States, we find relatively little change in participation among people potentially subject to the time limit in Colorado counties that were already operating mandatory E&T programs when the time limit was reinstated. A possible explanation is that sanctions for noncompliance with mandatory E&T requirements had already removed participants from the caseload who are unlikely to meet the ABAWD work requirement and/or that the E&T and workfare programs in place in these counties provided the supports needed for a greater share of participants to retain coverage.

In all States but Colorado, exits from SNAP spiked and churn increased in the fourth month of time limit reinstatement but later returned to earlier levels. We find that rates of entry, exit, and churn (leaving SNAP and then returning with no more than four months off SNAP) among people potentially subject to the time limit were generally stable before time limit reinstatement. Exits spiked in the month in which participants could first lose eligibility because of the time limit, and the number of people entering a churn spell also increased. The number of people entering, exiting, and churning then returned to levels like those in the period before time limit reinstatement, with a slight decline in some States toward the end of the study period. Although there was some variation in the rapidity with which exits peaked and then returned to levels prior to reinstatement of the time limit, the States generally returned to their prereinstatement levels by the seventh month of time limit reinstatement. Participants who reach the time limit and return to SNAP after a churn spell may have become eligible because they now meet the work requirement, have been identified as mentally or physically unfit for work, or have transitioned out of ABAWD status for some other reason,

Colorado is an exception. It was difficult to discern clear trends in rates of entry, exit, and churn in Colorado, though counties that simultaneously introduced mandatory E&T and the ABAWD time limit showed higher rates of SNAP exit beginning one month before time limit reinstatement and continuing through the fourth month of time limit reinstatement.

Participants who left SNAP after the eighth or twelfth month of time limit reinstatement received SNAP for a much shorter time than those who left SNAP after the first or fourth month,

except for in Colorado counties that already had mandatory E&T. This demonstrates that SNAP “spells” (consecutive months receiving SNAP) are shorter once the time limit has been reinstated. Spell lengths are similar before and after time limit reinstatement in Colorado counties that already had mandatory E&T when the ABAWD time limit was reinstated, suggesting that the ABAWD time limit may not have an effect (beyond that of mandatory E&T) on shortening SNAP spells in these counties.

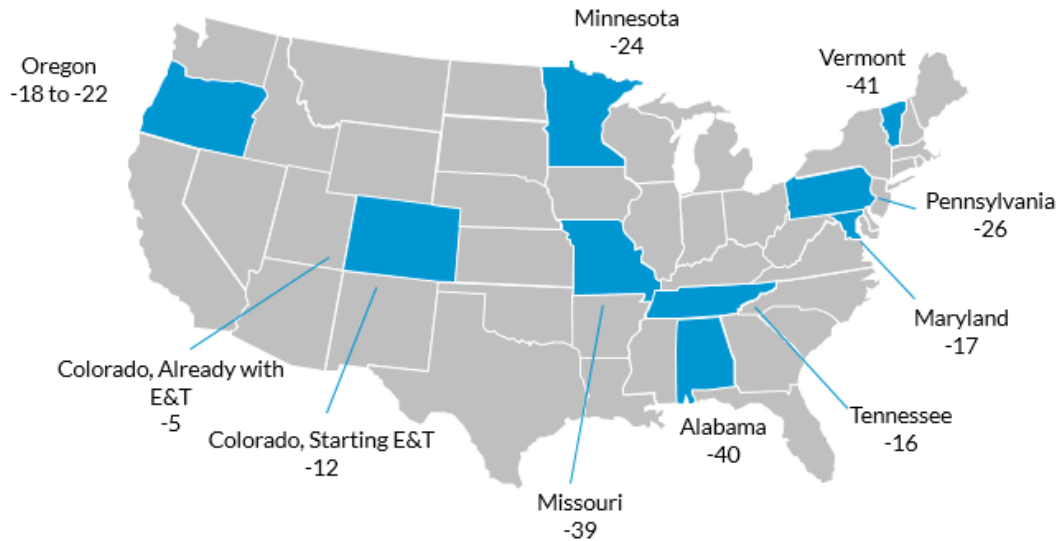
Impact of the ABAWD Time Limit on SNAP Participation and Employment

We estimate the impact of the ABAWD time limit on SNAP participation by comparing outcomes for a “time limit” cohort exposed to the time limit with a “comparison” cohort that is not exposed to the time limit, controlling for differences between the two groups using multivariate techniques. The time limit cohort consists of SNAP participants who were participating in SNAP three months before time limit reinstatement and are “potentially subject to the time limit.” We exclude participants ages 48 to 49 who might age out of ABAWD status during the observation year, so we focus on participants who are ages 18 to 47, subject to the general work requirements, and live in households without children. The comparison cohort is drawn from the same areas of the State one year earlier. We examine SNAP participation in the first year of time limit reinstatement for the time limit cohort and in the year before time limit reinstatement for the comparison cohort.

We find that time limit reinstatement reduces the share of the time limit cohort participating in SNAP in all study States. Focusing on the fourth month of time limit reinstatement—the first in which the time limit could remove participants from eligibility—we find that the reinstatement of the ABAWD time limit reduces participation among those potentially subject to the time limit by as little as 5 percentage points (in Colorado counties that already had mandatory E&T when the time limit was reinstated) to as much as 41 percentage points in Vermont (figure E.1).

FIGURE E.1

Percentage-Point Impact of the ABAWD Time Limit on SNAP Participation in the Fourth Month of Time Limit Reinstatement, by State and Colorado County Group



Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont and UI wage data from Colorado, Missouri, and Pennsylvania.

Notes: All estimates are statistically significant at the 5 percent level. Colorado counties “starting E&T” introduced mandatory E&T at the same time as the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated.

Participants potentially subject to the ABAWD time limit who were receiving SNAP shortly before time limit reinstatement, compared with a corresponding cohort drawn one year earlier.

Time limit reinstatement dates are November 1, 2013, for Minnesota and Vermont; January 1, 2016, for Alabama, Colorado, Maryland, Missouri, Oregon, and Tennessee; and March 1, 2016, for Pennsylvania.

Time limit reinstatement continues to produce a significant reduction in SNAP participation among the time limit cohort 12 months after time limit reinstatement, in all areas except for Colorado counties that already had mandatory E&T when the time limit was reinstated. The smallest effect is in Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit, where the share of the time limit cohort receiving SNAP 12 months after time limit reinstatement is 7 percentage points lower than it would have been without the time limit (data not shown). The largest effect is in Vermont, where the share of the time limit cohort receiving SNAP is 32 percentage points lower than it would have been without the time limit.

We confirm the 12th-month findings through a sensitivity analysis that uses a difference-in-difference (DID) approach to compare outcomes for participants just under age 50 (ages 45 to 47) with participants just above 50 (ages 50 to 52) who are not subject to the time limit because of their

age but otherwise meet the criteria for inclusion. The results are generally consistent with those of the main analysis. Time limit reinstatement reduces SNAP participation in all States except in the group of Colorado counties that already had mandatory E&T, where there is no statistically significant difference in SNAP participation in month 12.

Impact of the ABAWD Time Limit on Employment

We estimate the impact of the ABAWD time limit on employment and earnings covered by the Unemployment Insurance (UI) system using linked SNAP and UI wage data in Colorado, Missouri, and Pennsylvania. UI records are generally the most accessible form of earnings or employment information. However, they do not cover all types of employment. Federal employment, out-of-State employment, small farm work, some nonprofit employment, self-employment, independent contracting, and off-the-books work are generally excluded. The UI records provide quarterly wage data regardless of whether the person participates in SNAP in that quarter.

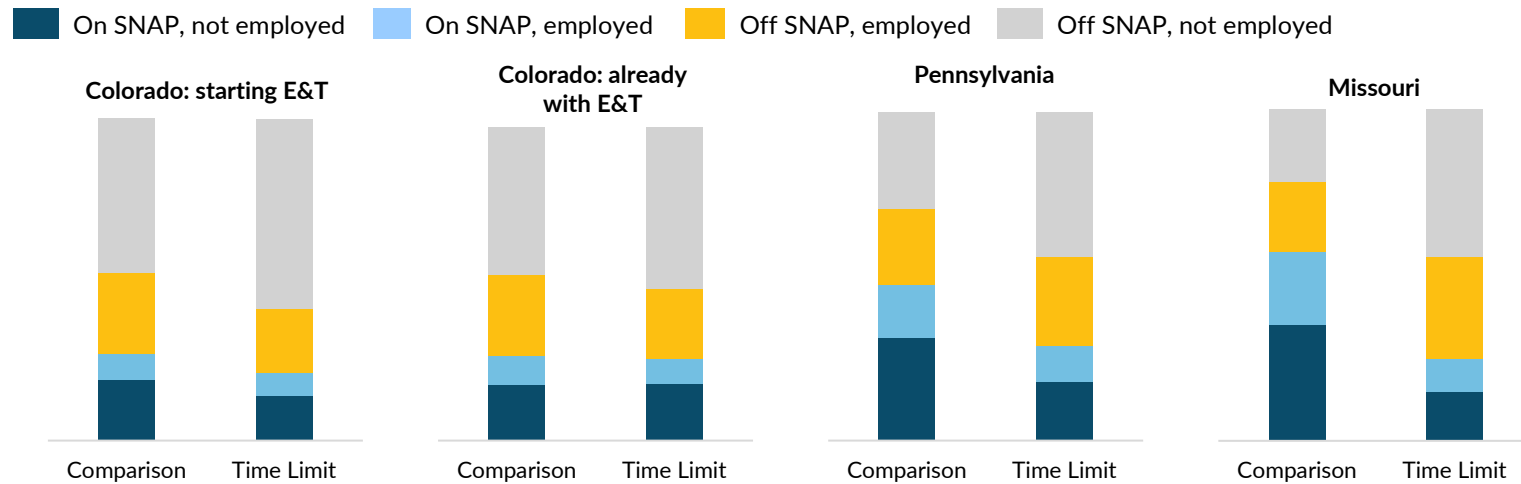
A key goal of the ABAWD time limit is to encourage employment. However, our primary analysis finds no evidence that the ABAWD time limit increases employment one year after time limit reinstatement. Instead, we find small statistically significant negative impacts on employment, with impacts of –2 percentage points in Pennsylvania, –3 percentage points in Missouri, –4 percentage points in Colorado counties that already had mandatory E&T when the time limit was reinstated, and –6 percentage points in Colorado counties that introduced mandatory E&T and the ABAWD time limit simultaneously. Our sensitivity analysis that compares outcomes for participants ages 45 to 47 with those ages 50 to 52 finds a positive 3 percentage-point impact on employment in Missouri but no statistically significant impact on employment in Colorado or Pennsylvania.

Combined Impact of the ABAWD Time Limit on SNAP and Earnings, by State and Colorado County Group

The negative SNAP and employment effects combine to increase the share of participants without either SNAP benefits or earnings in the fourth quarter following time limit reinstatement (figure E.2). Time limit cohort participants who remain on SNAP and are not employed may have not yet used up their time limit months (because they previously met the work requirement), qualify for an exemption, meet the work requirement through a work program or workfare, have employment outside the UI system, or no longer meet ABAWD criteria.

FIGURE E.2

Distribution of People Potentially Subject to the ABAWD Time Limit by SNAP Participation and Employment: Fourth Quarter of Time Limit Reinstatement Year (Time Limit Cohort) and Fourth Quarter of Prior Year (Comparison Cohort)



Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

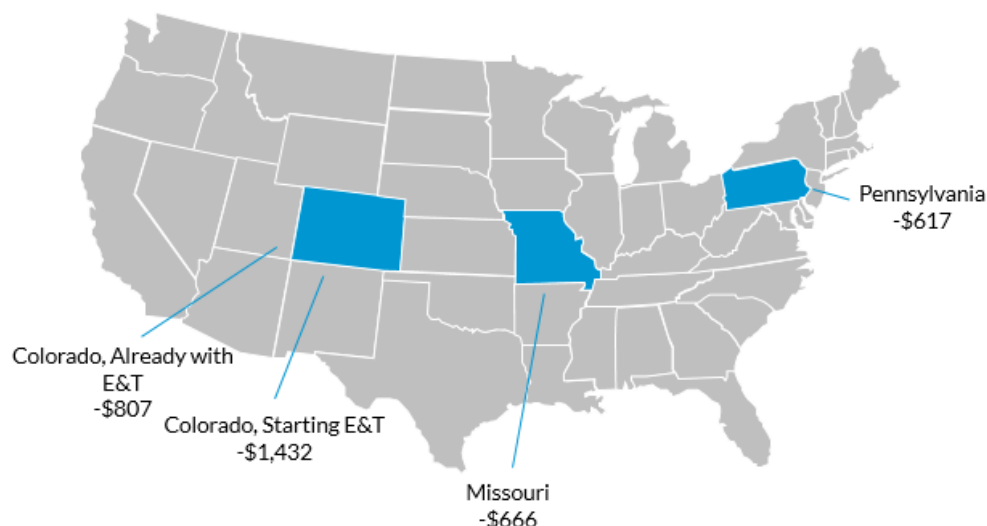
Notes: The estimates are regression adjusted probabilities. "On SNAP" is defined as participating in SNAP in the last month of the quarter. Employed is defined as having earnings greater than \$100 for the quarter, according to the UI wage data. Colorado counties "starting E&T" introduced mandatory E&T at the same time as the ABAWD time limit. Colorado counties "already with E&T" already had mandatory E&T when the ABAWD time limit was reinstated. Participants potentially subject to the ABAWD time limit who were receiving SNAP shortly before ABAWD time limit reinstatement ("Time Limit"), and a similar group drawn one year earlier and not exposed to the time limit ("Comparison"). Time limit reinstatement dates are January 1, 2016, for Colorado and Missouri and March 1, 2016, for Pennsylvania.

The effect is highest in Missouri, where 45 percent of the time limit cohort lack both SNAP and earnings in the fourth quarter, relative to 22 percent in the comparison cohort. Colorado counties that already had mandatory E&T when the time limit was reinstated experience the smallest change; 51 percent of the time limit cohort lack both SNAP and earnings in the fourth quarter, compared with 47 percent of the comparison cohort.

As a result of lower SNAP participation and negative employment effects, participants in the time limit cohort have lower annual combined SNAP benefits and earnings than those in the comparison cohort. We estimate that time limit reinstatement causes average annual combined SNAP benefits and earnings to fall by \$617 in Pennsylvania, \$666 in Missouri, \$807 in Colorado counties that already had mandatory E&T when the time limit was reinstated, and \$1,432 in Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit (figure E.3).

FIGURE E.3

Impact of ABAWD Time Limit Reinstatement on Combined Annual SNAP Benefits and Earnings, by State and Colorado County Group



Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: All estimates are statistically significant at the 5 percent level. The estimates are regression adjusted combined average annual earnings and average annual SNAP benefits. Earnings are reported in inflation-adjusted dollars with January to March 2017 as the base quarter. SNAP benefits are not inflation-adjusted. The maximum SNAP benefit did not change during the time period covered by the comparison and time limit cohorts. Colorado counties “starting E&T” introduced mandatory E&T at the same time as the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated. Participants potentially subject to the ABAWD time limit who were receiving SNAP shortly before the time limit was reinstated, compared with a corresponding group drawn one year earlier. Time limit reinstatement dates are January 1, 2016 for Colorado and Missouri and March 1, 2016, for Pennsylvania.

Conclusion

This study examines the reinstatement of the ABAWD time limit following the Great Recession. We find that time limit reinstatement substantially reduced SNAP participation among people subject to the ABAWD time limit but did not substantially improve employment or earnings.

Although the ABAWD time limit was partially and temporarily suspended because of the economic downturn caused by the COVID-19 pandemic, the findings should prove relevant as the economy recovers and States begin to reintroduce the time limit. Insights from our interviews with the SNAP Regional Directors may help guide time limit reinstatement, especially if waivers are in place for an extended period and expertise is lost because of staff turnover. Our estimates of the effects of the ABAWD time limit on SNAP participation may also provide some insight, with the caveat that effects can vary across States and may play out differently in a post-pandemic economy than in the economy following the Great Recession.

An important area for future research would be to investigate the interaction of the ABAWD time limit and E&T, especially in a mandatory E&T environment. We find relatively little effect of the ABAWD time limit on SNAP participation in Colorado counties that already had mandatory E&T when the time limit was reinstated. Future research could investigate whether this is because sanctions have already removed people from SNAP who do not work or meet mandatory E&T requirements, because participants have better access to E&T or workfare opportunities with which to meet the ABAWD work requirement, or both. We also find evidence that when mandatory E&T and the ABAWD time limit are implemented simultaneously, participation begins to fall before the fourth month of time limit reinstatement, possibly because of sanctions for noncompliance with mandatory E&T. Future research could weigh the pros and cons of administering the ABAWD time limit in a mandatory E&T environment and investigate whether employment outcomes for participants subject to the ABAWD time limit differ depending on the nature and characteristics of a State's E&T program.

Our primary analysis finds that the ABAWD time limit has a small negative impact on employment, while our sensitivity analysis finds no statistically significant impact of the ABAWD time limit on employment among older participants (ages 47 to 49) in Colorado and Pennsylvania and a small positive effect in Missouri. Taken together, the results from the main analysis and sensitivity analysis provide no evidence of improved employment because of time limit reinstatement in Colorado or Pennsylvania, whereas the employment effects for Missouri are inconclusive. The employment findings reflect the experiences of three States in the aftermath of the Great Recession and may not be generalizable to other States and time periods. However, they contribute to a growing body of literature on the impact of the ABAWD time limit that will help inform future policy consideration.

Introduction

This report examines the reinstatement of the able-bodied adult without dependents (ABAWD) time limit in the Supplemental Nutrition Assistance Program (SNAP) following the Great Recession. The ABAWD time limit restricts SNAP benefits to three months in a 36-month period for able-bodied adults who are between the ages of 18 and 49, live in a household without children, and do not work at least 20 hours per week or engage in equivalent employment and training, workfare, or volunteer activities. The ABAWD time limit was suspended during the Great Recession and remained waived in many States in subsequent years due to continued rates of high unemployment. The time limit was reinstated in part or all of most States by 2016 before being suspended again in 2020 in response to the economic downturn caused by the COVID-19 pandemic.

The ABAWD time limit is of considerable policy interest, yet research on the topic is relatively limited. In this report, we contribute to the literature by documenting the challenges of administering ABAWD policy as reported in interviews with SNAP Regional Directors in November and December 2016 and by analyzing administrative caseload data from nine States—Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont. We examine demographic and economic characteristics of people potentially subject to the time limit and trends in program participation. We estimate the impact of reinstatement of the ABAWD time limit on SNAP participation in all of the study States and investigate the impact of reinstatement of the ABAWD time limit on employment in three of the study States—Colorado, Missouri, and Pennsylvania—using linked SNAP administrative data and Unemployment Insurance (UI) wage records.

We find that reinstatement of the ABAWD time limit reduces SNAP participation among recipients on SNAP prior to time limit reinstatement but find no clear evidence of increased employment. Our primary analysis finds that the ABAWD time limit has a small negative impact on employment, while a sensitivity analysis finds no statistically significant impact of the time limit on employment among older participants (ages 47 to 49) in Colorado and Pennsylvania, and a small positive effect in Missouri. Taken together, the results from the main analysis and sensitivity analysis provide no evidence of improved employment due to time limit reinstatement in Colorado or Pennsylvania, and inconclusive effects in Missouri. When SNAP and employment changes are examined together, we find that the main effect of time limit reinstatement is to change the extent to which participants receive SNAP, regardless of whether they have earnings. The most common outcome for the people affected by the policy change is to be off SNAP and not employed a year after time limit reinstatement.

In the following sections, we provide additional background on ABAWD policy, discuss national trends in participation among able-bodied adults without dependents, summarize prior research, and describe our contribution to the literature. We then present the findings from our interviews with the Regional SNAP Directors. We describe the nine Study states and the administrative data used for the analysis, describe the characteristics of people potentially subject to the ABAWD time limit and show trends in participation in the nine study States, and present our multivariate analysis of the impact of ABAWD time limit reinstatement on SNAP participation and employment. We conclude by discussing the study's implications and areas for further research.

Background and National Context

The ABAWD time limit was first enacted as part of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) and went into effect late that year. States were granted the ability to request waivers from the time limit for the entire State or areas within a State due to high unemployment or a lack of sufficient jobs. The Balanced Budget Act of 1997 also provided States the discretion to exempt participants from the ABAWD time limit through “15 percent exemptions,” which were set equal to 15 percent of the State’s participants that were ineligible due to the ABAWD time limit. Each exemption entitled the State to extend eligibility to one ABAWD for one month.

The ABAWD time limit was suspended between April 1, 2009, and September 30, 2010, under the American Reinvestment and Recovery Act (ARRA) and continued to be waived in most States in the following years due to continuing high unemployment. It was not until 2016 that the time limit had been reinstated in most States.

ABAWD policy has been the subject of considerable policy interest and debate. Some have sought to strengthen and extend work requirements to additional populations while others have called for eliminating the time limit. A House-passed version of the 2018 Farm Bill to reauthorize SNAP would have extended the time limit to many more people and would have allowed just one month of eligibility if not meeting the work requirement. The final bill made only minor modifications to the ABAWD work requirement and time limit—reducing the 15 percent exemptions to 12 percent, modifying the definition of a work program, and requiring that States have their Governor’s approval to request a waiver. More recent regulatory changes tightened the criteria by which States can be approved for waivers and further constrained the use of 12 percent, or “discretionary” exemptions. These regulations were finalized in December 2019. However, the United States District Court for the

District of Columbia vacated this rule on October 18, 2020. As a result, the final rule's provisions regarding ABAWD discretionary exemptions and waivers are not in effect.

The Families First Coronavirus Response Act temporarily and partially suspended the ABAWD time limit in response to the economic downturn caused by the COVID pandemic. This provision applies during the period of April 1, 2020, through the month after the month in which the public health emergency declaration by the Secretary of Health and Human Services based on an outbreak of COVID-19 is lifted.

In addition to legislative and regulatory action at the national level, some States have passed legislation controlling what types of waivers are requested by their State, such as preventing their State agencies from requesting waivers or limiting the types of waivers that can be requested.¹

ABAWD Time Limit

The ABAWD time limit applies to SNAP recipients who are ages 18 through 49, are physically and mentally able to work, and are living in households without a child under 18. Individuals are exempt from the ABAWD time limit if they are pregnant, unfit for work, or are exempt from general SNAP work requirements. People subject to general work requirements must register for work, participate in Employment and Training (E&T) or workfare if required by the State, accept a job if offered, and not quit work or reduce hours below 30 hours per week without good cause. People working 30 or more hours per week, complying with the work requirements of another program, or receiving Unemployment Compensation are exempt from general work requirements and therefore exempt from the ABAWD time limit. Additional reasons for exemption from the general work requirements include responsibility for the care of a child under the age of six or an incapacitated person, participation in a drug/alcoholic rehabilitation program, or enrollment in school at least half time.

People subject to the ABAWD time limit are restricted to three countable months of SNAP participation within a 36-month period, unless they meet the ABAWD work requirement. A countable month is a month in which an ABAWD receives SNAP benefits for the full month and does not meet the ABAWD work requirement, does not live in an area covered by an ABAWD time limit waiver, and is not covered by a discretionary exemption (USDA 2015).

¹ For example, North Carolina has legislation prohibiting the State from seeking a waiver to reduce work requirements: <https://files.nc.gov/ncdhhs/DHHS-FactSheet-DSS-SNAP-120519.doc>. West Virginia limits the parameters by which a waiver can be requested: <https://www.wvlegislature.gov/wvcode/ChapterEntire.cfm?chap=9&art=8§ion=2>.

Participants can meet the ABAWD work requirement by working and/or participating in a work program for 80 hours per month or more (an average of 20 hours per week), or by participating in and complying with a workfare program. Working includes work for pay, in-kind work, and unpaid work (volunteering) that can be verified by the State agency. Work programs include the SNAP Employment and Training (E&T) program, although SNAP E&T job search and job search training must count for less than half of the required hours. Work programs also include other federal, state, and local programs such as those offered through Workforce Innovation Opportunity Act (WIOA) American Job Centers (AJCs). Workfare enables participants to receive the value of their SNAP benefit instead of wages through work at a supervised public, private, or nonprofit worksite. Monthly workfare hours are capped at the value of the SNAP benefit divided by the higher of the Federal or State minimum wage. States are not required to offer work program or workfare opportunities to ABAWDs though they can gain access to additional federal “pledge” funds if they guarantee to offer all at-risk ABAWDs a position in a qualifying program.² The availability of work program opportunities varies across States and across areas within States.

SNAP participants who use up the three countable months can continue to receive SNAP within the 36-month period if they become exempt or regain eligibility by meeting the work requirement over a 30-day period. Participants who have used up the three countable months, meet the work requirement, and then fail to meet the work requirement can receive an additional three consecutive months of additional eligibility, so long as they meet other SNAP eligibility criteria. However, they can only receive the additional three months once in a 36-month period.

Administering ABAWD policy presents unique challenges within the SNAP program (Czajka et al. 2001; USDA OIG 2016). The ABAWD time limit and work requirement reflect an additional layer of complexity beyond the general SNAP work requirements (such as registering for work and not voluntarily quitting a job) that apply to all nonexempt SNAP participants ages 16 through 59. States face challenges in understanding ABAWD policy and regulations. No other group is subject to a SNAP time limit, and so States must implement methods to track countable months. Identifying whether an ABAWD is mentally and physically unfit for work requires additional staff training, time, and resources and is further complicated by the lack of face-to-face contact arising from increased State reliance on online applications and call centers. ABAWDs tend to be more disconnected than other SNAP

² See “Guide to Serving ABAWDs Subject to Time Limited Participation” (USDA 2015). https://fns-prod.azureedge.net/sites/default/files/Guide_to_Serving_ABAWDs_Subject_to_Time_Limit.pdf, “Clarifications on Work Requirements, ABAWDs, and E&T,” <https://www.fns.usda.gov/snap/clarifications-work-requirements-abawds-and-et>; “SNAP Work Requirements,” <https://www.fns.usda.gov/snap/work-requirements>; and GAO (2018).

participants, making it harder to reach them to inform them of issues regarding their eligibility. Participants may not be aware of exemptions from ABAWD status or know if they qualify (Hahn et al. 2019).

National Levels and Trends

People potentially subject to the ABAWD time limit represent a small share of SNAP participants. Stavrianos and Nixon (1998) estimate that prior to implementation of the ABAWD time limit in 1996, able-bodied adults without children represented approximately 941,000 (3.8 percent) of SNAP participants.³ Although participation among this population had been falling along with the overall SNAP caseload in the months prior to implementation, the number of participating able-bodied adults fell about 40 percent in the first 12 months after the ABAWD provisions took effect, with most of the decrease occurring in the first two to three months after implementation. Participation continued to decline at a more modest pace through 1998 and 1999 (Czajka et al. 2001).

As of March 2000, able-bodied adults without children represented 2.5 percent of all SNAP participants. Slightly over half (55 percent) lived in areas with waivers from the time limit and almost all of the remaining participants were subject to the time limit.⁴ There is little indication that participants who lost eligibility during the first 36-month period due to the ABAWD time limit returned to the program in the next 36-month period (Czajka et al. 2001).

Although the Food and Nutrition Service (FNS) does not systematically track people potentially subject to the time limit, the FNS “Characteristics of Supplemental Nutrition Assistance Program Households” publications report the number of adults ages 18 to 49 without disabilities in childless households (a group that includes all people subject to the time limit as well as some who are not).⁵ In FY 2007 (the earliest date for which data are available) these adults accounted for 6.7 percent of all SNAP participants (figure 1).⁶

³ Prior to October 1, 2008, the program was named the Food Stamp Program. For ease of discussion, we refer to the program as “SNAP” throughout the report.

⁴ Seven percent of ABAWDs not residing in areas with the time limit were covered by the 15-percent exemption.

⁵ Examples of non-ABAWDs who are between 18 and 49, do not have children, and are not disabled include pregnant women and persons exempt from general SNAP work requirements, including persons who already work for more than 30 hours a week, are participating in a drug or alcoholic rehabilitation program, or are enrolled in school at least half time.

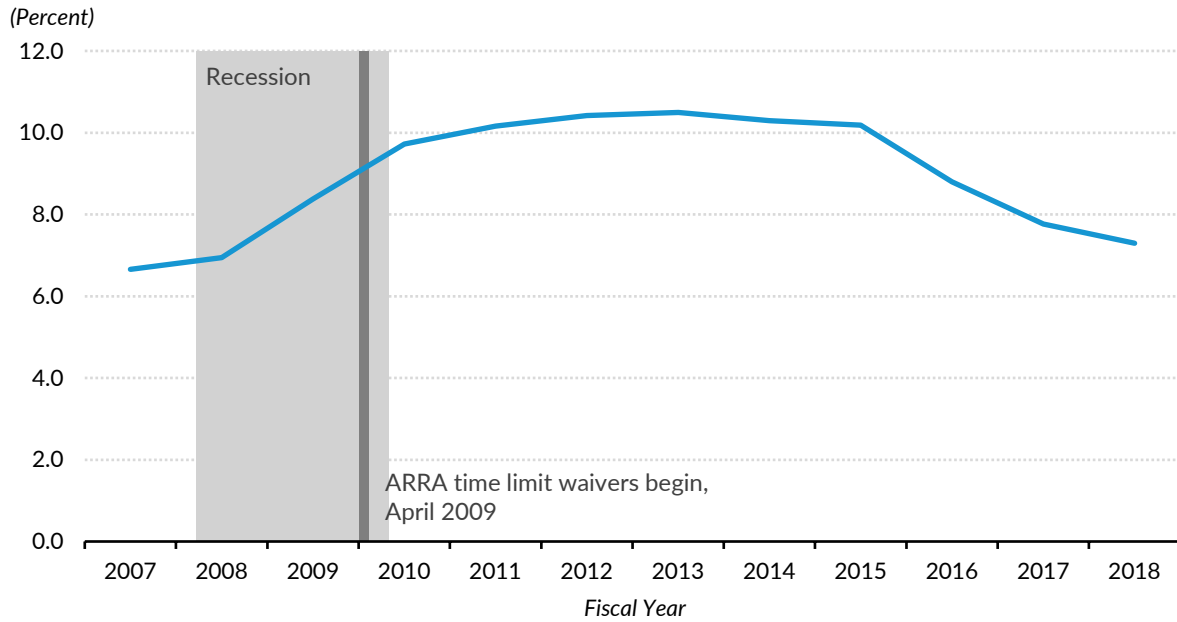
⁶ Counts of adults ages 18 to 49 without disabilities in childless households for the FY 2011-2015 period are from the various *Characteristics of Supplemental Nutrition Assistance Program Households* reports; counts for the FY

The sharp rise in unemployment at the beginning of the Great Recession led to the suspension of the ABAWD time limit in 2009; this change in eligibility rules, coupled with ongoing difficult economic conditions, contributed to a substantial increase in ABAWD participants. By FY 2010, the number of adults ages 18 to 49 without disabilities in childless households had risen to 3.9 million (9.7 percent of participating individuals) from 1.7 million in FY 2007 (figure 2). The overall SNAP caseload also grew substantially during this period, increasing from 25.9 million participants in FY 2007 to 39.8 million in FY 2010 (figure 3).

The number of participants peaked at 47 million in FY 2013. The number of adults ages 18 to 49 without disabilities in childless households also peaked, reaching 4.9 million in FY 2013 (10.5 percent of all participants) before declining slightly in FY 2014 and FY 2015 (figure 2). The number of adults ages 18 to 49 without disabilities in childless households declined from 2016 to 2018 (the most recently available year) as the economy continued to recover and more States reinstated the time limit in all or part of their State. Twenty-eight States and the District of Columbia had a statewide waiver as of July 2015. By March 2016, just eight States and the District of Columbia had a statewide waiver. In 2018, 2.9 million adults ages 18 to 49 without disabilities in childless households received SNAP, accounting for 7.3 percent of all SNAP participants.

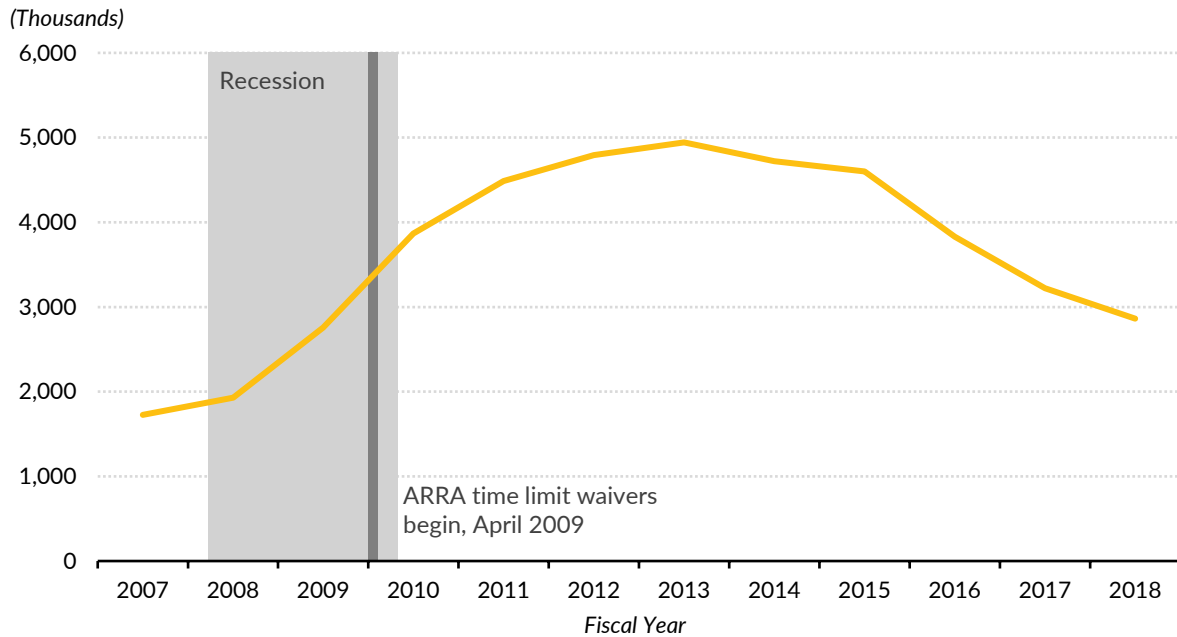
2007-2010 period are from correspondence with FNS. Total participation counts are from the *Characteristics of Supplemental Nutrition Assistance Program Households* reports for all years.

FIGURE 1
Adults Ages 18 to 49 without Disabilities in Childless Households, as Percent of Total SNAP Participants



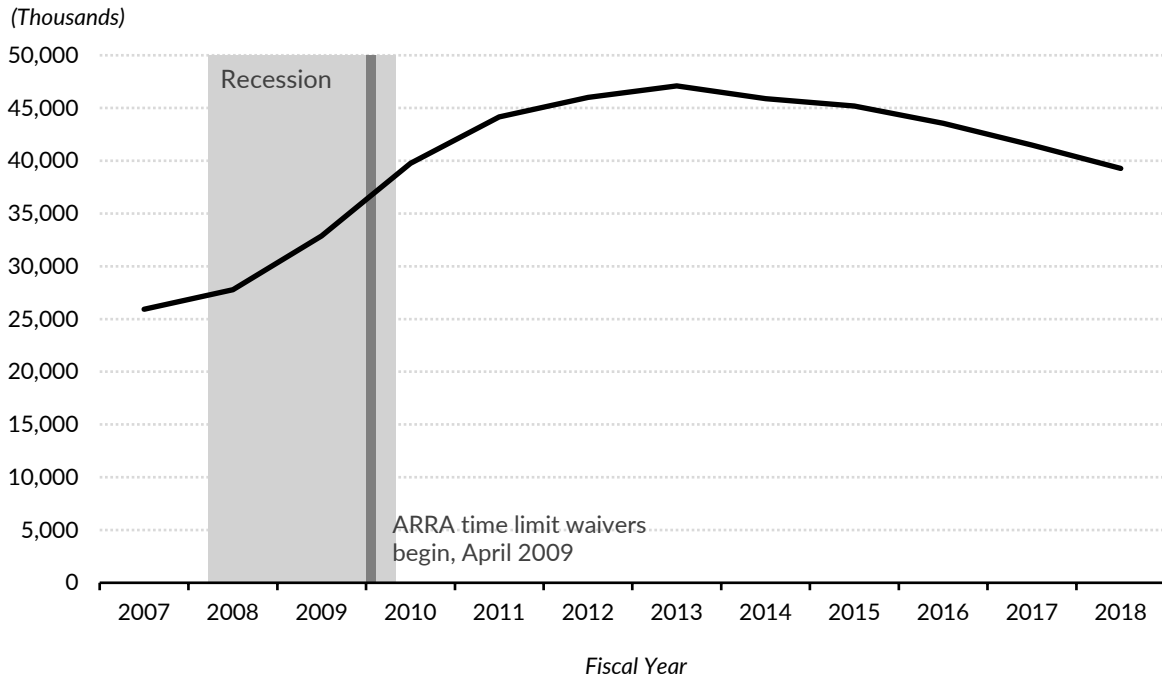
Source: Characteristics of Supplemental Nutrition Assistance Program Households reports, various years.

FIGURE 2
Adults ages 18 to 49 without disabilities in childless households



Source: Characteristics of Supplemental Nutrition Assistance Program Households reports, various years.

FIGURE 3
Total SNAP Participants



Source: Characteristics of Supplemental Nutrition Assistance Program Households reports, various years.

Prior Research

There is a small but growing body of research into ABAWD policy and its effects. Past studies have analyzed the characteristics of able-bodied adults without dependents, estimated the extent to which ABAWD and other SNAP policy changes affect SNAP participation, obtained insight from stakeholders and participants through interviews and focus groups, and investigated the effects of ABAWD policies for individual States and localities. A growing number of studies have examined the effect of reinstatement of the ABAWD time limit following the Great Recession, often utilizing variation in the timing of reinstatement across counties and states to estimate the impact of the ABAWD time limit on SNAP participation and employment.

Generalizing across studies can be difficult, because they often reflect different points in time, data sources, and populations. The number and characteristics of able-bodied adults without dependents who participate in SNAP will differ depending on whether the study is examining a time and place where the ABAWD time limit is in effect. All else equal, we would expect a higher share of participants potentially subject to the ABAWD time limit to be working in periods when the time limit

is in effect, due to the departure from SNAP of those who do not meet the ABAWD work requirement and have reached the time limit. Populations also differ across studies. A study might focus on participants who work less than 20 hours per week and are therefore at risk of losing benefits; less than 30 hours per week to include those who meet the ABAWD work requirement; or all able-bodied participants without dependents, including those who work 30 or more hours per week and are therefore exempt from general work requirements and ABAWD status. Survey-based research often focuses on a broader low-income population, including people not currently participating in SNAP but whose decision to participate could potentially be influenced by ABAWD policy. The effects of ABAWD policy on each of these populations may differ, complicating comparison across studies.

CHARACTERISTICS OF ABLE-BODIED ADULTS WITHOUT DEPENDENTS

Three studies provide national estimates of the characteristics of able-bodied adults without dependents. Stavrianos and Nixon (1998) present estimates for 1996, prior to the initial implementation of the ABAWD time limit. Czajka et al. (2001) present estimates for 2000 in areas where the time limit was in effect. Bolen et al. (2016) present estimates for 2014—a year in which the time limit was still waived in most States. In addition, the annual FNS publication *Characteristics of Supplemental Nutrition Assistance Program Households* includes tables for SNAP participants ages 18 to 49 without disabilities in households without children.

Although the studies provide estimates of the characteristics of able-bodied adults without dependents, they differ in some important ways. The 1996 and 2014 estimates focus on the characteristics of SNAP participants who do not work or who do not work enough to meet the ABAWD work requirement. The estimates reflect a time prior to initial implementation of the time limit (1996) or prior to reinstatement of the time limit in most States following the Great Recession (2014). Both studies include people living in high unemployment areas that would qualify for waivers. In contrast, the 2000 estimates reflect a population that is more connected to the workforce; they include people who meet the ABAWD work requirement, exclude those who have lost eligibility due to the ABAWD time limit, and exclude those living in areas covered by waivers. The *Characteristics of Supplemental Nutrition Assistance Program Households* estimates include all adults without disabilities ages 18 to 49 who live in households without children, including those who live in areas that are waived from the time limit or are working 30 or more hours per week.

Below, we describe the characteristics of able-bodied adults without dependents as observed in the three studies, supplementing in some cases with information drawn from the *Characteristics*

reports. In some cases, information about a characteristic is available in only one or two of the studies—we report information for all studies for which it is available.

We use the following terms in the discussion:

- “ABAWD potentially at risk” describes participants in the 1996 and 2014 estimates. These are ABAWDs who do not work enough hours to meet the work requirement and are at risk of losing eligibility if they do not live in an area with a time limit waiver, receive a discretionary exemption, increase their hours of work, or meet the ABAWD work requirement through a work program or workfare.
- “ABAWD subject to time limit” describes participants in the 2000 estimates. This group includes ABAWDs who meet the work requirement as well as those who do not. They exclude ABAWDs living in an area with a time limit waiver.
- “Participant age 18 to 49 without disabilities in childless household” describes participants in the *Characteristics of Supplemental Nutrition Assistance Program Households* estimates. This group is the broadest of the three groups and includes participants regardless of work status and where they reside. Unlike “ABAWD potentially at risk” and “ABAWD subject to time limit” this group includes participants who are working 30 or more hours per week and are therefore exempt from general work requirements and ABAWD status.

The studies provide the following information about the characteristics of these groups:

Gender. Slightly more than half (53 percent) of ABAWDs subject to the time limit in 2000 were men. Men represented 58 percent of ABAWDs potentially at risk in both 1996 and 2014.

Age. ABAWDs subject to the time limit in 2000 were disproportionately concentrated toward the lower and upper ends of the 18 to 49 age range—with 18 percent between the ages of 18 and 20 and 35 percent age 41 or above. ABAWDs potentially at risk were more evenly distributed by age in 1996 and were disproportionately concentrated among the younger ages in 2014—with 46 percent between 18 and 29 years old.

Race and Ethnicity. Forty-four percent of ABAWDs subject to the time limit in 2000 were Non-Hispanic White, 37 percent were Non-Hispanic Black, and 14 percent were Hispanic. The distribution for ABAWDs potentially at risk in 2014 is similar—with nearly half White, a third African American, and a tenth Hispanic. African Americans represented a higher share (46 percent) of ABAWDs potentially at risk in 1996.

Household Size. Fifty-eight percent of ABAWDs subject to the time limit in 2000 were in one-person SNAP households.⁷ A much higher share (72 percent) of ABAWDs potentially at risk were in single person households in 1996. This higher share is also reflected in more recent years using data from *Characteristics of Supplemental Nutrition Assistance Program Households*: 76 percent of participants ages 18 to 49 without disabilities in childless households were in one-person SNAP households in 2010 (when the time limit was waived in most areas) and 79 percent were in one-person SNAP households in 2018.⁸

Sources of Income. Almost half of ABAWDs subject to the time limit in 2000 had no income. Thirty-one percent had earnings and 23 percent had unearned income. A higher share of ABAWDs potentially at risk in 1996 lacked income. Nearly three-quarters (72 percent) did not have income and just 7 percent had earnings. The direction of difference is not surprising, given that the 1996 estimates exclude people meeting the work requirement and the 2000 estimates reflect a time period and geographic areas where the time limit was in effect. More recent data from *Characteristics of Supplemental Nutrition Assistance Program Households* show that 26 percent of participants ages 18 to 49 without disabilities in childless households were working in 2018.⁹ This group includes people working 30 or more hours per week who are not subject to the ABAWD time limit as well as people subject to the time limit.

Poverty Status. Eighty-two percent of ABAWDs potentially at risk in 1996 had gross income below 50 percent of the federal poverty guideline (FPG). A similar share (84 percent) had income below 50 percent FPG in 2014.

Homelessness. Among six states with available data in 2000, 6.5 percent of ABAWDs subject to the time limit lacked a stable or permanent residence.¹⁰

Spell Length. Forty-two percent of ABAWDs subject to the time limit in 2000 had participated in SNAP for three months or less, and 29 percent had participated for longer than a year. A somewhat

⁷ We use the term “household” to refer to the individual or group of people who apply for and receive SNAP together. People who live at the same residence but are not part of the SNAP household are not counted when describing household size.

⁸ These percentages are calculated from data in tables 3.5 and A-14 of the *2010 and 2018 Characteristics of Supplemental Nutrition Assistance Program Households* publications. See Eslami and Strayer 2011 and Cronquist 2019.

⁹ This percentage is calculated from table A.26 in Cronquist 2019.

¹⁰ The six states for which homelessness data are available are Colorado, Kentucky, Maine, Michigan, Ohio, and Rhode Island.

smaller share (one third) of ABAWDs potentially at risk had participated for three months or less in 1996, but the same share (29 percent) had participated for more than a year.

ADMINISTRATIVE CHALLENGES

In a September 2016 USDA Inspector General audit report (USDA OIG 2016), State officials expressed concern about the time and resources required to administer ABAWD policy and are quoted as calling ABAWD implementation an “administrative nightmare” and an “operational nightmare.” Similar challenges were reported in the years following the initial implementation of the ABAWD time limit (Czajka et al. 2001).

Challenges arise from the complexity of the rules and the demands of serving a population that can be difficult to reach and often face transportation and other barriers to employment. SNAP agencies must determine whether a person is subject to the ABAWD time limit, meets the ABAWD work requirement, establish whether there is “good cause” for not meeting the work requirement, and track countable months. States must also decide whether to apply for waivers and whether and how to use discretionary exemptions. Staff turnover during years in which the ABAWD time limit is waived contribute to lost expertise in the administration of ABAWD policy.

A few studies of individual States and localities have explored the experiences of SNAP administrators, participants, and other stakeholders with administering ABAWD policy and serving this population.

Arkansas. Stakeholders and SNAP participants in Arkansas describe ABAWD time limit rules as confusing, indicate that there is limited access of SNAP participants to jobs, training, and support services, and call for better communication, more employment and training opportunities, improved transportation infrastructure, and a better safety net. However, they note that even if these needs were met, a lack of high-quality jobs would continue to present a major obstacle (Hahn et al. 2019).

Franklin County, Ohio. Able-bodied adults without dependents who were referred to the Ohio Association of Food Banks Work Experience Program reported various barriers to employment, including physical or mental health limitations (33 percent), lack of a high school diploma or GED (30 percent), felony convictions (34 percent), and current probation or parole (10 percent). Only 38 percent had a valid driver’s license. Communication presents challenges. Although ninety-five percent reported having a phone number and over 85 percent reported a mailing address, only 38 percent reported having an e-mail address. Often, the clients were in short term housing situations and the

phone number was that of a friend, family member, or homeless shelter (Ohio Association of Food Banks 2014).

Minnesota. Wilder Research (2015) conducted interviews with community experts including attorneys, outreach and eligibility workers, SNAP employment and training staff, and agency division directors about their experiences with the reinstatement of the ABAWD time limit in Minnesota. Stakeholders described administrative challenges, including a lack of understanding about ABAWD policy and exemptions among eligibility workers, many of whom had started their jobs while the State had an ABAWD waiver, and the need for more money and resources for components of the State's mandatory E&T program. Respondents reported difficulty in communicating the policy change to the highly transient ABAWD population (1,000 notices in one county were returned to sender) and mentioned concern that many would not understand it due to high illiteracy rates among this population. They described the problem of low turnout at the required E&T orientation, which could be due to transportation issues or lack of understanding of the importance of attending. Respondents mentioned that low motivation may also be a contributing factor and that participants may not think the work required is worth the SNAP benefit. The study also offered insights from listening sessions with 29 homeless able-bodied adults, describing their difficulties with understanding written communication and transportation challenges.

IMPACT OF THE ABAWD TIME LIMIT ON SNAP PARTICIPATION AND EMPLOYMENT

Prior research based on a variety of data sources, research methods, and time periods finds that ABAWD time limit waivers increase SNAP participation and implementation of the ABAWD time limit decreases SNAP participation among able-bodied adults without dependents (Ziliak, Gunderson, and Figlio 2003; Ribar, Edelhoch, and Liu 2010; Ganong and Liebman 2018; Stacy, Scherpf, and Jo 2018; Han 2019; Ku et al. 2019; Waxman and Joo 2019; Brantley, Pillai, and Ku 2020; Gray et al. 2020; Harris 2020; Lippold 2020).¹¹

Of key interest is whether able-bodied adults who leave SNAP due to the time limit obtain employment. A Kansas and a Maine study both describe substantial wage increases following departure from SNAP, but these studies have major limitations. The Kansas study (Ingram and Horton 2016) finds that 60 percent of people leaving SNAP due to the time limit had found employment within 12 months. The authors attribute this to the effect of the time limit, without controlling for the fact that some participants who had turned to SNAP during a spell of unemployment or reduced hours

¹¹ Cuffey, Mykerezi, and Beatty (2015) find no effect of time limit waivers on SNAP participation in an analysis using data from the 2004 to 2009 Current Population Survey Food Security Supplements.

of work would have experienced increased earnings even in the absence of the time limit and others would have become employed due to Kansas' improving economy. The study also finds that the share of able-bodied adults meeting the work requirement doubled following time limit reinstatement, but does not indicate that this may simply reflect the fact that those who are working at least 20 hours per week are able to maintain eligibility and therefore represent a larger share of participants remaining on SNAP once the time limit is in effect. The Maine study (Leparula and Rector 2016) similarly examines increased employment following time limit reinstatement without controlling for the additional earnings that would have occurred in the absence of the time limit. Rosenbaum and Bolen (2016) further discuss the limitations of the two studies.

Most research studies that use quasi-experimental methods to isolate the effects of the ABAWD time limit on employment find little or no effect. Cuffey, Mykerezi, and Beatty (2015) use data from the Current Population Survey Food Security Supplement data for 2004 to 2009 and find no evidence of an impact of the ABAWD time limit on employment. Stacy, Scherpf, and Jo (2018) find no impact on labor force participation and number of hours worked in an analysis of linked American Community Survey (ACS) data and administrative data in nine States covering 2005 to 2015. Han (2019) analyzes ACS data for 2005 to 2017 and finds that suspending work requirements had no impact on employment, with a confidence interval of plus or minus 1.4 percentage points. Ritter (2018) uses basic monthly Current Population Survey data from 2000 to 2016 and SNAP Quality Control data for 2003 to 2017 and finds no evidence that the ABAWD time limit affects employment of older ABAWDs. Harris (2020) uses ACS data for 2010 to 2017 and finds that the ABAWD time limit increases ABAWD employment by 1.3 percentage points. Lippold (2020) uses a regression discontinuity design to compare counties just below and above the unemployment threshold required for the ABAWD waiver and finds that removing the ABAWD work requirement reduces hours of work.

Two prior studies use linked SNAP administrative data and UI wage records to investigate the impact of the ABAWD time limit. Gray et al. (2020) analyze linked SNAP administrative data and Unemployment Insurance (UI) wage records for Virginia. They find no effect of ABAWD time limit reinstatement in Virginia in 2013 on employment on average and statistically rule out employment increases of more than 2 percentage points, although they find some evidence of increased earnings among participants working near the level required to retain eligibility. Ribar, Edelhoj, and Liu (2010) use linked SNAP administrative data and UI wage records for South Carolina and find that the ABAWD time limit increases exits into employment as well as exits into nonemployment. However, they do not estimate the impact of the time limit on the probability of being employed.

CONTRIBUTION TO THE LITERATURE

We contribute to the literature by examining the reinstatement of the ABAWD time limit following the Great Recession. We provide insights about the challenges associated with reinstatement of the time limit obtained through interviews with seven SNAP Regional Directors in November and December 2016. We then analyze SNAP administrative data obtained from nine diverse States—Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee and Vermont—to describe trends in participation following time limit reinstatement, the characteristics of able-bodied adults without dependents and the extent to which they meet the work requirement, and patterns of entry, exit, and churn before and after time limit reinstatement. We then use multivariate methods to estimate the impact of the ABAWD time limit on SNAP participation. We estimate the impact of the time limit on employment, earnings, and the combination of SNAP benefits and earnings using linked SNAP administrative data and UI wage data for Colorado, Missouri, and Pennsylvania.

Our use of SNAP and UI wage records most resembles the South Carolina study by Ribar, Edelhoch, and Liu (2010) and the Virginia study by Gray et al. (2020). However, whereas these studies focused on one State, we apply a consistent methodology to nine diverse States. By using individual level administrative data, we avoid the limitations of survey-based analyses caused by substantial underreporting of SNAP in survey data (Meyer, Mok, and Sullivan 2009), annual reports of income and SNAP that complicate analysis of within-year policy changes, and lack of geographic detail that make it difficult to identify whether a person in a State with a partial waiver is in a waived or time-limited area.

ABAWD Time Limit Administration

To provide insight into the challenges of administering the ABAWD time limit, we conducted interviews with the seven FNS Regional SNAP Directors over the course of late November and early December 2016. FNS Regional Offices ensure States are complying with federal USDA program requirements and provide oversight and technical assistance to States. Our conversations ranged in length from about 45 minutes to 90 minutes. All our conversations included the Regional SNAP Director, and most included additional staff invited by the Director. We refer to the interview respondents as “regional respondents” in the text below. Respondents were open about the successes and challenges that States face when reinstating the ABAWD time limit. The interviews typically reinforce the challenges reported in the literature, as well as raise some additional considerations.

Regional respondents indicated that there is no one way to describe an ABAWD. When asked to describe the characteristics of the ABAWD population, one respondent said: “I am not sure you can put an ABAWD into any one category... ABAWDs are just what that implies, an able-bodied adult without a dependent. I mean, it’s a wide range.” Even so, respondents described ABAWDs as more likely to be homeless, ex-offenders, or to have drug or alcohol dependency issues. ABAWDs were also described as more likely to have mental illness or other disabilities, which might preclude them from being subject to the time limit, although screening procedures do not necessarily capture this accurately.

All seven regional respondents remarked on the difficulties of administering the ABAWD time limit. It was called “a complex policy to administer,” “a complicated policy area,” and “pervasive and awkward.” Training staff and keeping them updated on changing policies and rules is difficult, as is communicating that information to ABAWDs (often called “clients,” terms we use interchangeably in the text that follows). Tracking ABAWDs and their eligibility is an obvious challenge, especially because this population is viewed as more likely to be disconnected from the workforce or less likely to have a consistent means of receiving information or notices. One regional respondent reflected upon the challenges of ABAWD policy as “com[ing] back to policy complexity, and worker experience and training,” while another remarked that, “ABAWD policies are pretty complex so it is difficult to explain them to people who have been working in the program their whole lives, let alone for clients who might just be walking in [to the office].”

Below, we provide further details on nine major policy considerations and challenges States face in implementing and administering the ABAWD time limit. These include policy considerations and

challenges regarding time limit waivers and use of discretionary exemptions, administrative issues involving staff training and turnover, system modernization, identifying and communicating with people subject to the ABAWD time limit, tracking their eligibility, verifying whether they are meeting the ABAWD work requirement, and using work programs and workfare to help ABAWDs at risk of losing eligibility. For each area, we identify some major themes and findings from the literature and then augment them with responses from our seven interviews. We then describe some additional insights gained through the course of the interviews. We conclude by identifying four major themes that emerged from the interviews.

Our discussion reflects the complexities involved in the reinstatement of the ABAWD time limit following the Great Recession. It was clear from our interviews with regional respondents in November and December 2016 that most States did not identify or track ABAWDs during the waiver period and that the rules regarding ABAWDs were unfamiliar to many eligibility workers prior to time limit reinstatement. Therefore, considerable effort was required to train workers. Some States that had not changed their computer systems during the waiver period were able to “turn back on” tracking of countable months, but other systems required new programming. Later guidance from FNS clarified that States should identify and track ABAWDs in areas with a waiver, so that they are ready to administer the ABAWD time limit once the waiver is no longer in effect.¹²

Time Limit Waivers

A first challenge presented by ABAWD policy is that States must decide whether to request and use time limit waivers.

Each of the regions we spoke with emphasized that decisions about when and how the States pursued time limit waivers were made at the political level, either by political appointees or even State Governors and Legislatures. In the words of one respondent, “Politics play a huge role in States’ decisions to pursue an ABAWD time limit waiver.”

¹² See “Supplemental Nutrition Assistance Program – Clarifications on Work Requirements, ABAWDs, and E&T – May 2018.” USDA FNS letter to Regional Directors. <https://fns-prod.azureedge.net/sites/default/files/snap/Clarifications-on-WorkRequirements-ABAWDs-ET-May2018.pdf> and “Supplemental Nutrition Assistance Program State Agency Readiness to Apply the ABAWD Time Limit and Serve ABAWDs.” USDA FNS letter to All State Agency Directors. <https://fns-prod.azureedge.net/sites/default/files/media/file/State%20Agency%20Readiness%20to%20Apply%20the%20ABAWD%20Time%20Limit%20and%20Serve%20ABAWDs.pdf>.

We also heard from one regional respondent that advocates in some States provided assistance to the States in applying for ABAWD waivers: “That was a big push from the advocates, and they would help them [States] calculate it.... That’s the place where I saw the advocates come in really strongly.”

Discretionary Exemptions

Each State agency responsible for administering SNAP benefits is granted a number of discretionary exemptions that the State can use to provide one month of SNAP eligibility to a participant who would otherwise be ineligible due to the time limit. A State can choose to grant multiple exemptions to one individual to exempt that individual for multiple months (CBPP 2015). States must decide whether and how to use these exemptions, which were known as “15 percent exemptions” prior to the 2018 Farm Bill.¹³

In many of our interviews, regional respondents reported that a common use of discretionary exemptions is to cover erroneously awarded benefits paid to ABAWDs who have exceeded their countable months (instead of pursuing reimbursements from the recipient). This benefits the ABAWD but also simplifies administration of the program by removing the need for retrospective adjustments. For instance, one regional respondent described why States choose to use discretionary (15 percent) exemptions as follows: “States will use 15 percent exemptions to correct errors, and by that, I mean when they issue SNAP benefits incorrectly to ... ABAWDs because the State wasn’t properly tracking countable months, and so [the ABAWDs] receive benefits when they shouldn’t have, but it wasn’t really their own fault ... (as) they couldn’t have prevented it. So, that State does not want to initiate claims against [the impacted ABAWDs] because that doesn’t seem right.”

Respondents also reported that the discretionary exemptions are sometimes used to delay implementation of the time limit or to cover participants in parts of a State with fewer employment or E&T opportunities. They may also be used to target specific populations with significant work barriers, such as ex-offenders and people battling drug or alcohol addiction.

Finally, discretionary exemptions are used to target those who have tried but are failing to meet the work requirement. One regional respondent framed the policy orientation as follows: “[T]he intent of the 15 percent exemptions is to benefit those ABAWDs that have used their three countable months and that are in good faith trying to meet the ABAWD work requirement.”

¹³ We use the current term “discretionary exemption” in general discussion but refer to “15 percent exemptions” when quoting the interview respondents.

Staff Training and Turnover

States must devote time and resources to training staff members—caseworkers in particular—about the nuances of ABAWD eligibility rules. Caseworkers must learn the complexities of the regulations and how to accurately assess ABAWDs for SNAP eligibility. It can take months of intensive training for staff to be adequately trained and understand ABAWD policy (USDA OIG 2016). Complicating this endeavor, there is significant staff turnover in these agencies, which presents the challenge of training new staff members who have never had exposure to ABAWD implementation issues or the complexities of the regulations. Furthermore, administering ABAWD rules may be only part of a staff member’s job (CBPP 2015).

Regional respondents confirmed the challenges presented by staff turnover. One regional respondent phrased it as follows: “[Staff turnover is] a major challenge for States. The staff turnover has been quite aggressive in States, as it typically is. In many instances, the States had to start from scratch in learning the terminology, developing the policy manuals, and the other materials such as notices and training staff.”

In addition to regular turnover, States were faced with implementing a policy that many (and sometimes all) State staff had never seen before, and also possibly in the context of new computer or tracking systems that had not necessarily been designed with this level of detail.

States varied with respect to the timing and frequency of training. Some States offered training every few months, while others may not have offered training on ABAWD policy since the time limit was reinstated. As one regional respondent put it: “[The frequency of training] really varies by State...and this goes for nationwide too...It’s typical that States will conduct trainings prior to implementing the time limit. [After this] some States get training on ABAWD policy once every three months or so, but in some States, they haven’t had ABAWD training since they went off the time limit three years ago...there are definitely States where it has been mandatory or computer-based training; [for] some States, this is not the case.”

With respect to the reinstatement of the time limit, one region suggested a particular policy to their States: “We encouraged them to do two training sessions; early in the year prior to implementation then do a refresher training closer to the implementation date, mainly because this policy had not been in place for so many years.”

The ABAWD time limit also presents a training challenge given the number of areas affected by the policy. Staff are trained on general services provided to ABAWDs as well as specific questions.

“There are buckets of ABAWD policy that people are trained on: the actual time limit; screening for exemptions; the work requirement; and the E&T piece...then the various notices and those sorts of things.”

The regions worked with States to provide them with guidance and documentation regarding the ABAWD time limit. Regional respondents reported being in close contact with the States (and the federal office) as well as facilitating communication between States. Regions told us about working with States to be sure they were prepared for the expiration of the time limit waiver. A variety of training methods were used—there was no one set package. One regional respondent noted: “There is not a standard training package we can give them.... They sometimes dust off what they had and enhance it to make it more current, but the thing we always told the States is, ‘It’s not like riding a bike.’”

Webinars seemed to be the most common training package offered, provided both from the regions to the States, as well as national webinars or conference calls from FNS or other groups, such as the Center on Budget and Policy Priorities (CBPP) and American Public Human Services Association (APHSA). Conference calls and site visits also seemed to be a regular part of the region’s toolkits. Many regions mentioned having an annual conference where they and representatives from the States could get together and discuss policies, rules, and best practices. Though not discussed in detail, the national FNS office was identified as providing training to States and the regions, often in the form of documentation and webinars.

Regional respondents also mentioned “cheat sheets,” checklists, and summary memos to provide clear and concise language about the policies and rules. As with notifications to clients, providing policy and rule details in clear, concise language was one suggested way in which States could help their staff better understand the program and provide the best services to clients.

System Modernization

Many States modernized their data systems in the 2000s, often across multiple programs or systems, with the goal of increasing access to SNAP and other programs while reducing administrative cost (Rowe et al. 2010, Hulseley et al. 2013). Some States also implemented new automated eligibility systems to meet the demand of implementing the Affordable Care Act passed in 2010 but did so prior to expiration of time limit waivers. As a result, some of these systems were not equipped to track data related to the ABAWD time limit (Bolen et al. 2016). The move to modernization has also resulted in less face-to-face contact with clients. At the end of 2006, for example, 13 States accepted

applications via an online portal in at least some part of the State; by the end of 2011, 34 States were accepting online applications.¹⁴ As of October 2017, 46 State agencies offered on-line applications and 33 offered on-line recertifications (USDA 2018).

Despite the trend towards modernization, States have a variety of different data systems in place. One regional respondent summarized the data systems of the States in that region: “Some States do have a completely paperless system whereas the others have a normal mainframe system which requires them to maintain paper file folders for each client. Some of them use multiple systems in addition to the central eligibility system. Some use Excel for maintaining participation records and that information then flows back to the central office where that data is compiled and reentered into the eligibility system.”

Some States worked to link different programs together to improve efficiency—we heard reports of many States where the SNAP, TANF, Medicaid, and childcare assistance programs were linked together; other programs like WIC, however, were not linked because they are administered through a different agency.

According to regional respondents, modernization efforts seem to offer long-term benefits for productivity and accuracy, but also short-term costs to implement and train staff. As described in greater detail in the next section, system modernization efforts were cited as raising challenges of identifying certain characteristics of program participants that might include or exclude them as an ABAWD. As one regional respondent noted, “[Modernization] certainly changed how you can assess somebody’s unfitness to work if you’re not even seeing them.” Regional respondents also noted however, that modernization efforts may help States serve more people and improve efficiency; for example, “from the State’s perspective, it allows them to serve more clients... Any case worker throughout the State can serve a client regardless of where they reside.”

Identifying Who is Subject to the ABAWD Time Limit

From our interviews with regional respondents, it was clear that most States did not identify ABAWDs while waivers covering the entire State were in place and thus did not collect information to make that determination via their eligibility systems. Once the statewide waivers were eliminated, States needed to create individualized assessments to properly identify ABAWDs.

¹⁴ 2013. “SNAP Policy Database,” Economic Research Service, last updated August 20, 2019, <https://www.ers.usda.gov/data-products/snap-policy-database.aspx>.

A key challenge with respect to identifying ABAWDs is determining a potential ABAWD's fitness for work. State agencies are responsible for determining whether an individual is considered physically or mentally unfit for work and therefore exempt from the ABAWD time limit. The State must rely on an individualized assessment and/or the submission of qualifying information from the individual to make this determination. In practice, unless an ABAWD is receiving disability benefits, the State SNAP agency may not know if the individual has work limitations. According to SNAP regulations, a participant is considered "mentally or physically unfit for work" if he or she "is receiving temporary or permanent disability benefits issued by governmental or private resources," is "obviously mentally or physically unfit as determined by the State agency" or provides a statement from a physician or other medical professional indicating physical or mental unfitness for employment.¹⁵ FNS has also issued guidance that States can use "chronic homelessness" as an indicator that a person is unfit for employment.¹⁶ Because of the potential consequences for impaired individuals if they lose food assistance, developing mechanisms to accurately identify those who are unfit for work is a weighty challenge that likely requires additional training for eligibility staff (CBPP 2015).¹⁷

The ability of State agencies to determine which participants are "obviously" unfit for work is further complicated by the move from in-person case management to remote communication online and over the phone. This presents an additional challenge to State agencies in identifying those unfit for work, and in updating the accompanying policies and materials to do so. In interviews, we heard several reports that minimizing the amount of time program applicants spend with caseworkers (often because of modernization efforts such as online applications) has led to a decline in face-to-face interactions that help caseworkers identify fitness for work as well as whether a person qualifies as an ABAWD. In one of our interviews, the challenge of modernization was couched as follows: "[T]he model now is that you don't see a client...the State's focus is to try to keep clients out of the office as much as they can, by offering online application and telephone interviews. And now moving into online accounts where they can check their benefit amounts and check the status of their applications, report changes. Everything is moving to keep clients out of offices, but that personal interaction with ABAWDs is sometimes very critical in determining their ability or inability to work."

¹⁵ 7 CFR 273.24(c).

¹⁶ "Supplemental Nutrition Assistance Program – ABAWD Time Limit Policy and Program Access." USDA FNS Letter to Regional Directors. November 19, 2015. <https://fns-prod.azureedge.net/sites/default/files/snap/ABAWD-Time-Limit-Policy-and-Program-Access-Memo-Nov2015.pdf>.

¹⁷ "Fact Sheet on ABAWDs and Disability," The Center for Law and Social Policy, 2005, <http://www.clasp.org/docs/2015-Fact-Sheet-on-ABAWDs-and-Disability-FINAL.pdf>.

Some regional respondents commented on the role of advocacy and service-provider groups in the era of modernization. Because such groups are working with program participants, they may have more information about eligibility status or other characteristics important to obtaining or maintaining benefits. One practice we heard from one region is to have a State worker work directly with one of these advocacy or service-providers: “Because of modernization, there is less face-to-face contact with the SNAP people, but the providers—having face-to-face contact—are in a better place being able to identify potential exemptions...I’d say this is a best practice that we’ve seen: One State, for at least some providers, has their State staff (an eligibility worker) spend a day in some of the big service providers with the goal of having more face-to-face contact with some of the ABAWDs so that they can potentially make judgments on potential exemptions....The familiarity with the ABAWD policy that these providers have...is pretty good in my perspective.”

Communicating with Participants about ABAWD Policies

States are obligated to inform potential SNAP participants of the ABAWD work requirement, time limit, and exemption criteria at certification and at recertification. States are also required to send a “Notice of Adverse Action” before cutting off benefits because a participant has reached the time limit.¹⁸ These actions must be informed by, and done in coordination with, accurate tracking of ABAWD information.

In our interviews, regional respondents commented on a variety of challenges States and their partners (e.g., community-based organizations) face in notifying ABAWDs of policy or status changes. ABAWDs, as noted above, are more likely to be disconnected or displaced than other groups of SNAP benefit recipients. They have higher rates of homelessness, may not have a consistent address or access to a phone, email, or traditional mail. This disconnectedness has led States to use a variety of methods to connect with ABAWDs, including sending notices to the participant via direct mail; sending mail to the recipients’ family members; or relying on pamphlets or other documents available at the SNAP or other government offices. The challenges presented by communicating with some ABAWDs are further exacerbated by the system modernization efforts that many States have undergone by moving towards online application portals.

¹⁸ See “Requirements for Informing Households of ABAWD Rules.” EO Guidance Document # FNS-GD-2017-0018. <https://www.fns.usda.gov/snap/ABAWD/requirements-informing-household>.

The disconnectedness of the ABAWD group can be problematic as many States move towards online applications and other means of communicating. One regional respondent put it this way: “If they don’t have internet access, they’re kind of out.... In an effort to leave the paper era behind, we’re also leaving people who don’t have access to technology behind.”

Thus, while modernization may be considered a cost-savings and efficiency improvement from the overall State agency (or State or federal government budgeting) perspective, it may have a detrimental effect on providing services to vulnerable populations such as ABAWDs.

Although communication with ABAWDs can present challenges, good communication was noted as a centrally important part of administering the ABAWD time limit. Regulations require that ABAWDs be informed of the ABAWD time limit in their interview, but as one respondent noted: “It’s just good customer service to let somebody know, ‘Hey, you’re an ABAWD. Hey, here are the requirements. Hey, if you don’t meet these after this month, you’ll lose your benefits’.”

Many of the regions discussed the relationships that State agencies have with advocacy, nonprofit, and community-based organizations (CBOs) around notification. Many regions told us that States partner with these groups to help them notify ABAWDs about policy changes or to provide reminders to ABAWDs that they might need to recertify their benefits or catalog their E&T experience. But there is significant variation across the States in their relationships with the advocates. “Different States have different relationships with their advocate communities. Some work really closely together; some don’t. Some are really active; some aren’t.”

Another challenge we heard consistently from regional respondents is that ABAWD time limit policy is complex for both State workers and the ABAWDs themselves. This complexity—especially as policies and rules change over time—adds another level of challenge to communicating with ABAWDs about their eligibility and benefit levels. One respondent commented that it was important for States to improve their ability to use clear and concise language when communicating with ABAWDs.

Respondents noted that early planning was key to a smooth transition to the ABAWD time limit. States that planned early, set new systems in place, and worked hard to notify ABAWDs prior to the reinstatement of the time limit were better able to handle the transition. One regional respondent cited an approach used in one State that was granted permission to “phase-in” the time limit as each ABAWD came up for recertification. The entire process of doing so was summarized as follows:

[W]hen it came time for a household’s recertification, [this particular State] then looked at the household’s circumstance and decided who was an ABAWD, who actually needed to engage in activities to remain eligible and so forth. That allowed them to have—even if it was by phone—a

conversation with the person rather than rolling it out statewide all at once...It's the difference between talking with a client and helping to understand what this means versus sending them a letter that they might not quite understand or even bother reading because they might just think it's another piece of junk mail. [This State] found it beneficial to do a gradual approach, that allows them to work out any bugs or hiccups in the process rather than having to worry about the whole State all at once having these same hiccups.

This same respondent noted that a phase-in such as this was not a requirement for successful time limit reinstatement. Another State in the region had reinstated the time limit without difficulty using the standard approach (all at once, rather than phased-in at recertification), while yet another State that was less prepared had difficulty. States that did not prepare early—especially States with large caseloads—were reportedly less able to successfully serve ABAWDs quickly and provide accurate information.

Tracking Months toward the ABAWD Time Limit

States face logistical difficulty tracking the 36-month period to determine eligibility for each ABAWD because of the complexity of the rules (Bolen et al. 2016). Each month, the State must track participation status, countable months, fulfillment of the work requirement, exemption status, coverage by a discretionary exemption, and whether the participant is subject to an additional three months of SNAP eligibility (USDA 2015). A countable month only includes months where an individual received a full month of benefits, which complicates calculations of a participant's countable months. Moreover, no other group of SNAP participants requires this level of tracking, and so many States did not have systems in place for tracking this information when statewide waivers were in place (CBPP 2015). Therefore, the reinstatement of the ABAWD time limit required significant retooling of existing procedures in order to accommodate the need for more detailed information.

While collecting and maintaining accurate records for ABAWDs can be difficult for many of the reasons mentioned above, compiling information over time is perhaps even more challenging. Several mentions were made in our interviews of the difficulty of tracking ABAWDs, especially as they might move (either between counties or States, the importance of which depends upon the level of geography at which the program is administered) or become disconnected from the workforce or traditional forms of notification. As program rules change and participants' eligibility shifts due to changes in work or family status, tracking such information becomes increasingly difficult.

States have flexibility to determine how to measure the 36-month period, and they have used three primary ways to set what is known as the statewide "clock" (USDA 2015).

- Fixed Statewide. Each SNAP household is subject to the same 36-month period with the same start and end date.
- Fixed Individual. Each individual starts their own 36-month period when they are certified for benefits or when they first became an ABAWD.
- Rolling Clock. Each individual is subject to a 36-month clock that is re-calculated each month by looking back at the previous 36 months to see if the participant is eligible for one or more months of SNAP.

Most regional respondents described the fixed clock as easier to administer (although they did not specify whether they were referring to the Fixed Statewide or Fixed Individual clock). The regional respondents noted that implementing data systems to track each kind of clock is complicated and the process (particularly for the rolling clock) is difficult to accurately explain to participants. One regional respondent noted that simply translating how the clock works to the Information Technology (IT) staff for technical implementation can be difficult. Another respondent noted that most of the States in their region with rolling clocks have more sophisticated IT infrastructure that is better able to input and track different dates for clients.

We heard of only a few States that changed their clocks (to a fixed clock), but it was unclear whether that change coincided with the implementation of the time limit or was part of a broader policy or other system change effort. One respondent thought that as State computer systems became more sophisticated, more States would move to a rolling clock.

ABAWD Work Requirement Verification

Identifying whether participants are meeting the ABAWD work requirement is another important aspect of administering ABAWD eligibility rules, although one that was not specifically addressed in our interviews. State eligibility workers need to identify work hours and hours of qualifying work program activities for individuals and this task can be a challenge for States for a number of reasons: correctly attributing work hours, given the complex definition for what counts as qualifying work; nuances regarding work program hours and what kinds of job search qualify as work; and the ability to combine different types of work activities in order to meet the requirement. Managing these complexities requires the State's workers to master qualifying forms of work and systems that can capture that type of detail (CBPP 2015).

Traditionally, State agencies have collected information about work in terms of income for determining SNAP eligibility, but they have not necessarily collected information about the number of hours someone has worked, as is required for the ABAWD work requirement (e.g., in order to calculate a monthly accrual of a weekly average of 20 work hours). This level of detail, which is not consistent with other SNAP procedures, presents another layer of difficulty for administrators (CBPP 2015; Bolen 2016). The stakes are high for ABAWDs because they can lose eligibility erroneously if the State agency is unaware that they are meeting the work requirement, but States struggle to collect the necessary information over time and communicate the definitions of qualifying work (USDA OIG 2016).

Work Programs and Workfare

SNAP participants can meet the ABAWD work requirement through work and/or participation in a work program, or workfare. SNAP E&T is a work program that provides employment and training services to SNAP applicants and participants. These services are meant to assist participants to build job skills and provide training that will help increase their probability of employment and decrease their need for SNAP benefits. Work programs also include WIOA and a variety of other federal, state, and local training programs. “Workfare” enables participants to receive the value of their SNAP benefit instead of wages through work at a supervised public, private, or nonprofit worksite. Monthly workfare hours are capped at the value of the SNAP benefit divided by the higher of the Federal or State minimum wage

The SNAP E&T program has three types of federal funding streams. Each State receives a share of the annually appropriated “100 percent” funds, which were generally capped at \$90 million per year over the last decade (GAO 2018), though were increased to \$103.9 million by the 2018 Farm Bill.¹⁹ These funds are very low relative to the total number of potentially eligible SNAP recipients (Lee and Lower-Basch 2016). States can also receive “50 percent reimbursement” funds equal to half of nonfederal expenditures for allowable SNAP E&T services. Federal 50 percent reimbursement funds are the largest portion of federal expenditures on SNAP E&T and are responsible for most of the increase in federal SNAP E&T expenditures in the last decade. ABAWD “pledge” funds provide a total

¹⁹ See “Supplemental Nutrition Assistance Program Section 4005 of the Agriculture Improvement Act of 2018 – Informational Memorandum, FNS 2019. <https://fns-prod.azureedge.net/sites/default/files/resource-files/Section-4005-Agriculture-Act-2018.pdf#page=2>.

of \$20 million to be shared by States that pledge to offer a work program or workfare opportunity to all ABAWDs at risk of losing eligibility due to the time limit (GAO 2018).

Unless a State is a pledge State, it is not required to provide qualifying work activities to ABAWDs subject to the time limit or those at-risk for losing eligibility. Moreover, most States lack the resources to provide qualifying training and workfare opportunities to all ABAWDs subject to the time limit. According to Bolen et al. (2016), most States do not have enough resources to provide qualifying program slots to meet ABAWD demand. Furthermore, although States can receive additional federal funding through E&T Pledge Funds, most States do not make the pledge because the cost of providing the required trainings exceeds the amount of money gained by making the pledge (CBPP 2015). In 2015, only Colorado, Delaware, Texas, and Wisconsin were pledge states (CBPP 2015). Twelve States pledged to serve all at risk ABAWDs in fiscal year 2020.²⁰

SNAP E&T serves a small share of SNAP participants: 11.6 percent of nonelderly adult SNAP recipients participated in E&T activities in 2016 (Lauffer 2017). Many participants who are referred to E&T don't participate, although this varies by State. A GAO report found that between 35 and 98 percent of ABAWDs who were sent a referral letter to SNAP E&T participated in 2018, among the eight States that reported this information to FNS. FNS officials, state officials, and SNAP E&T service providers surveyed by GAO reported that participation may be low due to lack of transportation and other barriers to participation, a limited range of available services and employment opportunities, mental health and substance abuse issues, and transient living conditions that make it difficult to receive referral letters. SNAP recipients may decide not to participate due to past struggles finding employment (GAO 2018).

Experiences of States that have imposed the time limit and aimed to provide E&T opportunities to ABAWDs suggest that there are logistical challenges to directing additional SNAP E&T resources towards ABAWDs (CBPP 2015). States need to identify areas impacted by the time limit, estimate ABAWD demand, identify training providers to meet the demand, and educate the providers about the time limit, qualifying work activities, and methods for tracking and communicating about participation (CBPP 2015). The most common and least expensive SNAP E&T activity is job search assistance, which must account for less than half of an ABAWD's qualifying hours (though job search through WIOA has no such restriction).

²⁰ See "\$20 million ABAWD E&T Allocation for Fiscal Year 2020," letter from Moira Johnston (SNAP E&T director) to SNAP directors, all regions, October 10, 2019. This memorandum reflects pledge status in early 2020, before the COVID pandemic; it was provided to the authors by Andy Burns of FNS.

In our interviews, respondents spoke of the opportunities provided by a strong E&T program, the diversity of State approaches, and the challenges associated with effectively serving ABAWDs. Regional respondents noted that States across the country are experimenting with different types of E&T and partnering with a variety of organizations in their county, State, or region, including community-based organizations, advocacy groups, community and technical colleges, and other nonprofit organizations. Some States are providing E&T that is centered on work readiness where the client is being redirected to a career, while others are trying to provide basic services such as resume writing, personal appearance, and timeliness.

One regional respondent described a strong E&T program as including “a variety of different services ...they have education services where they work with community colleges and technical colleges to help people build skills they need to get specific jobs. The E&T program also works with the community (schools, advocates, employers, etc.) to make sure they are providing programs that will serve the needs of the clients and get them jobs that are in demand in their area. They also provide job search, interview skills, resume writing, and other soft skills that we’re not really born knowing how to do.”

ABAWDs may also be viewed as offering a State a pool of available employees. In one State, it was reported that ABAWDs have become a specific policy target because they have been identified as a potential workforce that, with sufficient support and training, could contribute to the State’s economy. As the regional respondent noted, “[ABAWDs are] a good pool of a potential workforce or human capital that they want to really work with, not only to help them maintain eligibility if they can, but also to get them some skills so they can become self-sufficient.”

Respondents also described efforts in some States to help ABAWDs meet the work requirement through Workfare:

[Some States] have a very robust workfare program. ABAWDs are put into a workfare where they will go and work at say Goodwill sites, different employment sites, to get work experience and keep their benefits past the third month.

It goes by a number of different names, whether it’s workfare, or work experience, that kind of thing That one seems fairly common in States. It might be because it’s simple for folks to engage in that because there’s maybe more opportunities there, and obviously they might be able to connect someone with a job, and then at that point they are not necessarily engaged in employment and training, they’re just finding a job somewhere that meets the required number of hours.

At the same time, the regional respondents emphasized that there is considerable variation across States regarding the extent of which ABAWDs are directed to work programs and workfare

opportunities. Some States, including pledge States, are very proactive, whereas others do not refer ABAWDs at all. One respondent described the situation as follows:

[Some States] are “strictly three-and-out” and they don’t offer any qualifying components. By that I mean vocational training, educational training, work-type jobs, workfare, those type of things. In that case in those states, those ABAWDs, traditionally, unless they have an exemption, will be off the program on their fourth month.

Despite being viewed as an important tool for serving ABAWDs, the regional respondents confirmed that providing and obtaining adequate E&T services present challenges for both States and ABAWDs. As described in greater detail below, States face challenges in funding and targeting E&T opportunities to ABAWDs and in increasing ABAWD participation in these opportunities. ABAWDs face challenges with obtaining access to E&T opportunities other than SNAP E&T job search or job search training (which must comprise less than half of their hours). Those living in areas of high unemployment also face challenges with finding employment once training has been completed.

E&T Challenges for States

The regional respondents reported that limited funding presents challenges to providing opportunities for ABAWDs to meet the work requirement through SNAP E&T:

Funding is huge for the states when you have a large ABAWD population, especially in your urban areas. Do you have the funding to truly serve them as they need to be?

A lot of times states don’t get enough E&T money from the federal government to cover effectively the whole state.

Respondents described efforts in some States to work collaboratively with other agencies and organizations to provide work program opportunities to ABAWDs:

The [State] agency is always going out trying to find new agencies to partner with, new community-based organizations they can partner with, that kind of thing.

[Some States] would work with labor agencies to know what jobs are in demand in the communities, and then work with the community colleges to set up specific training programs for that.

We’ve been encouraging States to work with other agencies, so that you do one assessment on a client and developed one individual employment plan for a client, so that they are not repeating those assessments in multiple locations. Integrating and coming up with a workforce development plan, which is what the WIOA is supposed to do...is to consolidate one Statewide plan for workplace development. Once that really gets in place in a State, it can really be effective and help clients.

There's flexibility within those sister federal employment programs [WIOA] that take a little more liberal approach to things like job search and job search training, that if an ABAWD is enrolled in and participating in, would make it a little easier for them to meet the work requirement.

Regional respondents described the challenges faced by States seeking to expand E&T programs to help ABAWDs meet the time limit. Trying to create (or improve) an E&T program at the same time as the reinstatement of the time limit puts additional pressures on certain States. In one example, a regional respondent said that, "It takes time to build an E&T program up. You can't just flip a switch and now you have a bigger E&T program. You have to build partnerships and you have to roll these things out over time because if you move too fast then you run the risk of it all falling apart." One respondent described a State that was seeking to expand its E&T program but had not yet implemented E&T in a major city that had lost a waiver: "That was definitely a difficulty. Workers were expressing that they wanted to be able to refer clients to an E&T program, but they didn't have one to refer them to."

Respondents also mentioned challenges in offering E&T programs in States where there is a mix of urban and rural areas. In rural areas, transportation is often a barrier to E&T opportunities (as well as office visits for in-person interviews). Rural residents may have additional challenges of fewer job opportunities—some States are focusing on self-employment opportunities for clients who live in such areas. Although not specifically mentioned in the interviews, transportation can also be a significant barrier for low-income people in urban and suburban areas (Pendall, Blumenberg, and Dawkins 2016).

Another challenge with E&T that we heard repeatedly is ABAWDs' engagement and getting the individual to take advantage of the opportunities provided. One of the regional respondents noted that States in their region do have open slots in their E&T training programs, but that ABAWDs do not necessarily take advantage of the available programs. One respondent noted that there are "staggering numbers of noncompliance or challenges of just getting ahold with ABAWDs" and "showing up is the biggest problem." Another stated, "I really do think—on a lot of the cases we reviewed—it's basically that the participant didn't show up. I don't think it was because of notifications. They come in and they go through their eligibility and then they are screening them and then they let them know about the programs that are offered (whether it's ABAWD or E&T) and it's just about showing up...It's really the participant's motivation."

E&T Challenges for ABAWDs

Two points emerged from our interviews regarding the challenges ABAWDs face with respect to E&T programs. First, the traditional SNAP E&T programs focus on providing participants with basic “soft skills” such as interview skills and resume writing. The issue is best summed up by this regional respondent:

As States are expanding their E&T programs, it still remains that job search and job search training are the most common elements or components that are offered by States. Unfortunately, those don't really help out ABAWDs that much. They can be used for under half the time, but the ABAWD still has to figure out a way to make up the 20 hours in the week. That's the biggest challenge: States need to be able to offer a greater variety of components that are going to help the ABAWDs meet the work requirement and then figure out a way to get those ABAWDs in those components.

Yet, some programs are trying to move beyond that orientation. We were told that some States' labor departments are informing the regional office that there are jobs in the “middle skills gap” area that need to be filled. Thus, E&T programs that offer a continuum of training—for example, first a GED program and then movement into developing practical skills for a specific career—may help move ABAWDs into better, more consistent employment. Some States are therefore looking more at career pathway strategies to promote skills-training and work.²¹ We also heard several mentions of how WIOA is having a positive effect on workforce development at the local level.²²

A second challenge was identified in one regional interview: the difficulty of finding employment in areas (e.g., States or counties) with high(er) unemployment rates—areas that are more likely to be eligible for a waiver. Thus, even with E&T job training, ABAWDs may still struggle to find work for lack of economic opportunity. The suggestion in this interview, therefore, was that there be some flexibility or cooperation between areas (e.g., counties) to facilitate employment among this group even if it is located outside the agency's service area.

²¹ Pamela J. Loprest, “Expanding opportunity through career pathways and training for middle-skill jobs,” Urban Wire (blog), Urban Institute, June 17, 2016, <https://www.urban.org/urban-wire/expanding-opportunity-through-career-pathways-and-training-middle-skill-jobs>.

²² Lauren Eyster, “What you need to know about the new workforce development bill,” Urban Wire (blog), Urban Institute, July 9, 2014, <http://www.urban.org/urban-wire/what-you-need-know-about-new-workforce-development-bill>.

Other Insights and Considerations

Four additional insights and considerations came up during the interviews.

First, multiple regional respondents mentioned that the transition to the new Presidential administration beginning in January 2017 would likely bring about changes to the program at the federal level. (The interviews were conducted in November and December 2016.) Not surprisingly, changes in the economy—generally an improving job market over the prior six years—was also expected to impact the SNAP program, especially ABAWDs. An improving economy can increase household incomes, which changes whether they are eligible for benefits, and can also make local areas ineligible for time limit waivers as the local area’s economy improves.

Second, at least two regional respondents mentioned the abrupt end to the ABAWDs’ benefits at the three-month time limit—and expressed concern about whether ending benefits in that short period of time affects an individual’s long-term success. Respondents indicated that they would like to know more about how loss of eligibility from the time limit affects this population and whether it is an effective policy to cut people off abruptly, or, alternatively, would it be a better policy to phase-out benefits. The short three-month time frame, plus the detailed information needed to track ABAWD status, makes the time limit difficult to implement and maintain. It was unclear to these respondents that the ABAWD time limit adequately helps the ABAWD population attain self-sufficiency and suitable, consistent employment. One regional respondent emphasized how difficult it is to engage with ABAWDs once they have left the program: “Once the ABAWDs are gone, they’re gone; they’re very hard to get back.”

Third, because States have a variety of policy options available to them to serve the ABAWD population, there is not a “one size fits all approach” to the best way to provide benefits, send notifications, or train staff. States also vary in the type of ABAWDs they are trying to serve—some States are more rural than others, some have different labor markets, and some have greater coordination with other programs (e.g., SNAP, TANF, and Medicaid). One regional respondent described the benefits and challenges raised by flexible options as follows:

Part of why there is not a pre-established training packet is because States can do things how they want to do them....You always might have that variation from State to State in terms of whether they are using a fixed clock or a rolling clock, whether they are a voluntary E&T or mandatory E&T, whether they do simplified reporting or change reporting.....Options are good, in most situations, because that offers flexibility, but at the same time too many options can be a hard time to sort through and figure out, ‘What’s the perfect combination of all of these options? What will give me the best outcome?’

Finally, one regional respondent discussed the complexity of policy options not in terms of the number of different options, but in the vague or unclear meaning of a policy rule or regulation versus its intent. For example, FNS permits States to consider being “chronically homeless” as an indicator that the individual may be “obviously mentally or physically unfit for employment as determined by the State agency.” While this allows flexibility at the State level, it also causes confusion. In the words of the regional respondent: “But what does ‘chronically homeless’ mean? There was no definition of that; we don’t have a definition of that. So the States had their own way of determining it, and it was really whether or not States were doing it correctly was difficult to say because we didn’t have a whole lot of guidance on it either.... We had our ideas of what that meant and what the intention of the rule was, but different States were applying it pretty differently.”

Key Findings from Interviews

The interviews with the SNAP Regional Directors were conducted in November and December of 2016 and represent their insights at that time—shortly after the reinstatement of the ABAWD time limit in many States. Over the course of the seven interviews, four primary themes emerged.

First, ABAWD policy is complex and challenging. This complexity creates confusion among ABAWDs as well as among the State (and regional) staff required to provide them with services and benefits. Transitioning from a time period in which statewide waivers were in place and States did not identify ABAWDs, to one in which ABAWDs again became a separate, unique group, introduced a number of challenges. The challenges were particularly acute for new staff who required training on ABAWD rules and new data or management systems. Those policies and rules—who qualifies as an ABAWD, when and for how long they are eligible for benefits, how to contact and notify them, and how to provide them with other services such as E&T—were new to both State staff and program participants.

Second, though ABAWDs make up a fraction of all SNAP participants, they are a challenging group to serve. They tend to have greater disconnectedness from the workforce and from traditional means of communication such as phone, email, or even regular housing and mail; they have higher rates of homelessness, and mental and physical disabilities, that, while not qualifying as a full disability, may nevertheless render them unable to work. Although being identified as unfit for work exempts a participant from ABAWD status, eligibility workers and participants must be aware that these exemptions apply. Thus, while ABAWDs are one of the groups in the most need of SNAP support, they are also one of the more difficult groups to communicate with and ultimately provide with services.

Third, when it comes to implementing new rules or new systems, every region emphasized the importance of starting early. Building new data and intake systems, and training staff and communicating with clients, takes time. States that prepare early for time limit reinstatement are the better for it. By identifying and notifying ABAWDs about the ABAWD time limit and work requirement in advance, States can reduce the number of questions when ABAWDs lose benefits. By having state systems and eligibility procedures up and ready to go, States can reduce the possibility that ABAWDs will receive benefits in error.

Finally, some States are working to expand SNAP E&T to help serve ABAWDs, but job search and job search training remain the most common items offered and only partially count toward the ABAWD work requirement. Most SNAP E&T programs focus on job search and job search training, which must comprise less than half of an ABAWD's countable hours. States face challenges in funding and targeting E&T opportunities to ABAWDs and in increasing ABAWD participation in these opportunities. ABAWDs who live in areas of high unemployment also face challenges in finding employment once training has been completed. Some States do nothing to help ABAWDs meet the work requirement, while others are working to expand their SNAP E&T programs to better serve ABAWDs and are actively pursuing partnerships with other agencies and organizations to provide work program and workfare opportunities to help ABAWDs retain eligibility, improve job skills, and move toward self-sufficiency.

Analysis of ABAWD Time Limit Reinstatement in Nine States

We investigate the effects of ABAWD time limit reinstatement in nine States using State administrative data. Below, we describe the selection of States for the study, the administrative data used in the study, and the methods to identify the populations of interest.

State Selection

We selected States in consultation with FNS to provide variation in the timing of time limit reinstatement, whether the time limit was reinstated in all or part of the State, FNS region, ABAWD “pledge” status, mandatory or voluntary E&T status, the use of discretionary exemptions in the first year of time limit reinstatement, unemployment rate, and SNAP participation rate (Table 1). We also asked SNAP regional directors for recommendations of States to include in the study and took those recommendations into consideration in the selection.

Minnesota and Vermont were the first of the study States to reinstate the time limit. Vermont did not have a waiver beginning in October 2012 and used discretionary exemptions to cover ABAWDs through November 1, 2013. At that point, the time limit was implemented in most of the State. Minnesota reinstated the time limit for most counties in November 2013.

Colorado is the only Pledge State included in the study. Pledge States guarantee to offer a work program or workfare opportunity to all ABAWDs at risk of losing eligibility due to the time limit. Colorado chose to administer the ABAWD time limit in 3 of its 64 counties in 2011, 2013, and 2014 and in 5 counties in 2012 and 2015. We focus on two sets of Colorado counties that reinstated the time limit in January 2016—one set of counties that was already operating mandatory E&T programs, and another set of counties that implemented mandatory E&T and the ABAWD time limit in January 2016.

The remaining States in the study had statewide waivers through December 2015. Alabama reinstated the time limit in 54 of its 67 counties in January 2016 and in the remaining 13 counties in January 2017. Missouri reinstated the time limit statewide in January 2016. Oregon reinstated the time limit in 2 of its 36 counties in 2016 and a third county in 2017.

Maryland had waivers for 11 of its 24 counties in 2016 and 13 counties in 2017 and used discretionary exemptions to cover several additional counties. We treat counties covered entirely by discretionary exemptions as “waived” in our analysis because the ABAWD time limit was not implemented in these counties and we would not expect to see a policy response.

Pennsylvania used discretionary exemptions to cover ABAWDs in counties without waivers in the first two months of 2016 and reinstated the time limit in these counties on March 1, 2016. We treat March 2016 as the month of time limit reinstatement when analyzing Pennsylvania.

After Tennessee lost its statewide waiver at the end of December 2015, it did not obtain waivers for individual counties until March 2016. However, no ABAWD lost eligibility due to the time limit in counties that were waived again in March 2016, and so we treat these counties as “waived” in January and February 2016 for the purpose of this analysis. The time limit was in effect in 9 of Tennessee’s 95 counties in both 2016 and 2017.

The States varied by whether they had voluntary E&T programs, mandatory E&T programs, or changed status at around the time of ABAWD time limit reinstatement. If a State operates a mandatory E&T program, then a SNAP participant who is assigned to E&T and does not comply with the E&T requirement is sanctioned—losing at least one month of SNAP benefits for the first occurrence of noncompliance, at least three months of SNAP benefits for the second occurrence, and at least six months of SNAP benefits for the third occurrence (USDA 2016). Alabama, Maryland, and Tennessee transitioned from mandatory to voluntary E&T in October 2015 (Tennessee’s E&T had only been in operation in 13 counties). Minnesota and Vermont transitioned from voluntary to mandatory E&T for ABAWDs when the time limit was reinstated. Missouri and Pennsylvania had voluntary programs and Oregon had a mandatory program both before and after time limit reinstatement. As noted above, Colorado had a mix of policies. E&T programs were mandatory but operating in only certain counties. Some Colorado counties that reinstated the time limit already had a mandatory E&T program. Counties that did not already have a mandatory E&T program implemented it at the same time as the ABAWD time limit.

TABLE 1
Description of Study States

	TLR Date ¹	TLR full or part ^{1,2}	E&T pledge (FY 2016) ³	E&T type before/after reinstatement ⁴	Discretionary exemptions used ^{5,6}	Unemp. rate Dec. 2016 ⁷	SPR, all ⁸	SPR, working poor ⁸
Alabama	Jan-16	Part	no	mand./vol.	0	5.5	85	74
Colorado	Jan-16	Part	yes	mixed	2,638	2.7	76	63
Maryland	Jan-16	Part	no	mand./vol.	18,761	4.1	92	74
Minnesota	Nov-13	Part	no	vol./mand.	0	4.0	83	72
Missouri	Jan-16	Full	no	vol.	0	3.9	89	73
Oregon	Jan-16	Part	no	mand.	146	3.9	100	93
Pennsylvania	Mar-16	Part	no	vol.	65,671	4.8	90	78
Tennessee	Jan-16	Part	no	mand./vol.	4,808	4.5	95	79
Vermont	Nov-13	Part	no	vol/mand	5,661	2.8	99	85

Notes: TLR = time limit reinstatement; E&T = employment and training; SPR = SNAP participation rate for fiscal year 2015.

¹ Source: SNAP E&T Plans.

² This column shows whether the initial reinstatement of the ABAWD time limit affected the entire State or only part of the State.

³ Source: Bolen, Ed, Dottie Rosenbaum, Stacy Dean, and Brynne Keith-Jennings. 2016. "More Than 500,000 Adults Will Lose SNAP Benefits in 2016 as Waivers Expire." Washington, DC: Center on Budget and Policy Priorities. <http://www.cbpp.org/research/food-assistance/more-than-500000-adults-will-lose-snap-benefits-in-2016-as-waivers-expire>.

⁴ FY 2017 SNAP E&T State Plans, obtained from FNS on January 23, 2017.

⁵ Source: "SNAP - Fiscal Year (FY) 2015 Allocations of 15 Percent Exemptions for Able-Bodied Adults without Dependents (ABAWDs) - Adjusted for Carryover." <https://fns-prod.azureedge.net/sites/default/files/snap/FY-2015-ABAWD-Exemptions-Memo-Adjusted-for-Carryover.pdf>; "SNAP - FY 2017 Allocations of 15 Percent Exemptions for ABAWDs - Totals Adjusted for Carryover." <https://fns-prod.azureedge.net/sites/default/files/snap/FY2017-ABAWD-15%25-Exemption-Totals.pdf>.

⁶ This column reports the number of exemptions used in FY 2014 in Minnesota and Vermont and in FY 2016 in all other states.

⁷ Non-seasonally adjusted unemployment rate for December 2016. Downloaded on May 25, 2018 from: <https://beta.bls.gov/dataViewer/view/e319723af6ae42a8a679a4fa69d8db3a>. Rates range from 2.4 in Hawaii to 7.1 in Alaska. FNS uses monthly labor force data in addition to non-seasonally adjusted employment rates when determining whether an area qualifies for a waiver.

⁸ Source: Cunyngnam, Karen. 2018. "Estimates of State Supplemental Nutrition Assistance Program Participation Rates in 2015." Washington, DC: Mathematica Policy Research. <https://fns-prod.azureedge.net/sites/default/files/ops/Reaching2015.pdf>.

Administrative Data

We entered into data use agreements with each of the study States to obtain monthly data on SNAP participants required for the study for the two years prior to time limit reinstatement and the eighteen months following time limit reinstatement. We requested information on demographic characteristics, work, income, exemptions from the general work requirements, employment and training participation, and ABAWD status.²³

States track all or most of the requested variables in their eligibility systems, but different data systems are used to archive the historic values and some variables are not available in these systems. States varied in their ability to provide the requested variables. In some cases, data were provided, but had high levels of missing values or did not match the definition needed for the study. For example, some States that provided information about educational attainment only provided information for current students. Although current student status is important for determining eligibility, an adult's level of educational attainment does not factor into SNAP eligibility determination, so it is not surprising that this information was not always available. If information about educational attainment or another variable is unavailable or has high levels of missing values for a State, we exclude that State when presenting the estimates.

Unemployment Insurance Records

We obtained unemployment (UI) quarterly wage data through data use agreements with three States—Colorado, Missouri, and Pennsylvania. The wage records include everyone who is on SNAP at any point in the months covered by the SNAP data and appears in the UI wage data at any point in the range of quarters covered by the UI data. One State linked the SNAP and UI wage data and provided us with the linked file. The other two States provided us with identifiers (created for the study and not containing any personally identifying information) that we used to link the SNAP and UI wage data.

UI records have benefits and drawbacks. They are collected consistently across States and over time and are subject to minimal reporting error. UI records are generally the most accessible form of earnings or employment information. However, they do not cover all types of employment. Federal employment, out-of-State employment, small farm work, some nonprofit employment, self-

²³ We requested that personally identifying information such as name, address, and Social Security number be excluded from the data.

employment, independent contracting, and off-the-books work are generally excluded (Barnow and Greenberg 2015). A 2001 estimate found that this comprises about 13 percent of employment (Hotz and Scholz 2001), though it may have grown with the expansion of the independent contractor economy.²⁴ It may also represent a larger share of employment among ABAWDs, since this population tends to lack stable employment. An additional limitation is that UI data provide quarterly rather than monthly earnings information.

Identifying the Population of Interest

We identify two key populations of interest to the study—participants “potentially subject to the time limit” and “ABAWDs subject to the time limit.” We define SNAP participants as “potentially subject to the time limit” if they are ages 18 to 49, subject to the general work requirements (defined below), and in a household without a child under age 18. We classify participants as “ABAWDs subject to the time limit” if they are “potentially subject to the time limit,” live in an area with a time limit, and are not pregnant or determined unfit for work. ABAWDs subject to the time limit include participants who meet the ABAWD work requirement, are accruing a countable month, are in a first (partial) month of SNAP participation (which does not count toward the time limit), or are covered by a discretionary exemption. If discretionary exemptions were used to exempt an entire county or postpone time limit reinstatement, the participant is treated as living in a “waived” area and is not counted as an ABAWD subject to the time limit.

We focus on the broader group of people potentially subject to the time limit when comparing results before and after time limit reinstatement and in time-limited and non-time-limited areas of the State. We show results for ABAWDs subject to the time limit for parts of the analysis where we do not need to compare across time-limited and non-time-limited areas or periods. We can only reliably identify ABAWDs subject to the time limit in areas where the time limit is in effect, because it is only then that the administrative data provided to the study indicate whether a person is pregnant or unfit for work for the purpose of the ABAWD requirement.

To identify people potentially subject to the time limit, we begin by excluding SNAP participants who are exempt from the general SNAP work requirements. Regardless of whether the ABAWD time limit is in effect, States must determine whether SNAP participants are subject to or exempt from the

²⁴ Demetra Nightingale, “Worker Protection Policies Should Adapt to the Changing Structure of Employment,” *Urban Wire*, January 2, 2018, <https://www.urban.org/urban-wire/worker-protection-policies-should-adapt-changing-structure-employment>.

general SNAP work requirements. SNAP participants are exempt from the general work requirements if any of the following are true. The participant is:

- under age 16 or over age 59
- already working a monthly minimum of 30 hours per week (or equivalent earnings)
- physically or mentally disabled
- complying with work requirements of another program
- responsible for care of a child under the age of 6
- responsible for care of an incapacitated person
- regularly participating in a drug/alcoholic rehabilitation program
- enrolled in school at least half time
- receiving Unemployment Compensation

We classify participants as potentially subject to the time limit if they are between the ages of 18 and 49, not exempt from the general work requirements, and are living in a household that does not contain a child under the age of 18. Within this group, we classify participants as ABAWDs subject to the time limit if they live in an area where the time limit is in effect, are not pregnant, and are not identified as being physically or mentally unable to work. Participants who live in areas that are entirely covered by discretionary exemptions are treated as living in areas without the time limit and are not counted as ABAWDs subject to the time limit. However, a participant who receives a discretionary exemption based on his or her individual circumstances—for example, to provide another month of coverage for making a “good faith” effort to meet the work requirement, is included in the definition of ABAWD subject to the time limit. In some States, we are not able to identify pregnancy or inability to work, beyond the levels of disability already captured in the exemption from the general work requirements. In these States, the main difference between the group classified as potentially subject to the time limit and the group classified as ABAWDs subject to the time limit is that the latter group lives in an area in which the time limit is in effect.

For some parts of our analysis, we identify people who would be potentially subject to the time limit except that they are exempt from the general work requirements because they work 30 or more hours per week. This group is important for at least two reasons: first, they are at risk of becoming subject to the ABAWD time limit if they lose their job or their work hours decrease, and second, some participants currently subject to the ABAWD time limit may increase their employment and move into this group. We therefore include these workers in portions of our descriptive analysis.

Characteristics and SNAP Participation of People Potentially Subject to the Time Limit

In this section, we present findings from a descriptive analysis of SNAP administrative data. We review participants potentially subject to the time limit in the context of the overall caseload, describe their characteristics, display trends in participation, and show the extent to which ABAWDs subject to the time limit use time-limited benefits, meet the ABAWD work requirement, and maintain eligibility. We then examine dynamics of participation including entry, exit, churn, and spell length.

























Participants Potentially Subject to the Time Limit Relative to the Overall Caseload

Figure 4 shows the number and characteristics of SNAP participants in each State in the month that the time limit was reinstated: November 2013 for Minnesota and Vermont, March 2016 for Pennsylvania, and January 2016 for the remaining States. This provides a picture of SNAP participants prior to the reduction in participation associated with reinstatement of the time limit. We count January 2016 as the month of time limit reinstatement in Colorado, because that is the month in which the time limit was reinstated in most of Colorado's counties that were not already administering the ABAWD time limit.

The figure shows the total number of SNAP participants, the number and share that are 18 to 49, the number and share that are potentially subject to the time limit, and the number and share that would potentially be subject to the ABAWD time limit except that they already work 30 or more hours per week. The number and share of participants potentially subject to the time limit include all participants regardless of whether they live in areas of the State in which the ABAWD time limit has been reinstated. These participants are subject to the ABAWD time limit if they live in an area in which the time limit is in effect and are not identified as pregnant or mentally or physically unfit for work.

FIGURE 4

**SNAP Participants: All, Ages 18 to 49, Potentially Subject to the Time Limit, and Potentially Subject to the Time Limit but Work At Least 30 Hours per Week
By State, in Month of Time Limit Reinstatement**

	All participants	Ages 18-49	Potentially subject to time limit	Potentially subject but works 30+ hours
Alabama				
Percent of Participants	100%	38% 	8% 	1% 
Number of Participants (thousands)	872	331	66	7
Colorado				
Percent of Participants	100%	34% 	4% 	0.5% 
Number of Participants (thousands)	393	134	18	2
Maryland				
Percent of Participants	100%	38% 	5% 	3% 
Number of Participants (thousands)	760	286	39	20
Minnesota				
Percent of Participants	100%	41% 	9% 	1% 
Number of Participants (thousands)	453	186	39	6
Missouri				
Percent of Participants	100%	39% 	6% 	1% 
Number of Participants (thousands)	843	329	55	12
Pennsylvania				
Percent of Participants	100%	38% 	6% 	2% 
Number of Participants (thousands)	1,657	624	103	28
Tennessee				
Percent of Participants	100%	39% 	8% 	1% 
Number of Participants (thousands)	1,140	442	93	13
Vermont				
Percent of Participants	100%	42% 	9% 	1% 
Number of Participants (thousands)	94	39	8	1

Source: State SNAP administrative data, month of reinstatement of the ABAWD time limit: November 2013 for Minnesota and Vermont; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: The Minnesota estimates exclude people in families with children receiving benefits from Minnesota’s Temporary Assistance for Needy Families program (MFIP). Including MFIP participants would reduce the percentage of people potentially subject to the time limit as a share of all SNAP participants. The rightmost two columns are mutually exclusive.

The study includes a mix of small, medium, and large States that vary considerably in the size of their SNAP caseloads. The smallest State, Vermont had about 94,000 participants in its first month of time limit reinstatement (November 2013) and the largest State, Pennsylvania, had 1.7 million participants in its first month (March 2016). The count of participants by State is close to the monthly number according to the FNS national databank, except in Colorado, where the number of participants is 18 percent below the count in the FNS national databank, Minnesota, where we lack data for families with children receiving assistance from Minnesota’s Temporary Assistance for Needy Families

program (MFIP), and Pennsylvania, where the number of participants is 11 percent below the count in the FNS national databank.²⁵

Relatively few SNAP participants are potentially subject to the time limit. Participants ages 18 to 49 make up 34 to 42 percent of SNAP participants in the study States, but most are exempt from the ABAWD time limit because they have children in the household, have a disability, or are exempt from the general work requirements for other reasons. Between 4 and 9 percent of SNAP participants in the month of time limit reinstatement are potentially subject to the time limit.²⁶ These participants are subject to the ABAWD time limit if they are not pregnant, are not identified as being unfit for work, and are in an area of the State in which the time limit is reinstated. ABAWDs subject to the time limit must meet the ABAWD work requirement, use a countable month, be in a first (partial) month of a spell of participation, or be covered by a discretionary exemption.

A small fraction of each State's participants is not potentially subject to the time limit because they already work 30 or more hours per week and are therefore exempt from the general work requirements. These participants account for 3 percent of Maryland's participants, 2 percent of Pennsylvania's participants and 1 percent or less of participants in the other study States.

²⁵ The FNS national databank identifies the following counts of participants in January 2016: 869,982 (Alabama), 480,212 (Colorado), 755,752 (Maryland), 836,186 (Missouri), 1,129,940 (Tennessee) and the following counts of participants in November 2013: 551,045 (Minnesota), 99,405 (Vermont). The national databank identifies 1,866,954 participants in Pennsylvania in March 2016. <https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap>. The omission of MFIP families from the Minnesota data is not a major limitation for the study, because, by definition, households with children do not contain ABAWDs. We count a person as a "participant" if the administrative data indicate that he or she is an eligible member of a SNAP household that receives a positive benefit amount in the month being processed. For each State, we reviewed participant counts relative to the national databank and attempted to resolve differences, reviewing variable definitions and requesting repeated data pulls from some States. Even so, we could not resolve some differences. One possible explanation is that administrative data systems are constantly being updated. Data requests made at a later date (as for our study) may not necessarily match information requested at an earlier date (such as for the FNS databank). Also, different staff and procedures may have been used to obtain the information reported to FNS for the databank and the information provided to this study.

²⁶ Minnesota's data exclude families receiving cash assistance. Had they been included, the percentage of participants potentially subject to the time limit would be lower.

Distribution of Participants Potentially Subject to the Time Limit by Time Limit Area Status within State

The study States vary with respect to the share of participants living in areas with no time limit in the study period, with a time limit in all months of the study period, with a time limit beginning in the first month that the time limit was reinstated in the State and remaining in effect for the rest of the study period, or with some other pattern of time limit status (figure 5).

Alabama reinstated the time limit in most areas in January 2016 and for all remaining areas in January 2017. Thirty-seven percent of Colorado's January 2016 SNAP participants who are potentially subject to the time limit lived in areas of the State where the time limit was already in effect, and 40 percent lived in areas in which the time limit was reinstated in January 2016 and remained in effect for the rest of the study period. Minnesota and Vermont reinstated the ABAWD time limit for nearly all areas in November 2013 and Missouri reinstated the ABAWD time limit for the entire State in January 2016. In contrast, 39 percent of Maryland's, 23 percent of Pennsylvania's, and 21 percent of Tennessee's participants who were potentially subject to the time limit lived in areas where the time limit was reinstated in 2016 and remained in effect for the rest of the study period. Oregon (not shown) reinstated the time limit in two Portland area counties in 2016. The two counties account for between 22 and 30 percent of Oregon's SNAP participants ages 18 to 49.²⁷ Oregon reinstated the time limit in a third Portland area county in 2017.

²⁷ Due to data limitations, we are not able to reliably identify participants potentially subject to the time limit in Oregon until August 2016 and so exclude them from this table. We present a range of estimates for the share of participants ages 18 to 49 living in the two time-limited counties because the Oregon data lack county identifiers and the zip codes that we use to map to counties do not precisely follow county lines.

FIGURE 5

Distribution of SNAP Participants Potentially Subject to the Time Limit by Area ABAWD Time Limit Status within the Study Period
By State in Month of Time Limit Reinstatement

	No time limit in study period	Time limited in all months	Waived, then time limited	Other pattern
Alabama				
Potentially Subject to time limit	0%	0%	89%	11%
Potentially Subject but works 30+ hours	0%	0%	92%	8%
Colorado				
Potentially Subject to time limit	7%	37%	40%	15%
Potentially Subject but works 30+ hours	5%	41%	41%	13%
Maryland				
Potentially Subject to time limit	49%	0%	39%	12%
Potentially Subject but works 30+ hours	45%	0%	43%	12%
Minnesota				
Potentially Subject to time limit	3%	0%	95%	1%
Potentially Subject but works 30+ hours	1%	0%	97%	1%
Missouri				
Potentially Subject to time limit	0%	0%	100%	0%
Potentially Subject but works 30+ hours	0%	0%	100%	0%
Pennsylvania				
Potentially Subject to time limit	65%	0%	23%	13%
Potentially Subject but works 30+ hours	53%	0%	30%	17%
Tennessee				
Potentially Subject to time limit	79%	0%	21%	1%
Potentially Subject but works 30+ hours	76%	0%	23%	0%
Vermont				
Potentially Subject to time limit	3%	0%	92%	5%
Potentially Subject but works 30+ hours	3%	0%	91%	6%

Source: State SNAP administrative data, month of reinstatement of ABAWD time limit: November 2013 for Minnesota and Vermont; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: The “Waived, then Time-Limited” category refers to areas where the time limit was reinstated in the first month that the time limit was reinstated in the State and remained in effect for the rest of the study period. The “Other Pattern” category refers to areas with some other pattern of time limit implementation—for example, the area could have been waived in the first year of time limit reinstatement and implemented the time limit in the following year.

Participants who are potentially subject to the time limit except that they work 30 or more hours per week are slightly more likely to be concentrated in areas with a time limit than are participants who are potentially subject to the time limit in five of the study States. In Alabama, 92 percent of participants who would potentially be subject to the time limit if they did not work 30 or more hours per week lived in a time-limited area, compared with 89 percent of those potentially subject to the time limit. The differences are greatest in Maryland (43 percent compared with 39 percent) and

Pennsylvania (30 percent compared with 23 percent). This pattern may reflect greater opportunities for work in time-limited areas, as the waived areas within these states had to demonstrate high unemployment rates or a lack of sufficient jobs in order to qualify for a waiver. There is little difference between the two groups in Colorado and Vermont.

Characteristics of Participants Ages 18 to 49, Potentially Subject to the Time Limit, and ABAWDs Subject to the Time Limit

In this section, we compare the demographic and income characteristics of all SNAP participants ages 18 to 49 with those who are potentially subject to the time limit and those who are ABAWDs subject to the time limit. We count participants as potentially subject to the time limit if they are 18 to 49, subject to the general work requirements, and in households without children under 18. ABAWDs subject to the time limit are a subset of the participants potentially subject to the time limit who live in an area where the time limit is in effect and are not identified in the administrative data as being pregnant or unfit for work. We also look at a broader group including people potentially subject to time limit or working 30+ hours. This group incorporates participants who are potentially subject to the time limit as well as adults without disabilities who are 18 to 49, in households without children under 18, and who work 30 or more hours per week. Participants who work 30 or more hours per week are not a primary focus of this paper because they are exempt from general work requirements and are not subject to the ABAWD time limit. Nevertheless, we include them to provide a complete picture of the characteristics of able-bodied adults without dependents in this age range.

We focus on the characteristics of participants in the first month of time limit implementation—before reductions in participation associated with time limit reinstatement. By focusing on characteristics in the first month of implementation (rather than an earlier month) we have the data needed to identify ABAWDs subject to the time limit.

The States vary in the level of demographic and income information provided to the study. While basic information such as sex, age, and benefit level were provided by all States, other information such as marital status and educational attainment were only provided by a few States.²⁸ We present

²⁸ In some cases, States provided a requested variable, but the variable did not fully capture the question of interest to the study. For example, some States provided information about educational attainment, but only for those participants currently in school. We show results for characteristics where the data match the definition of interest to the study.

results for each State where data are available. We do not present results for Oregon in this section, due to the lack of data needed to reliably identify people potentially subject to the time limit at the time of time limit reinstatement. Additional details and results for the eighth month of time limit implementation are presented in the appendix.²⁹

Demographics

Men are more likely than women to be potentially subject to the ABAWD time limit. This is not surprising, given the much greater likelihood that a child lives with a single mother than a single father.³⁰ Men make up between 31 and 43 percent of SNAP participants ages 18 to 49 in the study States but account for 52 to 64 percent of participants potentially subject to the time limit and 50 to 65 percent of ABAWDs subject to the time limit (figure 6). For example, in Tennessee, 38 percent of all SNAP participants ages 18 to 49 are men, compared with 60 percent of participants potentially subject to the time limit, and 61 percent of ABAWDs subject to the time limit. In most States, counting participants who work 30 or more hours per week along with people potentially subject to the time limit reduces the share who are male; the greatest difference is in Maryland, where 64 percent of participants potentially subject to the time limit are male, compared with 58 percent of participants who are either potentially subject to the time limit or already work 30 or more hours per week.

We show results separately for different groups of time-limited counties in Colorado. Colorado differs from the other study States in that it had opted to administer the time limit in five counties prior to reinstating the ABAWD time limit in many more counties in January 2016. These counties are referred to as “counties already with time limit” in the figure. A second group of counties, those “already with E&T,” reinstated the time limit in January 2016 but were already operating mandatory Employment and Training (E&T) programs. In these counties, some people potentially subject to the ABAWD time limit may have already lost eligibility due to noncompliance with mandatory E&T requirements. The third set of counties, those “starting E&T,” are counties that reinstated the time limit in January 2016 but did not already have an E&T program. This set of counties simultaneously

²⁹ The eighth month was selected to represent a point by which the number of people potentially subject to the time limit has stabilized in most States following a drop off after ABAWD time limit reinstatement.

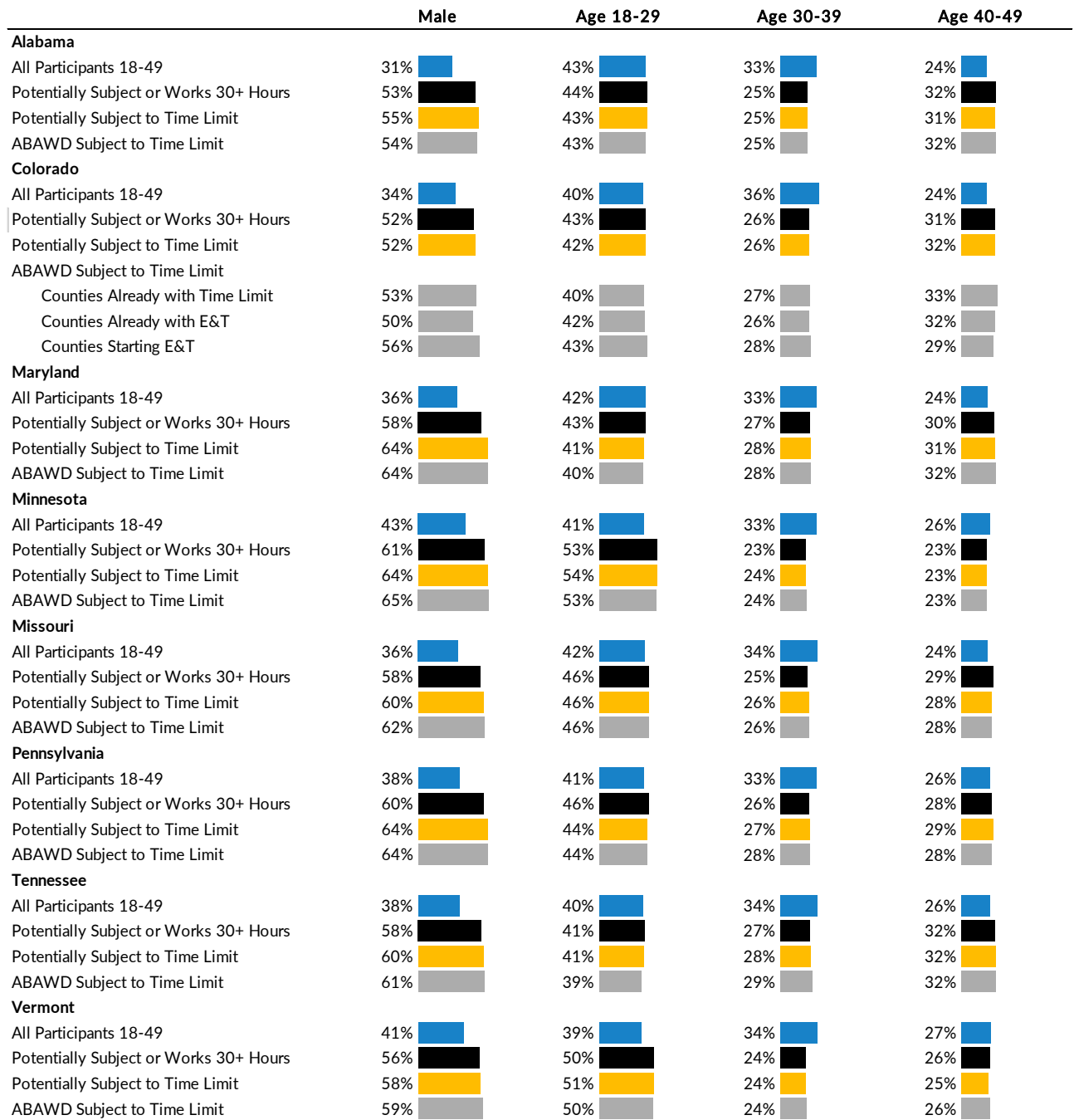
³⁰ Nationally, 23 percent of SNAP households consist of a single female with children and 2 percent consist of a single male with children. See Cronquist (2019, table A.14).

implemented the ABAWD time limit and mandatory E&T.³¹ A lower share of ABAWDs are men in the first two groups of counties than in the third county group or in the other States.

³¹ Colorado did not have any county that reinstated the time limit in January 2016 without also operating mandatory E&T.

FIGURE 6

**Gender and Age of SNAP Participants Ages 18 to 49
By State and Colorado County Group in Month of Time Limit Reinstatement**



Source: State SNAP administrative data for the first month of reinstatement of ABAWD time limit: November 2013 for Minnesota and Vermont; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: Colorado counties “Already with Time Limit” had the ABAWD time limit in place throughout the study period. Colorado counties “Already with E&T” had mandatory E&T prior to ABAWD time limit reinstatement in January 2016. Colorado counties “Starting E&T” simultaneously introduced mandatory E&T and the ABAWD time limit in January 2016.

SNAP participants potentially subject to the time limit and ABAWDs subject to the time limit differ somewhat in age distribution across the study States and relative to all participants ages 18 to 49. ABAWDs tend to be younger (ages 18 to 29) in Minnesota and Vermont, with 53 percent of Minnesota's ABAWDs and 50 percent of Vermont's ABAWDs in this age range, compared with 39 to 46 percent in the other study States. Alabama, Maryland, Tennessee, and Colorado counties that already had the ABAWD time limit or mandatory E&T have the highest share of older (ages 40 to 49) ABAWDs, with over 30 percent falling in this age range.

SNAP participants potentially subject to the time limit are generally similar in race and ethnicity to all SNAP participants ages 18 to 49 in their State (figure 7). However, a somewhat higher share is Black in Alabama, Minnesota, Missouri, Pennsylvania, and Tennessee. The largest difference is in Missouri, where 40 percent of participants potentially subject to the time limit are Black, compared with 30 percent of all participants ages 18 to 49. In Colorado, non-Hispanic White participants make up a higher share of participants potentially subject to the time limit (49 percent) than of all participants (42 percent), whereas Hispanic participants make up 38 percent of all participants ages 18 to 49 but 31 percent of those potentially subject to the time limit.

The racial and ethnic composition of ABAWDs is affected by the racial and ethnic composition of the areas in which the time limit is reinstated. For example, in Minnesota, 7 percent of participants potentially subject to the time limit are American Indian or Alaskan Native, compared with 3 percent of ABAWDs subject to the time limit. This likely reflects the waiver from the ABAWD time limit of most Indian reservations within the State. Over 75 percent of ABAWDs in Colorado counties implementing both E&T and the time limit in January 2016 are non-Hispanic White, compared with 55 percent of those in counties that already had E&T (but were implementing the time limit) and 43 percent of those in counties already administering the time limit.

FIGURE 7

**Race and Ethnic Status of SNAP Participants Ages 18 to 49
By State and Colorado County Group in Month of Time Limit Reinstatement**

	AAPI	AIAN	Black	Hispanic	White	Other	Unknown
Alabama							
All Participants 18-49	0%	0%	51%	1%	45%	1%	1%
Potentially Subject or Works 30+ Hours	0%	0%	54%	1%	43%	2%	1%
Potentially Subject to Time Limit	0%	0%	53%	1%	43%	2%	1%
ABAWD Subject to Time Limit	0%	0%	50%	1%	46%	2%	1%
Colorado							
All Participants 18-49	2%	1%	10%	38%	42%	0%	6%
Potentially Subject or Works 30+ Hours	1%	1%	9%	31%	49%	0%	8%
Potentially Subject to Time Limit	1%	1%	9%	31%	49%	0%	8%
ABAWD Subject to Time Limit							
Counties Already with Time Limit	2%	1%	19%	27%	43%	0%	9%
Counties Already with E&T	2%	1%	5%	29%	55%	0%	9%
Counties Starting E&T	0%	1%	1%	15%	75%	0%	8%
Maryland							
All Participants 18-49	2%	0%	57%	3%	31%	0%	7%
Potentially Subject or Works 30+ Hours	1%	0%	58%	1%	31%	0%	8%
Potentially Subject to Time Limit	1%	0%	57%	1%	32%	0%	8%
ABAWD Subject to Time Limit	2%	0%	54%	2%	30%	0%	11%
Minnesota							
All Participants 18-49	7%	5%	27%	5%	55%	2%	1%
Potentially Subject or Works 30+ Hours	4%	6%	32%	4%	52%	2%	1%
Potentially Subject to Time Limit	3%	7%	33%	4%	50%	2%	1%
ABAWD Subject to Time Limit	4%	3%	35%	4%	52%	2%	1%
Missouri							
All Participants 18-49	1%	0%	30%	2%	62%	0.2%	5%
Potentially Subject or Works 30+ Hours	0%	0%	39%	2%	54%	0.2%	4%
Potentially Subject to Time Limit	0%	0%	40%	2%	54%	0.2%	4%
ABAWD Subject to Time Limit	0%	0%	41%	2%	53%	0.2%	4%
Pennsylvania							
All Participants 18-49	2%	0%	30%	13%	53%	2%	0%
Potentially Subject or Works 30+ Hours	1%	0%	35%	11%	51%	2%	0%
Potentially Subject to Time Limit	1%	0%	36%	11%	49%	2%	0%
ABAWD Subject to Time Limit	1%	0%	24%	5%	67%	3%	0%
Tennessee							
All Participants 18-49	1%	0%	34%	2%	63%	0.3%	0%
Potentially Subject or Works 30+ Hours	0%	0%	38%	1%	61%	0.1%	0%
Potentially Subject to Time Limit	0%	0%	38%	1%	61%	0.1%	0%
ABAWD Subject to Time Limit	1%	0%	40%	1%	58%	0.3%	0%
Vermont							
All Participants 18-49	1%	0%	3%	1%	93%	0.1%	2%
Potentially Subject or Works 30+ Hours	1%	0%	2%	1%	94%	0.1%	1%
Potentially Subject to Time Limit	1%	0%	2%	1%	94%	0.1%	2%
ABAWD Subject to Time Limit	1%	0%	2%	1%	95%	0.1%	1%

Source: State SNAP administrative data for the first month of ABAWD time limit reinstatement: November 2013 for Minnesota and Vermont; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: AIAN is defined as American Indian/Alaska Native, and AAPI is defined as Asian-American/Pacific Islander. Colorado counties "Already with Time Limit" had the ABAWD time limit in place throughout the study period. Colorado counties "Already with E&T" had mandatory E&T prior to ABAWD time limit reinstatement in January 2016. Colorado counties "Starting E&T" simultaneously introduced mandatory E&T and the ABAWD time limit in January 2016.

Most SNAP participants ages 18 to 49 have never been married, and the share never married is higher among those potentially subject to the time limit and ABAWDs (figure 8).

FIGURE 8

**Marital Status of SNAP Participants Ages 18 to 49
By State and Colorado County Group in Month of Time Limit Reinstatement**

	Unknown	Married	Separated	Divorced	Never Married
Colorado					
All Participants 18-49	8%	27%	7%	9%	49%
Potentially Subject or 30+ Hours	9%	12%	6%	11%	63%
Potentially Subject to Time Limit	8%	11%	6%	11%	63%
ABAWD Subject to Time Limit					
Counties Already with Time Limit	9%	10%	6%	10%	66%
Counties Already with E&T	5%	12%	6%	13%	64%
Counties Starting E&T	12%	11%	5%	12%	60%
Maryland					
All Participants 18-49	1%	12%	7%	4%	76%
Potentially Subject or 30+ Hours	1%	5%	7%	4%	83%
Potentially Subject to Time Limit	1%	5%	7%	4%	83%
ABAWD Subject to Time Limit	0.4%	5%	7%	4%	84%
Minnesota					
All Participants 18-49	0%	19%	9%	8%	63%
Potentially Subject or 30+ Hours	0.1%	5%	7%	7%	82%
Potentially Subject to Time Limit	0.1%	4%	7%	7%	83%
ABAWD Subject to Time Limit	0.1%	4%	7%	7%	82%
Pennsylvania					
All Participants 18-49	0.1%	15%	7%	6%	71%
Potentially Subject or 30+ Hours	0%	6%	5%	6%	83%
Potentially Subject to Time Limit	0%	5%	5%	6%	84%
ABAWD Subject to Time Limit	0%	6%	6%	7%	81%
Tennessee					
All Participants 18-49	0%	20%	10%	11%	60%
Potentially Subject or 30+ Hours	0%	9%	8%	11%	71%
Potentially Subject to Time Limit	0%	8%	9%	11%	72%
ABAWD Subject to Time Limit	0%	7%	7%	10%	76%

Source: State SNAP administrative data for the first month of ABAWD time limit reinstatement: November 2013 for Minnesota; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: Widowed participants are included with married and account for less than one percent of participants in all States. Colorado counties “Already with Time Limit” had the ABAWD time limit in place throughout the study period. Colorado counties “Already with E&T” had mandatory E&T prior to ABAWD time limit reinstatement in January 2016. Colorado counties “Starting E&T” simultaneously introduced mandatory E&T and the ABAWD time limit in January 2016.

People potentially subject to the time limit and ABAWDs are much more likely than other SNAP participants to be homeless, with rates between two and four times that of other participants ages 18 to 49 (figure 9). Of the five States with data on homelessness, the rate is highest in Minnesota, where

28 percent of participants potentially subject to the time limit are homeless, compared with 11 percent of all SNAP participants ages 18 to 49. The homelessness rate is lowest in Tennessee, where 1 percent of all SNAP participants ages 18 to 49 and 3 percent of SNAP participants potentially subject to the time limit are homeless. If we count participants who work 30 or more hours per week together with participants potentially subject to the time limit, the homeless share drops in all States but Tennessee but remains well above that for all participants ages 18 to 49.

The rate of homelessness among ABAWDs subject to the time limit is similar to that for participants who are potentially subject to the time limit. Although FNS issued guidance in November 2015 that “chronic homelessness” could be used as an indicator for unfitness for work,³² this was not a requirement and States may have interpreted “chronic homelessness” differently or not yet implemented changes at the time represented here (2016). In some States, a higher rate of homelessness among ABAWDs than among participants potentially subject to the time limit could occur if homeless participants are disproportionately concentrated in areas (such as metropolitan areas) in which the time limit is reinstated. States may also differ in how they define homelessness, so results are not necessarily comparable across States.

A small share (1 to 2 percent) of people potentially subject to the time limit is pregnant. Pregnant participants are exempt from the ABAWD time limit, and so are not counted as ABAWDs subject to the time limit.

Few SNAP participants ages 18 to 49 in the five study States where citizenship status is available are noncitizens, and noncitizens are an even smaller share of participants potentially subject to the time limit. Five percent of Colorado and Maryland participants ages 18 to 49 are noncitizens compared with 3 percent of those potentially subject to the time limit. Three percent of Pennsylvania’s and 2 percent of Missouri’s and Tennessee’s participants ages 18 to 49 are noncitizens, compared with 1 percent of those potentially subject to the time limit. A slightly higher share (3 to 5 percent) of ABAWDs in Maryland, Tennessee, and the Colorado counties that already had the time limit or mandatory E&T are noncitizens, possibly reflecting a somewhat higher presence of noncitizens in time-limited areas of Maryland and Tennessee and in these two groups of Colorado counties.

³² Supplemental Nutrition Assistance Program: ABAWD Policy and Program Access. Letter to Regional Directors, November 2015. <https://fns-prod.azureedge.net/sites/default/files/snap/ABAWD-Time-Limit-Policy-and-Program-Access-Memo-Nov2015.pdf>.

FIGURE 9

Homeless, Pregnancy, and Noncitizen Status of SNAP Participants

By State and Colorado County Group in Month of Time Limit Reinstatement

	Homeless	Pregnant	Noncitizen
Colorado			
All Participants 18-49	6%	2%	5%
Potentially Subject or 30+ Hours	17%	2%	3%
Potentially Subject to Time Limit	18%	2%	3%
ABAWD Subject to Time Limit			
Counties Already with Time Limit	24%	0%	4%
Counties Already with E&T	16%	0%	4%
Counties Starting E&T	11%	0%	2%
Maryland			
All Participants 18-49	5%	3%	5%
Potentially Subject or 30+ Hours	12%	2%	3%
Potentially Subject to Time Limit	15%	2%	3%
ABAWD Subject to Time Limit	16%	0%	5%
Minnesota			
All Participants 18-49	11%	3%	NA
Potentially Subject or 30+ Hours	26%	2%	NA
Potentially Subject to Time Limit	28%	2%	NA
ABAWD Subject to Time Limit	29%	0%	NA
Missouri			
All Participants 18-49	6%	0%	2%
Potentially Subject or 30+ Hours	20%	1%	1%
Potentially Subject to Time Limit	23%	1%	1%
ABAWD Subject to Time Limit	24%	0%	1%
Pennsylvania			
All Participants 18-49	NA	4%	3%
Potentially Subject or 30+ Hours	NA	2%	2%
Potentially Subject to Time Limit	NA	2%	1%
ABAWD Subject to Time Limit	NA	0%	1%
Tennessee			
All Participants 18-49	1%	1%	2%
Potentially Subject or 30+ Hours	3%	2%	1%
Potentially Subject to Time Limit	3%	2%	1%
ABAWD Subject to Time Limit	7%	0%	3%

Source: State SNAP administrative data for the first month of ABAWD time limit reinstatement: November 2013 for Minnesota; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: Colorado counties “Already with Time Limit” had the ABAWD time limit in place throughout the study period. Colorado counties “Already with E&T” had mandatory E&T prior to ABAWD time limit reinstatement in January 2016. Colorado counties “Starting E&T” simultaneously introduced mandatory E&T and the ABAWD time limit in January 2016.

SNAP participants who are potentially subject to the time limit and ABAWDs have somewhat lower educational attainment than all participants ages 18 to 49 (figure 10). Between 20 percent and 33 percent of participants potentially subject to the time limit lack a high school degree in the four States for which data are available, exceeding the overall rate for participants ages 18 to 49 by one to four percentage points. Fewer than one in five SNAP participants has attended college, and the rates are lower for participants potentially subject to the time limit, with rates ranging from 9 percent in Minnesota to 13 percent in Missouri. Counting participants working 30 or more hours along with participants potentially subject to the time limit reduces the share without a high school degree in all four States, though not to the same level as all recipients ages 18 to 49 in two of the States.

FIGURE 10
Educational Attainment of SNAP Participants Ages 18 to 49
By State in Month of Time Limit Reinstatement

	Unknown	No HS Degree	HS Degree	1+ Years of College	2+ Years of College	4+ Years of College
Minnesota						
All Participants 18-49	6%	25%	57%	12%		
Potentially Subject or 30+ Hours	5%	28%	56%	10%		
Potentially Subject to Time Limit	5%	29%	56%	9%		
ABAWD Subject to Time Limit	6%	29%	56%	10%		
Missouri						
All Participants 18-49	4%	31%	48%	17%	11%	3%
Potentially Subject or 30+ Hours	4%	31%	51%	14%	9%	3%
Potentially Subject to Time Limit	4%	33%	50%	13%	8%	2%
ABAWD Subject to Time Limit	4%	33%	50%	13%	8%	2%
Pennsylvania						
All Participants 18-49	10%	19%	62%		9%	3%
Potentially Subject or 30+ Hours	11%	19%	62%		8%	3%
Potentially Subject to Time Limit	11%	20%	61%		7%	3%
ABAWD Subject to Time Limit	15%	16%	59%		9%	4%
Vermont						
All Participants 18-49	7%	23%	57%	13%	10%	5%
Potentially Subject or 30+ Hours	11%	25%	52%	12%	9%	5%
Potentially Subject to Time Limit	11%	26%	51%	12%	9%	5%
ABAWD Subject to Time Limit	11%	26%	51%	12%	9%	5%

Source: State SNAP administrative data for the first month of ABAWD time limit reinstatement: November 2013 for Minnesota and Vermont; March 2016 for Pennsylvania; January 2016 for Missouri.

Notes: Minnesota does not provide details on number of years of college attended. Therefore, the "1+ Year of College" column includes those who attended at least one year, the 2+ column includes those who attended at least two years, and the 4+ column includes those who attended at least four years. In Pennsylvania, people with some college but less than an associate degree are categorized as having a high school degree.

Employment, Income, and Poverty

Figure 11 presents information about employment, income, and poverty obtained from the SNAP administrative data. Earnings and employment information from UI wage records is not included here but is presented later in the impact analysis.

SNAP participants who are potentially subject to the time limit are much less likely than all participants ages 18 to 49 to work at least 20 hours per week, have earnings, or have unearned income. Those who do have earnings or unearned income tend to have lower amounts relative to all participants ages 18 to 49. In the first month of time limit reinstatement, between 4 and 15 percent of SNAP participants who are potentially subject to the time limit work at least 20 hours a week, compared with 17 to 27 percent of all participants ages 18 to 49 (figure 11). Between 9 and 35 percent of SNAP participants who are potentially subject to the time limit have at least some earnings, compared with 27 to 38 percent of all participants ages 18 to 49. Among those with earnings, median monthly earnings range from \$353 to \$781 for people potentially subject to the time limit and from \$1,097 to \$1,318 for all participants ages 18 to 49.

Relatively few participants (3 to 6 percent) who are potentially subject to the time limit have unearned income, compared with between 18 and 26 percent of all participants ages 18 to 49. Among participants with unearned income, the median is lower among people potentially subject to the time limit than among all people ages 18 to 49.

The lower employment, earnings, and unearned income among participants potentially subject to the time limit is partly explained by the criteria used to define this group. People who work at least 30 hours a week are not counted as potentially subject to the time limit, because they are exempt from the general work requirements. Their work and earnings are included when counting participants ages 18 to 49 but are excluded when counting people potentially subject to the time limit. Similarly, participants who receive income for a disability are included in the results for all participants ages 18 to 49. However, due to their disability, they are not included when counting people potentially subject to the time limit. This helps explain the higher rates of unearned income among all participants 18 to 49 relative to those who are potentially subject to the time limit. Finally, income eligibility limits vary with family size. A family with children will remain eligible for SNAP at a higher level of income and earnings than a participant potentially subject to the time limit who lives alone. This also contributes to the higher income observed for all participants ages 18 to 49, relative to those who are potentially subject to the time limit.

FIGURE 11

**Employment and Income Characteristics of SNAP Participants Ages 18 to 49
By State and Colorado County Group in Month of Time Limit Reinstatement**

	Pct Working 20+ Hours/Week	Pct with Earnings	Median Monthly Earnings	Pct with Unearned Income	Median Monthly Unearned Income
Alabama					
All Participants 18-49	17%				
Potentially Subject or 30+ Hours	14%				
Potentially Subject to Time Limit	4%				
ABAWD Subject to Time Limit	5%				
Colorado					
All Participants 18-49	27%	38%	\$1,105	25%	\$733
Potentially Subject or 30+ Hours	23%	42%	\$683	6%	\$152
Potentially Subject to Time Limit	15%	35%	\$628	6%	\$156
ABAWD Subject to Time Limit					
Counties Already with Time Limit	15%	35%	\$650	7%	\$114
Counties Already with E&T	16%	37%	\$654	6%	\$200
Counties Starting E&T	14%	36%	\$640	6%	\$200
Minnesota					
All Participants 18-49	27%	38%	\$1,200	22%	\$710
Potentially Subject or 30+ Hours	20%	32%	\$728	4%	\$427
Potentially Subject to Time Limit	7%	21%	\$640	4%	\$400
ABAWD Subject to Time Limit	7%	21%	\$640	4%	\$362
Missouri					
All Participants 18-49		30%	\$1,142	25%	\$733
Potentially Subject or 30+ Hours		22%	\$455	5%	\$220
Potentially Subject to Time Limit		8%	\$353	5%	\$150
ABAWD Subject to Time Limit		8%	\$350	4%	\$150
Pennsylvania					
All Participants 18-49	24%				
Potentially Subject or 30+ Hours	28%				
Potentially Subject to Time Limit	9%				
ABAWD Subject to Time Limit	13%				
Tennessee					
All Participants 18-49	25%	27%	\$1,097	18%	\$733
Potentially Subject or 30+ Hours	17%	18%	\$482	3%	\$179
Potentially Subject to Time Limit	5%	9%	\$412	3%	\$150
ABAWD Subject to Time Limit	6%	8%	\$455	2%	\$191
Vermont					
All Participants 18-49	24%	35%	\$1,318	26%	\$762
Potentially Subject or 30+ Hours	20%	32%	\$854	5%	\$340
Potentially Subject to Time Limit	11%	25%	\$781	5%	\$350
ABAWD Subject to Time Limit	11%	25%	\$790	5%	\$350

Source: State SNAP administrative data for the first month of ABAWD time limit reinstatement: November 2013 for Minnesota and Vermont; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: Income is reported in nominal dollars and excludes zeros. Colorado counties “Already with Time Limit” had the ABAWD time limit in place throughout the study period. Colorado counties “Already with E&T” had mandatory E&T prior to ABAWD time limit reinstatement in January 2016. Colorado counties “Starting E&T” simultaneously introduced mandatory E&T and the ABAWD time limit in January 2016.

If we count participants working 30 or more hours per week together with participants potentially subject to the time limit, then the share who work at least 20 hours per week and the share with earnings increases substantially in all States, though not to the level for all participants ages 18 to 49, except in Colorado and Pennsylvania. Including participants who work 30 or more hours per week raises median earnings somewhat, but nowhere near the average for all participants ages 18 to 49. This is not surprising, since an adult with children will retain SNAP eligibility up to a higher income level than will an adult living alone.

With little earnings or unearned income, most SNAP participants who are potentially subject to the time limit have household income below half the federal poverty guideline (FPG). Between 83 and 89 percent have income below half the FPG in Alabama, Maryland, Missouri, and Tennessee, with somewhat lower shares in Colorado (70 percent), Minnesota (79 percent), and Vermont (69 percent) (figure 12). If we count participants working 30 or more hours per week together with participants potentially subject to the time limit, the share below 50 percent FPG falls by between 7 and 16 percentage points. Even so, the share who are extremely poor remains substantially above the rate for all participants ages 18 to 49, which range from 37 to 58 percent, depending on State.

Only 1 or 2 percent of participants potentially subject to the time limit have incomes above the FPG in Alabama, Missouri, and Tennessee. None of these States has used the Broad-Based Categorical Eligibility (BBCE) option to raise the gross income limit above 130 percent FPG, and less than half a percent of participants potentially subject to the time limit have income above that level.³³

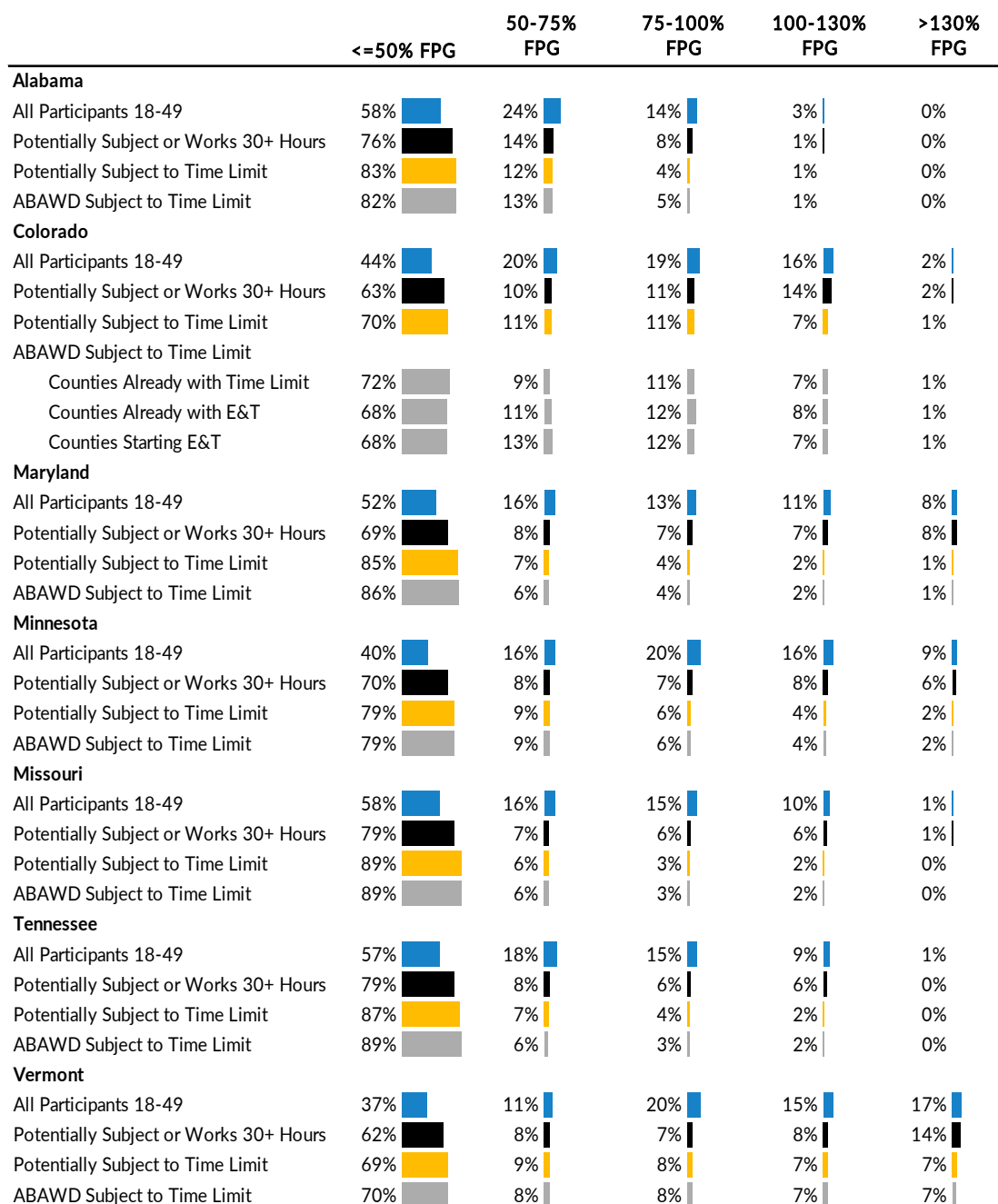
Maryland, Minnesota, and Vermont have raised their gross income limits to 200 percent FPG, 165 percent FPG, and 185 percent FPG respectively. Even so, just 1 percent of Maryland's and 2 percent of Minnesota's participants who are potentially subject to the time limit have income above 130 percent FPG. Among the study States, Vermont has the highest share of participants above poverty, with 7 percent of people potentially subject to time limit having income between 100 and 130 percent FPG and another 7 percent having income above 130 percent FPG. When comparing income to the poverty guideline, we use the household's income. Therefore, some ABAWDs with little or no work are raised above 130 percent FPG by the income of other household members.

³³ Households containing an elderly member or member with a disability are not subject to the 130 percent gross income limit and may be eligible if other criteria are met. Therefore, it is possible for a person who is potentially subject to the time limit and lives in a household with an elderly member or member with a disability to be eligible above 130 percent FPG in States that have not raised income limits through BBCE.

FIGURE 12

Poverty Status of SNAP Participants Ages 18 to 49

By State and Colorado County Group in Month of Time Limit Reinstatement



Source: State SNAP administrative data for the first month of ABAWD time limit reinstatement: November 2013 for Minnesota and Vermont; January 2016 for the remaining States.

Notes: FPG standards for the federal poverty guideline. Colorado counties “Already with Time Limit” had the ABAWD time limit in place throughout the study period. Colorado counties “Already with E&T” had mandatory E&T prior to ABAWD time limit reinstatement in January 2016. Colorado counties “Starting E&T” simultaneously introduced mandatory E&T and the ABAWD time limit in January 2016.

Geographic Distribution

The study States differ in the extent to which SNAP participants reside in “noncore” (typically rural) areas, small town micropolitan areas, small or medium metropolitan areas, or are on the fringe or center of large metropolitan areas.³⁴ Alabama comes closest to an even distribution across the different types of areas, though has relatively fewer participants on the fringe of large metropolitan areas. Vermont consists entirely of areas classified as noncore, micropolitan, or small metropolitan. Maryland is the most urban of the study States, with 57 percent of participants ages 18 to 49 living on the fringe of a large metropolitan area and 27 percent living in the center of a large metropolitan area (figure 13). Over half of Minnesota’s and Missouri’s participants and 41 percent of Tennessee’s participants ages 18 to 49 live on the fringe or in the center of a large metropolitan area. Tennessee has the second largest share (after Alabama) of participants in medium metropolitan areas. At least a quarter of participants ages 18 to 49 are in noncore or micropolitan areas in Alabama, Missouri, Tennessee, and Vermont.

SNAP participants who are potentially subject to the time limit are somewhat more likely than all participants ages 18 to 49 to live in a large central metropolitan area in Maryland, Minnesota, Missouri, and Tennessee, but otherwise have a similar geographic distribution. The biggest difference is in Missouri, where 34 percent of participants potentially subject to the time limit live in a large central metropolitan area, compared with 24 percent of all participants ages 18 to 49.

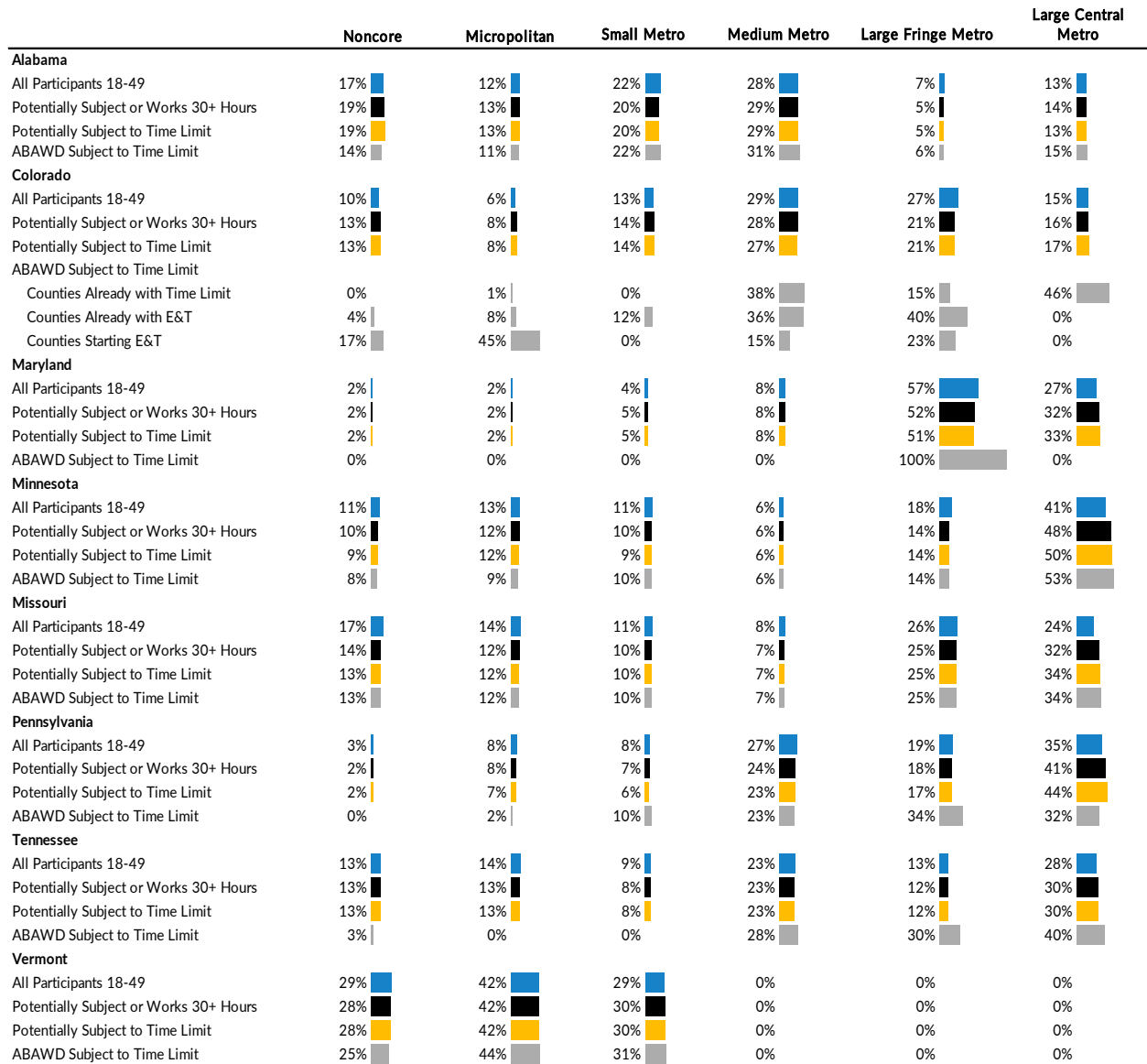
The geographic distribution of ABAWDs subject to the time limit reflects differences in the geographic characteristics of sub-State areas with and without the time limit. Missouri implemented the time limit statewide, and so the geographic distribution of ABAWDs matches the distribution of participants potentially subject to the time limit. Maryland’s time limit policy was implemented entirely in large fringe metropolitan areas. None of Tennessee’s micropolitan or small metropolitan areas were subject to the time limit in the first year of implementation.

³⁴ We use the OMB geographic designations. Nonmetropolitan areas are outside the boundaries of metropolitan areas and are divided into two types: 1) Micropolitan areas, which have a labor-market area centered on an urban cluster of 10,000 to 49,999 people; and 2) all other nonmetropolitan areas, referred to as “noncore.” <https://www.ers.usda.gov/topics/rural-economy-population/rural-classifications/what-is-rural.aspx>

FIGURE 13

Geographic Area Status of SNAP Participants Ages 18 to 49

By State and Colorado County Group in Month of Time Limit Reinstatement



Source: State SNAP administrative data for the first month of ABAWD time limit reinstatement: November 2013 for Minnesota and Vermont; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: Colorado counties “Already with Time Limit” had the ABAWD time limit in place throughout the study period. Colorado counties “Already with E&T” had mandatory E&T prior to ABAWD time limit reinstatement in January 2016. Colorado counties “Starting E&T” simultaneously introduced mandatory E&T and the ABAWD time limit in January 2016.

Household Size and Benefit Level

SNAP households containing ABAWDs subject to the time limit are much more likely than all SNAP households to have just one member. Between 77 percent and 88 percent of households with ABAWDs have one member in the first month of time limit implementation in the time-limited areas of the study States, compared with between 46 and 63 percent of all SNAP households in time-limited areas (figure 14). Average monthly SNAP benefits range from \$162 to \$190 for one-member ABAWD SNAP households, from \$215 to \$282 for two-member households with at least one ABAWD, from \$267 to \$416 for three-member households with at least one ABAWD, and from \$324 to \$499 for households with four or more members and at least one ABAWD.

FIGURE 14

Household Size and Average SNAP Benefit in Areas with the Time Limit

By State and Colorado County Group in Month of Time Limit Reinstatement

	One Person	Two People	Three People	Four+ People
Alabama				
All Households, Percent Distribution	47%	19%	17%	17%
Households with ABAWD, Percent Distribution	77%	18%	4%	1%
Households with ABAWD, Average Benefit	\$183	\$270	\$354	\$433
Colorado (already with time limit)				
All Households, Percent Distribution	49%	17%	14%	20%
Households with ABAWD, Percent Distribution	88%	10%	2%	0.4%
Households with ABAWD, Average Benefit	\$163	\$269	\$336	\$449
Colorado (counties already with E&T)				
All Households, Percent Distribution	46%	18%	15%	21%
Households with ABAWD, Percent Distribution	84%	13%	3%	0.5%
Households with ABAWD, Average Benefit	\$162	\$269	\$353	\$425
Colorado (counties starting E&T)				
All Households, Percent Distribution	50%	18%	14%	18%
Households with ABAWD, Percent Distribution	79%	16%	3%	1%
Households with ABAWD, Average Benefit	\$165	\$280	\$416	\$499
Maryland				
All Households, Percent Distribution	51%	21%	14%	14%
Households with ABAWD, Percent Distribution	87%	9%	3%	1%
Households with ABAWD, Average Benefit	\$177	\$261	\$375	\$460
Minnesota				
All Households, Percent Distribution	63%	14%	9%	14%
Households with ABAWD, Percent Distribution	88%	10%	2%	1%
Households with ABAWD, Average Benefit	\$176	\$237	\$311	\$383
Missouri				
All Households, Percent Distribution	51%	17%	14%	18%
Households with ABAWD, Percent Distribution	82%	14%	3%	1%
Households with ABAWD, Average Benefit	\$181	\$276	\$349	\$444
Pennsylvania				
All Households, Percent Distribution	58%	18%	11%	13%
Households with ABAWD, Percent Distribution	79%	17%	4%	1%
Households with ABAWD, Average Benefit	\$184	\$215	\$267	\$324
Tennessee				
All Households, Percent Distribution	53%	18%	14%	16%
Households with ABAWD, Percent Distribution	87%	10%	2%	1%
Households with ABAWD, Average Benefit	\$190	\$282	\$365	\$459
Vermont				
All Households, Percent Distribution	59%	18%	11%	12%
Households with ABAWD, Percent Distribution	83%	14%	3%	1%
Households with ABAWD, Average Benefit	\$175	\$259	\$329	\$392

Source: State SNAP administrative data for the first month of ABAWD time limit reinstatement: November 2013 for Minnesota and Vermont; March 2016 for Pennsylvania; January 2016 for the remaining States.

Notes: Colorado counties “Already with Time Limit” had the ABAWD time limit in place throughout the study period. Colorado counties “Already with E&T” had mandatory E&T prior to ABAWD time limit reinstatement in January 2016. Colorado counties “Starting E&T” simultaneously introduced mandatory E&T and the ABAWD time limit in January 2016. SNAP benefits are presented in nominal dollars.

Trends in Participation

Figure 15 shows trends in participation in areas with and without the ABAWD time limit for all people ages 18 to 49 and for those who are potentially subject to the time limit. We define areas “with time limit” as those that were included in the first set of areas to be time-limited within the State and where the time limit remained in effect for the remainder of the study period. We define areas “without time limit” as areas that remained without the ABAWD time limit for the entire study period.³⁵ We show trends in participation for areas “with time limit” and “without time limit” both before and after time limit reinstatement. By this definition, Alabama and Missouri have no areas without time limit because the time limit was reinstated in all parts of these States at some point during the study period. Missouri reinstated the time limit Statewide in January 2016. In Alabama, all counties that did not reinstate the time limit in January 2016 reinstated it in January 2017. We show results separately for Colorado counties that reinstated the time limit in January 2016 and already had mandatory E&T and counties that introduced both the time limit and mandatory E&T in January 2016.³⁶

We show trends in participation in the two years prior to time limit reinstatement and in the 19 to 24 months following time limit reinstatement. The exact time span varies for each State and reflects the data available. For some States, the first month of data is 23 months prior to time limit reinstatement. States also vary in how many months of data are available following time limit reinstatement. To facilitate comparison across States, we display the number of SNAP participants in each month as a percentage of the number of participants in the first month of data.

Some States show increases in participation among people potentially subject to the time limit in the years prior to time limit reinstatement. We are not aware of SNAP policy changes that might have contributed to this increase. A possible explanation is that the expansion of Medicaid eligibility to adults without disabilities and without children led to increased SNAP participation among this population in some States (Schmidt, Shore-Sheppard, and Watson 2019). States may also have made changes in outreach, application or certification requirements, or Employment and Training (E&T) referrals or sanctions. However, investigating these possibilities was beyond the scope of this study.

The States have varying patterns of participation in the two years prior to time limit reinstatement—with some having relatively flat levels of participation and others having increases and/or decreases in participation. After time limit reinstatement, all study States experience a

³⁵ Tennessee did not have a waiver in January and February 2016. However, we count areas that were waived beginning in March 2016 and remained waived for the rest of the study period as “without the time limit.”

³⁶ Oregon is omitted from the figure due to data limitations.

reduction in participants who are potentially subject to the time limit and live in time-limited areas. The largest reduction is typically between the third and fourth month of time limit reinstatement, the point at which participants who do not meet the ABAWD work requirement can first lose eligibility due to the time limit. Participation then levels off or slightly declines through the remainder of the study period. Colorado differs from this general pattern, possibly due to the presence of mandatory E&T. Additional details are provided below, first for the two years prior to time limit reinstatement and then for the period following time limit reinstatement.

Participation Prior to Time Limit Reinstatement

SNAP participation for all participants ages 18 to 49 and for participants potentially subject to the time limit was relatively flat in Minnesota and Missouri in the two years prior to time limit reinstatement, with little increase or decrease in levels of participation. In Alabama, participation among people potentially subject to time limit and among all people ages 18 to 49 was initially flat and then began a gradual decline about a year prior to time limit reinstatement.

In Tennessee and Vermont, participation among people potentially subject to the time limit trended upward in the first year of the study period, reaching a level 20 percent or more above the level in the first month of the study period. However, participation among all participants ages 18 to 49 remained relatively flat during this time period in Vermont and trended downward in Tennessee. Participation among people potentially subject to the time limit fell in both States in the six months prior to time limit reinstatement, with a steeper decline in Tennessee.³⁷

Participation among people potentially subject to the time limit was relatively flat in Maryland in the first year of the study period, but then increased. By January 2016, the first month of time limit reinstatement, participation was 19 percent above the level in the first month of the study period. Participation among all people ages 18 to 49 declined in the same months that participation among people potentially subject to the time limit was rising.

Participation among people potentially subject to the time limit in Pennsylvania increased between January 2014 and March 2016, with the greatest increase occurring in areas that would remain under

³⁷ Vermont's trend line for people potentially subject to the time limit in areas without a time limit fluctuates due to the relatively small number of participants in these areas (figure 1). Because the numbers are small, relatively small changes in the number of participants can have larger percentage effects than for the other groups and figures.

a time limit waiver for 2016 and 2017. Participation among all people ages 18 to 49 remained relatively flat.

In Colorado, participation among people potentially subject to the time limit fluctuated prior to time limit reinstatement. In counties that already had mandatory E&T and introduced the time limit in January 2016, participation reached a high of 113 percent of the January 2014 level in March 2015 and then fell to 97 percent of the January 2014 level by December 2015. In counties that introduced both mandatory E&T and the time limit in January 2016, participation among people potentially subject to the time limit rose to a high of 131 percent of the January 2014 level in March 2015. Participation gradually fell, reaching 114 percent of the January 2014 level in October 2015, and then rose to 120 percent of the January 2014 level in December 2015. Participation among all people ages 18 to 49 remained relatively flat prior to time limit reinstatement.

Participation Following Time Limit Reinstatement

All States experienced a reduction in participation among people potentially subject to the time limit in the months after time limit reinstatement, although the reduction in participation for Colorado counties that already had E&T was similar to that for all participants ages 18 to 49. Most States experienced a large drop between the third and fourth month of time limit reinstatement—the point at which ABAWDs could first lose eligibility due to the time limit. The pattern differed in States with mandatory E&T programs, with substantial differences in Colorado and modest differences in Minnesota and Vermont.³⁸

States are required to offer E&T programs but are able to choose whether they are voluntary, mandatory, or a mix. For example, a State can choose to operate a mandatory program for ABAWDs and a voluntary program for other participants, or mandatory and voluntary programs in different parts of the State. If a State operates a mandatory E&T program, then a SNAP participant who is assigned to E&T and does not comply with the E&T requirement is sanctioned—losing at least one month of SNAP benefits for the first occurrence, at least three months of SNAP benefits for the second occurrence, and at least six months of SNAP benefits for the third occurrence (USDA 2016).

The effect of ABAWD time limit reinstatement may vary depending on the timing and extent of mandatory E&T requirements within a State. If a State simultaneously introduces mandatory E&T

³⁸ Oregon also had mandatory E&T for ABAWDs during this time period but is not presented here. The other States operated voluntary E&T programs at the time of time limit reinstatement.

requirements and the ABAWD time limit, participants may lose SNAP due to noncompliance with E&T prior to the point that the ABAWD time limit is reached. If a State already has mandatory E&T at the time the ABAWD time limit is introduced, the time limit may have less effect. Some participants who would have lost eligibility due to the time limit will have already lost eligibility due to sanctions for E&T noncompliance. Others may already be engaged in E&T or workfare activities that may satisfy the ABAWD work requirement.

The level of effect of ABAWD time limit reinstatement in States with mandatory E&T can also be expected to vary based on the extent to which the State refers participants to mandatory E&T or exempts them from E&T participation. State can choose to exempt participants from mandatory E&T for various reasons—such as lack of transportation, lack of employability, language barriers—that would not exempt the participant from the ABAWD time limit. Therefore, the effects of the ABAWD time limit might be greater in States that offer more exemptions to mandatory E&T requirements than in States that do not.

There was little change in SNAP participation in Colorado counties that already had mandatory E&T when the time limit was reinstated. Although there was a slight reduction in participation among people potentially subject to the time limit between March and May 2016, the general trend does not differ much from the generally downward trend for all participants ages 18 to 49. This may suggest that the ABAWD time limit had little effect when implemented in the context of the pre-existing mandatory E&T program. This could happen if ABAWDs who would lose eligibility from the ABAWD time limit have already lost eligibility due to sanctions for noncompliance with E&T requirements, or because a higher share of those that remain are participating in E&T or workfare opportunities that meet the ABAWD work requirement.

The pattern differs in Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit. In these counties, participation starts to fall in January 2016 and continues to fall through August 2016, without a noticeably sharper drop between March and April. This suggests that mandatory E&T, rather than the ABAWD time limit, may have had a greater effect on participation.

Minnesota had a less abrupt drop in participation than the other States (excluding Colorado) and participation among people potentially subject to the time limit who live in time-limited areas begins to fall in the first month of time limit reinstatement. Participation for this group also falls relative to participants in areas without the time limit. A possible explanation is that Minnesota converted from voluntary to mandatory E&T for ABAWDs when the time limit was reinstated. Some ABAWDs may

have been sanctioned off of SNAP for failing to meet E&T requirements before reaching the three-month time limit.³⁹

Vermont also had mandatory E&T requirements for ABAWDs when the time limit was reinstated. (E&T participation was voluntary in the other study States discussed here, though Alabama, Maryland, and Tennessee had only recently transitioned from mandatory to voluntary in October 2015). In Vermont, participation among people potentially subject to the time limit who live in time-limited areas begins to drop in the first month of time limit reinstatement and immediately falls below the trend line for those living in areas without the time limit. As with Minnesota and Colorado, this may suggest that mandatory E&T requirements removed some ABAWDs from participation prior to the point at which they would lose eligibility due to the time limit.⁴⁰

Pennsylvania had a smaller reduction in participation among people potentially subject to the time limit living in time-limited areas but also had continued growth in participation among those living in waived areas. Therefore, the difference between those in waived and nonwaived areas is of a similar magnitude as in other States.

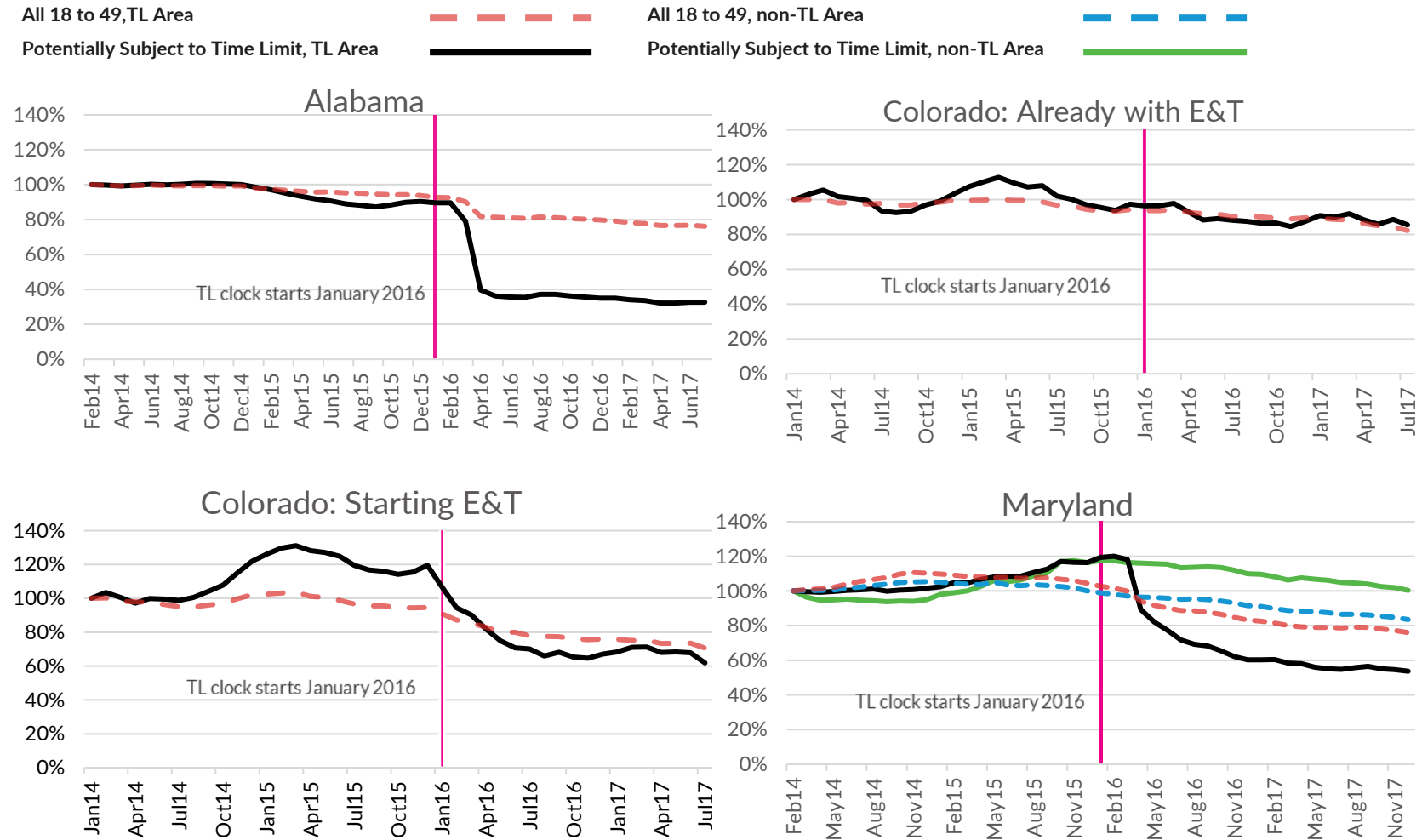
In all of the States except for Colorado and Pennsylvania, the number of participants potentially subject to the time limit at the end of the analysis period was less than half what it had been when the time limit was reinstated. In contrast, participation moderately decreased for all people ages 18 to 49 and for people potentially subject to the time limit in areas without the time limit.

³⁹ Information about mandatory and voluntary E&T status is obtained from the State SNAP Employment and Training plans for the year of time limit reinstatement.

⁴⁰ One caveat is that the Vermont Employment and Training plan that describes the mandatory requirements also refers to ABAWDs' "three free months" of participation. This may suggest that the mandatory E&T requirement was not expected to remove many ABAWDs from eligibility.

FIGURE 15

Monthly Participants as a Percent of Participants in First Data Month: All Participants Ages 18 to 49 and People Potentially Subject to the ABAWD Time Limit, by Area Time Limit Status, by State and Colorado County Group



All 18 to 49, TL Area

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All 18 to 49, non-TL Area

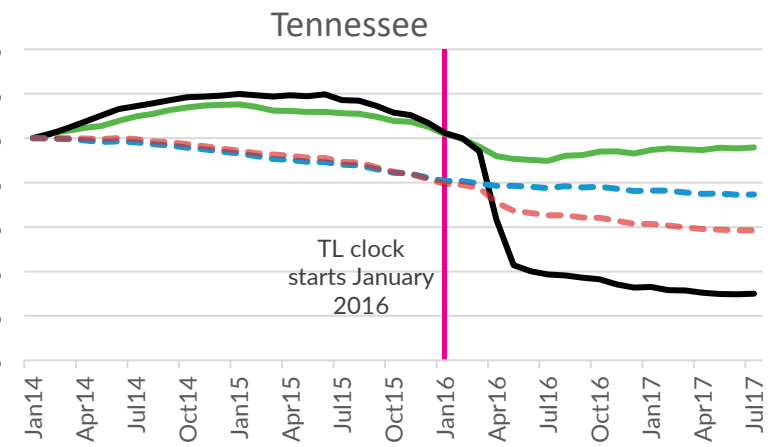
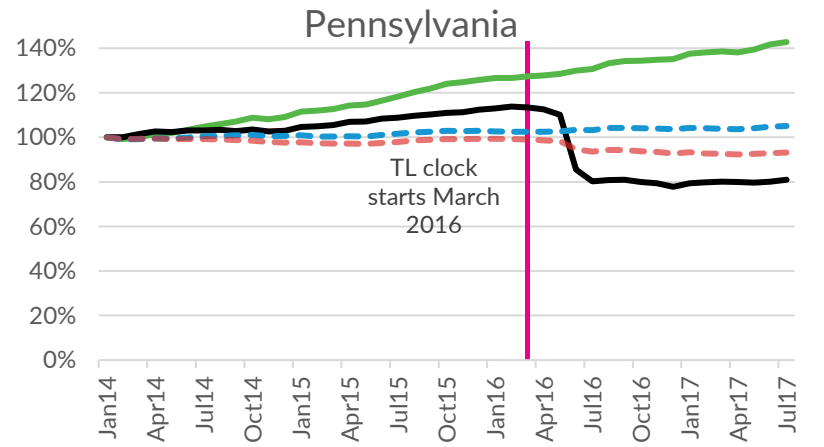
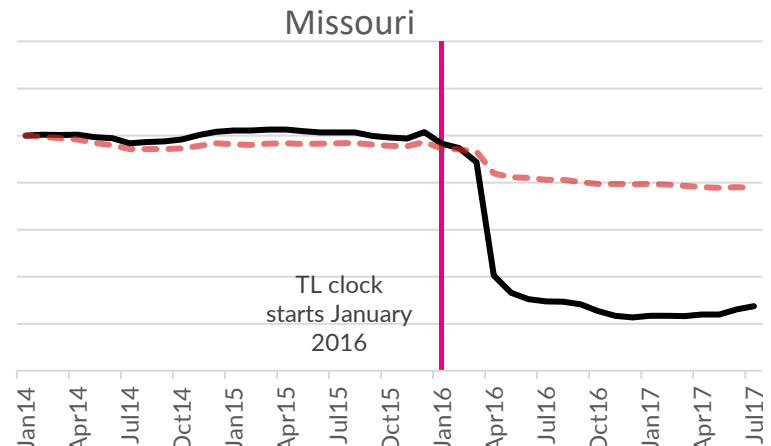
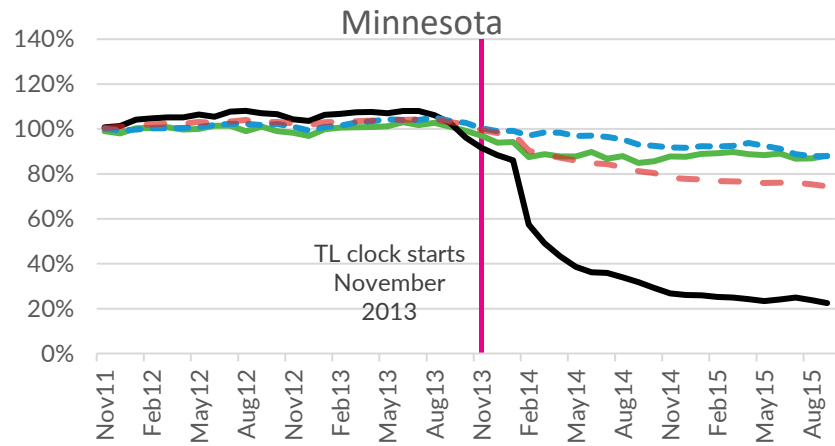
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Potentially Subject to Time Limit, TL Area

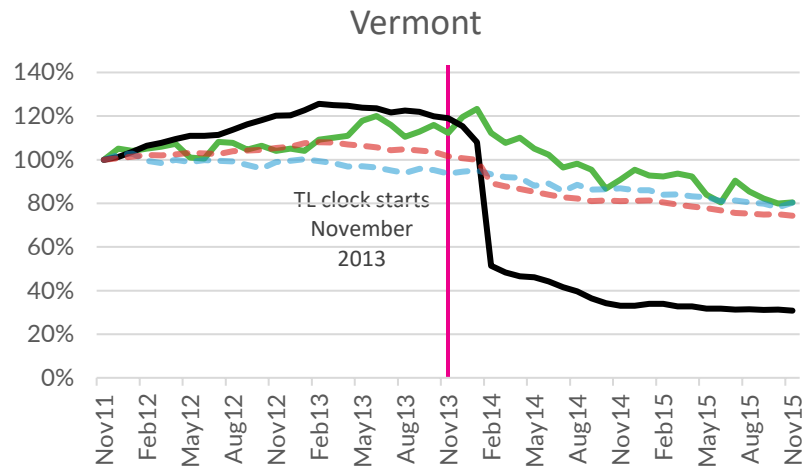
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Potentially Subject to Time Limit, non-TL Area

—



All 18 to 49, TL Area --- All 18 to 49, non-TL Area ---
 Potentially Subject to Time Limit, TL Area --- Potentially Subject to Time Limit, non-TL Area ---



Source: Author’s tabulations of Alabama, Colorado, Maryland, Minnesota, Missouri, Pennsylvania, Tennessee, and Vermont SNAP Administrative data. Area time limit status obtained from FNS.

Notes: Maryland excludes participants in areas that changed time limit status between 2016 and 2017. Minnesota excludes participants in areas that changed time limit status between November 2013 and 2015 and people participating in Minnesota Family Investment Program (MFIP). Colorado “Already with E&T” counties had mandatory E&T prior to ABAWD time limit reinstatement. Colorado “Starting E&T” counties simultaneously introduced mandatory E&T and the ABAWD time limit.

Meeting the ABAWD Work Requirement

Figure 16 shows the number of ABAWDs in the first and eighth month of time limit reinstatement, the number meeting the ABAWD work requirement, and the share meeting the ABAWD work requirement. We show results for the first month to illustrate the extent to which ABAWDs participate in SNAP and meet the work requirement prior to the point at which those not meeting the work requirement are removed from SNAP. We show results for the eighth month after time limit reinstatement because this reflects a point by which most of the drop in ABAWD participation has occurred, and so may better reflect the work level of ABAWD participants after the initial departure of those not meeting the work requirement. Due to data limitations, we do not present results for Colorado, Maryland, and Missouri.

The results show the change in the size and characteristics of each State's ABAWD caseload between the first and eighth month of time limit reinstatement and are independent snapshots of the two months. A participant may be present in the first month only, the eighth month only, or in both months. A participant's ABAWD status and whether the participant meets the work requirement may also differ between the two months. This differs from the impact analysis (presented later) that selects a cohort of ABAWDs who were participating in SNAP just prior to time limit reinstatement and estimates the impact of time limit reinstatement on their SNAP participation and employment over the following year.

FIGURE 16

**Number of ABAWDs and Number and Share Meeting the ABAWD Work Requirement
By State in the First and Eighth Month of Time Limit Reinstatement**

	Number of ABAWDs	Number Meeting Work Requirement	Share Meeting Work Requirement	Participants who would be ABAWDs but Work 30+ Hours
Alabama				
First Month	58,679	3,194	5%	6,454
Eighth Month	23,201	6,951	30%	5,277
Minnesota				
First Month	35,883	1,865	5%	6,300
Eighth Month	13,864	2,547	18%	5,239
Oregon				
First Month	13,019	950	7%	3,553
Eighth Month	3,139	854	27%	3,186
Pennsylvania				
First Month	21,011	2,517	12%	8,216
Eighth Month	13,438	3,574	27%	7,379
Tennessee				
First Month	17,940	1,194	7%	2,927
Eighth Month	6,290	1,455	23%	2,468
Vermont				
First Month	7,448	485	7%	913
Eighth Month	2,709	961	35%	727

Source: State SNAP administrative data for the first month and eighth month of ABAWD time limit reinstatement: November 2013 and June 2014 for Minnesota and Vermont; March 2016 and October 2016 for Pennsylvania; January 2016 and August 2016 for the remaining States.

Figure 16 shows that the number of ABAWDs fell substantially in each State between the first and eighth month of time limit reinstatement, reflecting the trends shown previously for figure 15, but with results narrowed to reflect ABAWDs subject to the time limit. People who are pregnant or identified by the State as “unfit for work” are excluded from the ABAWD estimates as well those living in areas covered by a waiver. Oregon had the largest percentage drop in ABAWD participation, with the number of ABAWDs falling by 76 percent from 13,019 in the first month of time limit reinstatement to 3,139 in the eighth month. Pennsylvania had the smallest reduction in relative terms, with the number of ABAWDs falling by 36 percent from 21,011 in the first month of time limit reinstatement to 13,438 in the eighth month. In all other States shown, the number of participating ABAWDs fell by 60 to 65 percent.

The number of ABAWDs meeting the work requirement increased between the first and eighth month of time limit reinstatement, in all States except Oregon. The biggest difference in both absolute and relative terms is in Alabama, where the number of ABAWDs meeting the work requirement more

than doubled from 3,200 in the first month of time limit to 7,000 in the eighth month of time limit reinstatement.

The share of ABAWDs meeting the work requirement is substantially higher in the eighth month of time limit reinstatement than in the first month, ranging from 18 to 35 percent in the eighth month and 5 to 12 percent in the first month. The higher share in the eighth month is partly due to the increase in the number of ABAWDs meeting the work requirement, but mainly due to the overall decline in the number of ABAWDs subject to the time limit.

















Additional Methods for Maintaining Eligibility

Figure 17 summarizes the ways in which ABAWDs maintain eligibility in the eighth month of time limit reinstatement, for States where data are available. We focus on the eighth month because the reason for eligibility in the first month is not well documented in the data that we received from most States and because the eighth month represents a point when participation has stabilized in most States following the initial departure of ABAWDs from SNAP. The methods for maintaining eligibility include meeting the work requirement, being in the first month of participation and receiving a partial month's benefit, being covered by a discretionary exemption, or using time-limited benefits.

If we are unable to identify the reason for eligibility based on the data provided by the State, we classify the ABAWD as having an "Undetermined Reason" for eligibility. This could arise from our erroneous classification of some participants as ABAWDs subject to the time limit or our inability to ascertain the reason for their eligibility from the administrative data provided to the study and should not be interpreted as reflecting the accuracy of the State's eligibility procedures. We are unable to identify participants receiving a first month of partial benefits in Minnesota and Pennsylvania. If they do not meet one of the other criteria, they are included among those with undetermined reason for eligibility.

FIGURE 17

**SNAP ABAWDs: Method for Maintaining Eligibility
By State in the Eighth Month of Time Limit Reinstatement**

	Meeting Work Requirement	Partial Benefit Month	Discretionary Exemption	Using Time-Limited Benefits	Undetermined Reason
Minnesota					
Share with this Method	18% 		0%	68% 	13% 
Number with this Method	2,547		0	9,485	1,831
Pennsylvania					
Share with this Method	27% 		29% 	34% 	10% 
Number with this Method	3,574		3,933	4,544	1,387
Tennessee					
Share with this Method	23% 	10% 	4% 	40% 	23% 
Number with this Method	1,455	606	231	2,531	1,467
Vermont					
Share with this Method	35% 	9% 	0%	41% 	14% 
Number with this Method	961	239	0	1,123	386

Source: State SNAP administrative data for the eighth month of ABAWD time limit reinstatement: June 2014 for Minnesota and Vermont; October 2016 for Pennsylvania; August 2016 for Tennessee.

We find that ABAWDs participating in the eighth month of time limit reinstatement are primarily eligible through use of a time-limited benefit month, with the share ranging from 34 percent in Pennsylvania to 68 percent in Minnesota. Twenty-nine percent of Pennsylvania’s ABAWDs are covered by discretionary exemptions. Tennessee also used discretionary exemptions in the first year of time limit reinstatement, with four percent of ABAWDs covered through discretionary exemptions in the eighth month of time limit reinstatement.⁴¹ Between 9 and 10 percent of ABAWDs are eligible due to being in a partial benefit month, in the two States where data are available.

















Method for Meeting the ABAWD Work Requirement

Over three quarters of ABAWDs who meet the work requirement in the eighth month of time limit reinstatement do so by working 20 or more hours per week (figure 18). Of ABAWDs who meet the work requirement, 23 percent do so through volunteer or unpaid work in Alabama and 11 percent do so through workfare in Vermont. Eighteen percent of ABAWDs who meet the work requirement in Oregon do so through work programs or E&T programs, as do 7 percent in Pennsylvania and Tennessee, 5 percent in Minnesota, and 2 percent in Vermont.

⁴¹ Vermont used discretionary exemptions to delay the start date for time limit reinstatement.

FIGURE 18

**Method for Meeting the ABAWD Work Requirement
By State in the Eighth Month of Time Limit Reinstatement**

	Works 20+ Hours/Week	Work Program or E&T	Workfare	Volunteer or Unpaid	Combination of Work and Work Program
Alabama					
Share with this Method	77% 			23% 	
Number with this Method	5,358			1,593	
Minnesota					
Share with this Method	94% 	5% 	1% 		
Number with this Method	2,398	115	34		
Oregon					
Share with this Method	78% 	18% 	1% 		3% 
Number with this Method	664	155	10		25
Pennsylvania					
Share with this Method	92% 	7% 	1%		
Number with this Method	3,301	252	21		
Tennessee					
Share with this Method	93% 	7% 		0.2%	
Number with this Method	1,348	104		3	
Vermont					
Share with this Method	87% 	2% 	11% 		
Number with this Method	837	17	108		

Source: State SNAP administrative data for the eighth month of ABAWD time limit reinstatement: June 2014 for Minnesota and Vermont; October 2016 for Pennsylvania; August 2016 for the remaining States.

Share Meeting the ABAWD Work Requirement by Characteristic































Figure 19 shows the share and number of ABAWDs meeting the work requirement, by gender and age, in the eighth month of time limit reinstatement. Women are more likely to meet the work requirement than men in all study States. For example, in Alabama, 25 percent of men and 35 percent of women meet the work requirement. The rates for men and women are closest in Tennessee, where 21 percent of men and 25 percent of women meet the work requirement.

Older ABAWDs (ages 40 to 49) are somewhat more likely to meet the work requirement than younger ABAWDs in all States. The largest difference by age group is in Vermont, where 33 percent of participants ages 18 to 29 and 34 percent of participants ages 30 to 39 meet the work requirement, compared with 42 percent of those ages 40 to 49.

FIGURE 19

SNAP Participants Subject to the ABAWD Time Limit: Share and Number Meeting the ABAWD Work Requirement by Sex and Age

By State in the Eighth Month of Time Limit Reinstatement

	Male	Female	Age 18-29	Age 30-39	Age 40-49
Alabama					
Share Meeting Work Requirement	25% 	35% 	28% 	30% 	32% 
Number Meeting Work Requirement	2,862	4,084	2,689	1,873	2,389
Minnesota					
Share Meeting Work Requirement	14% 	24% 	19% 	16% 	20% 
Number Meeting Work Requirement	1,225	1,322	1,386	558	603
Oregon					
Share Meeting Work Requirement	22% 	33% 	24% 	31% 	32% 
Number Meeting Work Requirement	375	479	408	269	177
Pennsylvania					
Share Meeting Work Requirement	21% 	34% 	26% 	25% 	29% 
Number Meeting Work Requirement	1,747	1,827	1,596	928	1,050
Tennessee					
Share Meeting Work Requirement	21% 	25% 	21% 	23% 	26% 
Number Meeting Work Requirement	752	703	537	418	500
Vermont					
Share Meeting Work Requirement	29% 	43% 	33% 	34% 	42% 
Number Meeting Work Requirement	430	531	446	236	279







Source: State SNAP administrative data for the eighth month of ABAWD time limit reinstatement: June 2014 for Minnesota and Vermont; October 2016 for Pennsylvania; August 2016 for the remaining States.

Homeless people subject to the time limit are much less likely to meet the work requirement than participants who are not homeless (figure 20). Nine percent of homeless ABAWDs meet the work requirement in Minnesota, compared with 21 percent of participants who are not homeless. Ten percent of homeless participants meet the work requirement in Oregon and Tennessee, compared with 29 percent and 24 percent of nonhomeless people respectively.

FIGURE 20

SNAP Participants Subject to the ABAWD Time Limit: Share and Number Meeting the ABAWD Work Requirement by Homelessness Status

By State in the Eighth Month of Time Limit Reinstatement

	Homeless	Not Homeless
Minnesota		
Share Meeting Work Requirement	9% 	21% 
Number Meeting Work Requirement	330	2,217
Oregon		
Share Meeting Work Requirement	10% 	29% 
Number Meeting Work Requirement	25	829
Tennessee		
Share Meeting Work Requirement	10% 	24% 
Number Meeting Work Requirement	33	1,422













Source: State SNAP administrative data for the eighth month of ABAWD time limit reinstatement: June 2014 for Minnesota; August 2016 for Oregon and Tennessee.

The share of people meeting the work requirement rises with level of educational attainment in the three States for which data are available (figure 21). In Minnesota, 14 percent of people without a high school degree meet the work requirement in the eighth month of time limit reinstatement, compared with 19 percent of those with a high school degree (but no more) and 24 percent who have attended college. In Pennsylvania, 18 percent of people without a high school degree meet the work requirement, compared with 28 percent of those with at least a high school degree but less than an associate degree, 34 percent of those with at least two years of college, and 37 percent of those with at least four years of college. In Vermont, 28 percent of those without a high school degree meet the work requirement, compared with 36 percent of those with a high school degree (but no more), 51 percent with some college, and 60 percent with four or more years of college.

FIGURE 21

SNAP Participants Subject to the ABAWD Time Limit: Share and Number Meeting the ABAWD Work Requirement by Educational Attainment

By State in the Eighth Month of Time Limit Reinstatement

	No HS Degree	HS Degree	1+ Years of College	2+ Years of College	4+ Years of College
Minnesota					
Share Meeting Work Requirement	14% 	19% 	24% 		
Number Meeting Work Requirement	523	1,520	365		
Pennsylvania					
Share Meeting Work Requirement	18% 	28% 		34% 	37% 
Number Meeting Work Requirement	411	2,224		447	184
Vermont					
Share Meeting Work Requirement	28% 	36% 	51% 	51% 	60% 
Number Meeting Work Requirement	188	471	206	167	120

Source: State SNAP administrative data for the eighth month of ABAWD time limit reinstatement: June 2014 for Minnesota and Vermont; October 2016 for Pennsylvania.

Note: In Pennsylvania, people with some college but less than an associate degree are categorized as having a high school degree.

The share of ABAWDs who meet the work requirement in the eighth month of time limit reinstatement is highest in the fringe areas of major metropolitan areas in Oregon, in small metropolitan areas in Minnesota and Pennsylvania, and in “noncore areas” (typically rural) in Alabama, Tennessee, and Vermont. Differences across geographic areas vary by no more than 10 percentage points within most States, but differ markedly in Tennessee, where the share meeting the work requirement ranges from 12 percent in the center of large metropolitan areas to 46 percent in noncore areas. This variation across States suggests that geography alone may be insufficient to draw conclusions about the likelihood that ABAWDs meet work requirements.

FIGURE 22

SNAP Participants Subject to the ABAWD Time Limit: Share and Number Meeting the ABAWD Work Requirement by Geographic Area

By State in the Eighth Month of Time Limit Reinstatement

	Noncore	Micropolitan	Small Metro	Medium Metro	Large Fringe Metro	Large Central Metro
Alabama						
Share Meeting Work Requirement	37%	27%	31%	30%	30%	26%
Number Meeting Work Requirement	1,057	582	1,654	2,202	459	997
Minnesota						
Share Meeting Work Requirement	22%	22%	24%	21%	20%	15%
Number Meeting Work Requirement	294	312	385	177	374	1,005
Oregon						
Share Meeting Work Requirement				22%	29%	23%
Number Meeting Work Requirement				145	673	36
Pennsylvania						
Share Meeting Work Requirement	25%	31%	33%	23%	26%	28%
Number Meeting Work Requirement	14	71	411	786	1,108	1,184
Tennessee						
Share Meeting Work Requirement	46%			30%	28%	12%
Number Meeting Work Requirement	72			511	599	273
Vermont						
Share Meeting Work Requirement	41%	35%	33%			
Number Meeting Work Requirement	274	392	295			

Source: State SNAP administrative data for the eighth month of ABAWD time limit reinstatement: June 2014 for Minnesota and Vermont; October 2016 for Pennsylvania; August 2016 for the remaining States.

Entry, Exit, and Churn among People Potentially Subject to the ABAWD Time Limit

The number of people receiving SNAP in a given month is determined by the number who enter, exit, and remain on SNAP in the month. Some SNAP participants “churn,” leaving and returning to SNAP with no more than four months without benefits.⁴²

We define “entry” as entering SNAP for the first time or after more than 4 months without benefits. We define “exit” as leaving SNAP and not returning within five months. “Churners” are participants who enter a churn spell. We refer to them as “re-entrants” when they return to SNAP. Participants who reach the time limit and return to SNAP after a churn spell may have become eligible

⁴² We base this definition on a previous report for FNS: Mills, Gregory, Tracy Vericker, Heather Koball, Kye Lippold, Laura Wheaton, Sam Elkin. *Understanding the Rates, Causes, and Costs of Churning in the Supplemental Nutrition Assistance Program (SNAP) - Final Report*. Prepared by Urban Institute for the US Department of Agriculture, Food and Nutrition Service, September 2014.

because they now meet the work requirement, have been identified as mentally or physically unfit for work, or have transitioned out of ABAWD status for some other reason.

Figure 23 shows entry, exit, and churn for people potentially subject to the ABAWD time limit who live in areas in which the time limit was in effect throughout the first 18 months of time limit reinstatement. We focus on areas in which the time limit was introduced and remained in effect to provide a consistent picture of patterns of entry, exit, and churn both before and after time limit reinstatement.

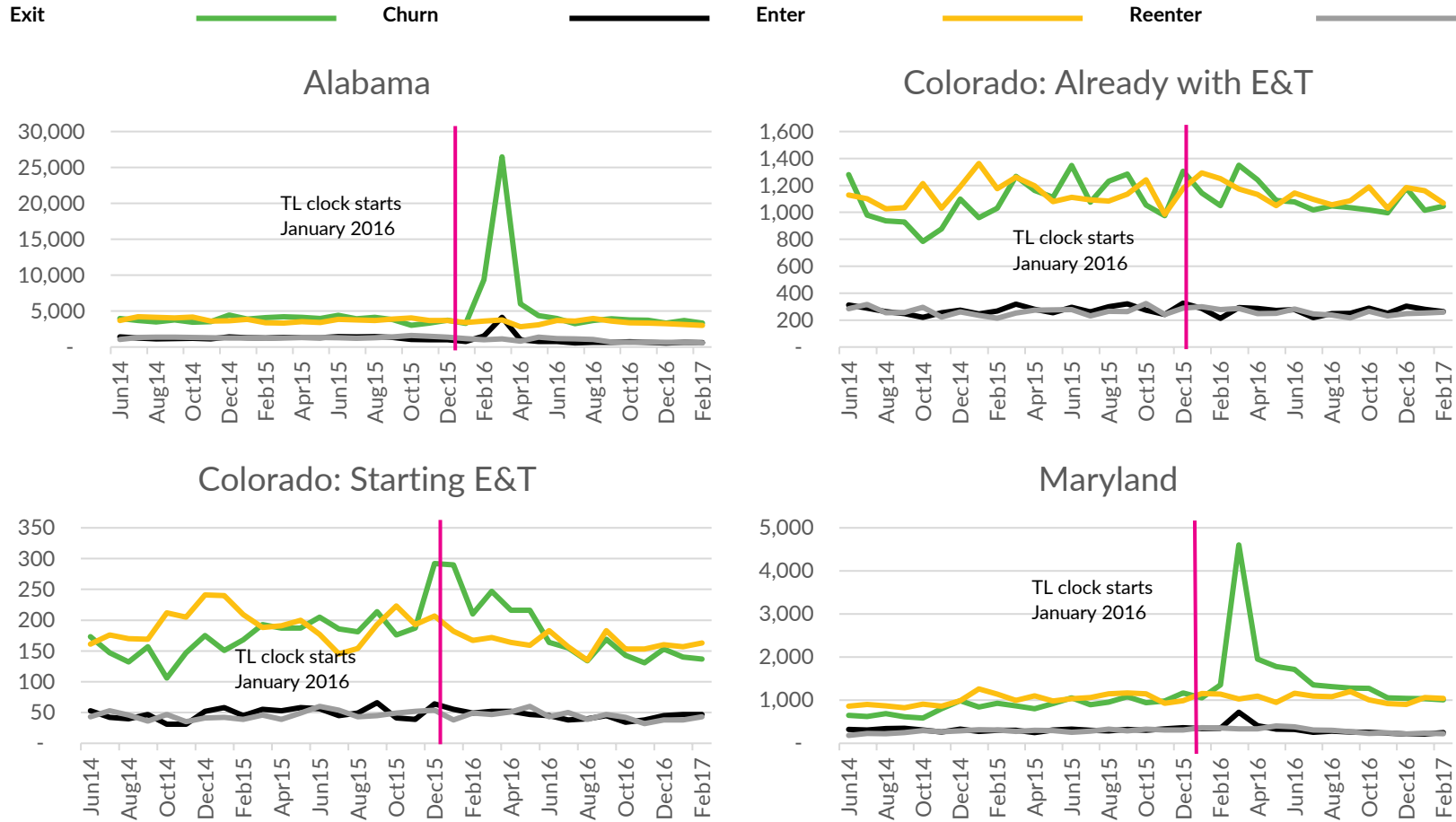
In all study states but Colorado, rates of entry, exit, and churn were generally stable prior to time limit reinstatement. Exits and churn rose to a peak in the fourth month of time limit reinstatement, and then returned to their prior levels, with a slight decline in some States toward the end of the study period. Although there was some variation in the rapidity with which exits peaked and then returned to levels prior to ABAWD time limit reinstatement, the States generally returned to their pre-reinstatement levels by the seventh month of time limit reinstatement.

For example, in Alabama, between 3,300 and 4,200 people potentially subject to the time limit entered SNAP each month in the 18 months prior to time limit reinstatement (yellow line), between 3,000 and 4,400 exited SNAP each month (green line), between 1,000 and 1,500 entered a churn spell (black line), and between 1,000 and 1,600 re-entered SNAP after a churn spell (gray line). Exits spiked in the month in which ABAWDs could first lose eligibility due to the time limit and the number of people entering a churn spell also increased. Among Alabamans potentially subject to the time limit who were participating in SNAP in March 2016 (three months after ABAWD time limit reinstatement), approximately 26,000 exited SNAP in the next month and 4,000 entered a churn spell. By the sixth month after time limit reinstatement, the number of people entering, exiting, and churning had returned to levels like those in the period prior to time limit reinstatement.

It is difficult to discern clear trends in rates of entry, exit, and churn in Colorado, though counties that simultaneously implemented mandatory E&T and the time limit show higher rates of SNAP exit beginning one month prior to time limit reinstatement and continuing through the fourth month of time limit reinstatement. This may suggest that a combination of behavioral effect (people choosing not to recertify due to the new requirements) and E&T sanctions increased SNAP exits just prior to and in the first few months of time limit reinstatement.

FIGURE 23

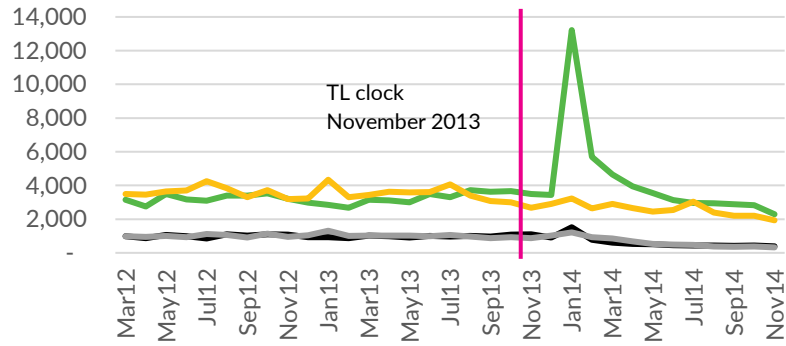
Exit, Entry, Churn, and Re-Entry from Churn among People Potentially Subject to the ABAWD Time Limit in Areas Subject to the Time Limit in the Eighteen Months Following Time Limit Reinstatement. By State and Colorado County Group



Exit

Churn

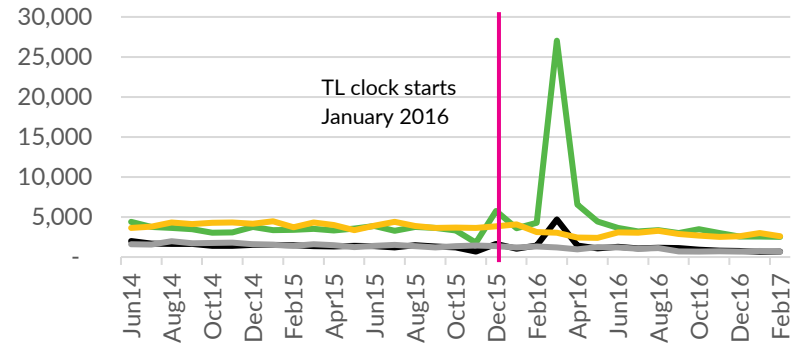
Minnesota



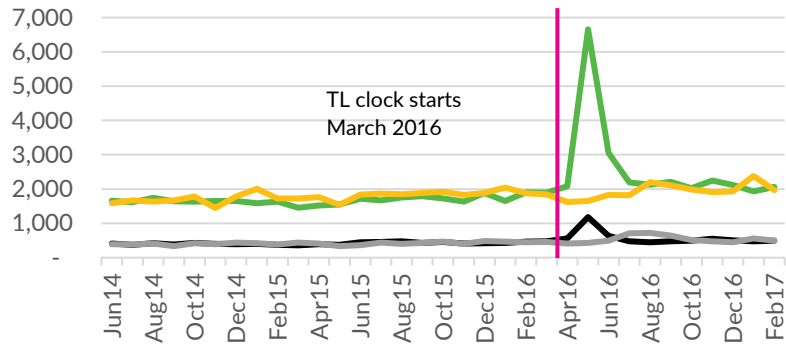
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Reenter

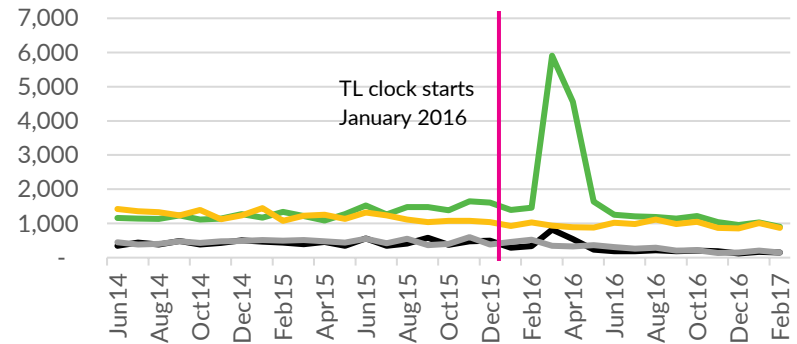
Missouri

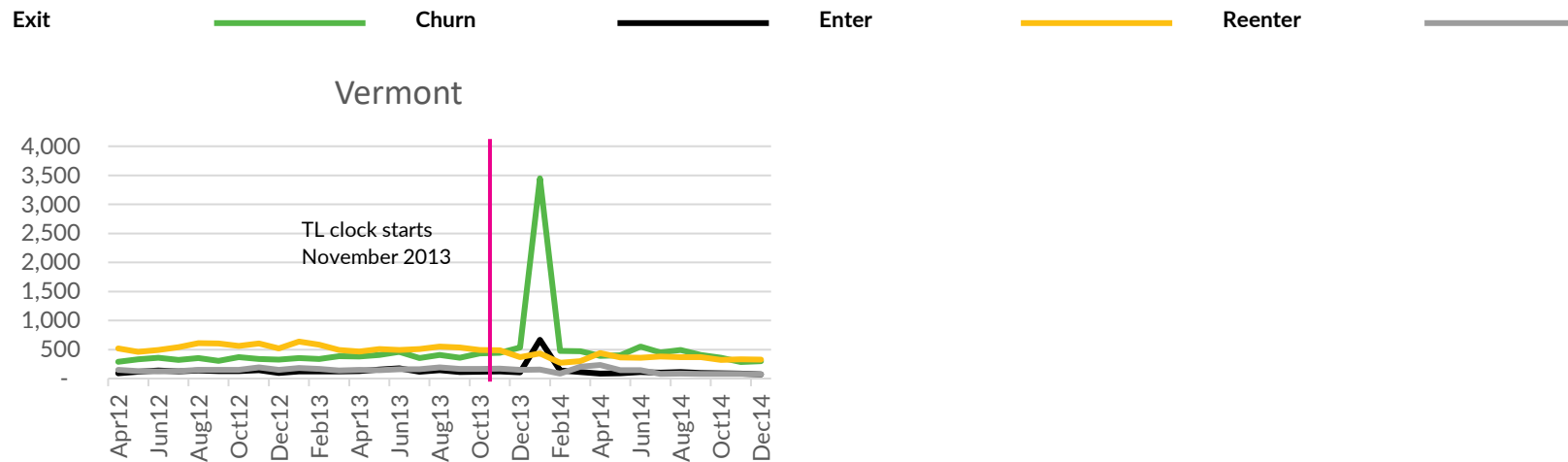


Pennsylvania



Tennessee





Source: Authors' tabulations of Alabama, Colorado, Maryland, Minnesota, Missouri, Pennsylvania, Tennessee, and Vermont SNAP Administrative data.

Notes: A potential ABAWD is classified as having exited SNAP if they leave SNAP and were without benefits for over four months; if they return before that they are classified as churning. A potential ABAWD is classified as having entered SNAP if they have entered SNAP for the first time or are returning after more than four months without benefits. Those who return with no more than four months off SNAP are classified as re-entering after a churn spell. Colorado "Already with E&T" counties had mandatory E&T prior to ABAWD time limit reinstatement. Colorado "Starting E&T" counties simultaneously introduced mandatory E&T and the ABAWD time limit.

Spell Length of Participants Exiting SNAP

ABAWDs subject to the time limit are likely to have shorter spells of SNAP participation after the initial departure from SNAP of those who do not meet the ABAWD work requirement in the first few months of time limit reinstatement. Shorter spells are expected, because participants who do not meet the ABAWD work requirement and are not covered by an exemption can participate for a maximum of four months (a first partial benefit month plus three time-limited months) before losing eligibility.

The data confirm that participants subject to the time limit who exited SNAP in the month after the eighth or twelfth month of time limit reinstatement had shorter spells of SNAP participation than those who exited in the month after the first or third month of time limit reinstatement, except for participants in Colorado counties that already had mandatory E&T when the time limit was reinstated (figure 24).

For example, in Minnesota, 77 percent of participants subject to the time limit who were on SNAP in the first month of time limit reinstatement and did not receive SNAP in the next month had received SNAP for more than four months at the time of their departure, as had 86 percent of those who exited SNAP following the third month of time limit reinstatement. In contrast, just 39 percent of those exiting after the eighth month of time limit reinstatement and 34 percent of those exiting after the twelfth month had participated for more than four months.

We show the spell length of departures after the first month, because the administrative data do not permit us to reliably identify ABAWDs subject to the time limit prior to the first month of time limit reinstatement. Departures after the first month are less likely than later months to be influenced by the ABAWD time limit. They provide the best available picture of what spell length might have looked like for ABAWDs that left SNAP prior to time limit reinstatement. The participants who exit SNAP after the third month of time limit reinstatement include ABAWDs who would have left in that month even in the absence of the time limit, plus those who left because of the time limit. We show spell length for ABAWDs leaving SNAP after the eighth and twelfth months to provide insight into spell length of ABAWDs after the initial departure of those who were on SNAP when the time limit was reinstated and subsequently lost eligibility due to the time limit.

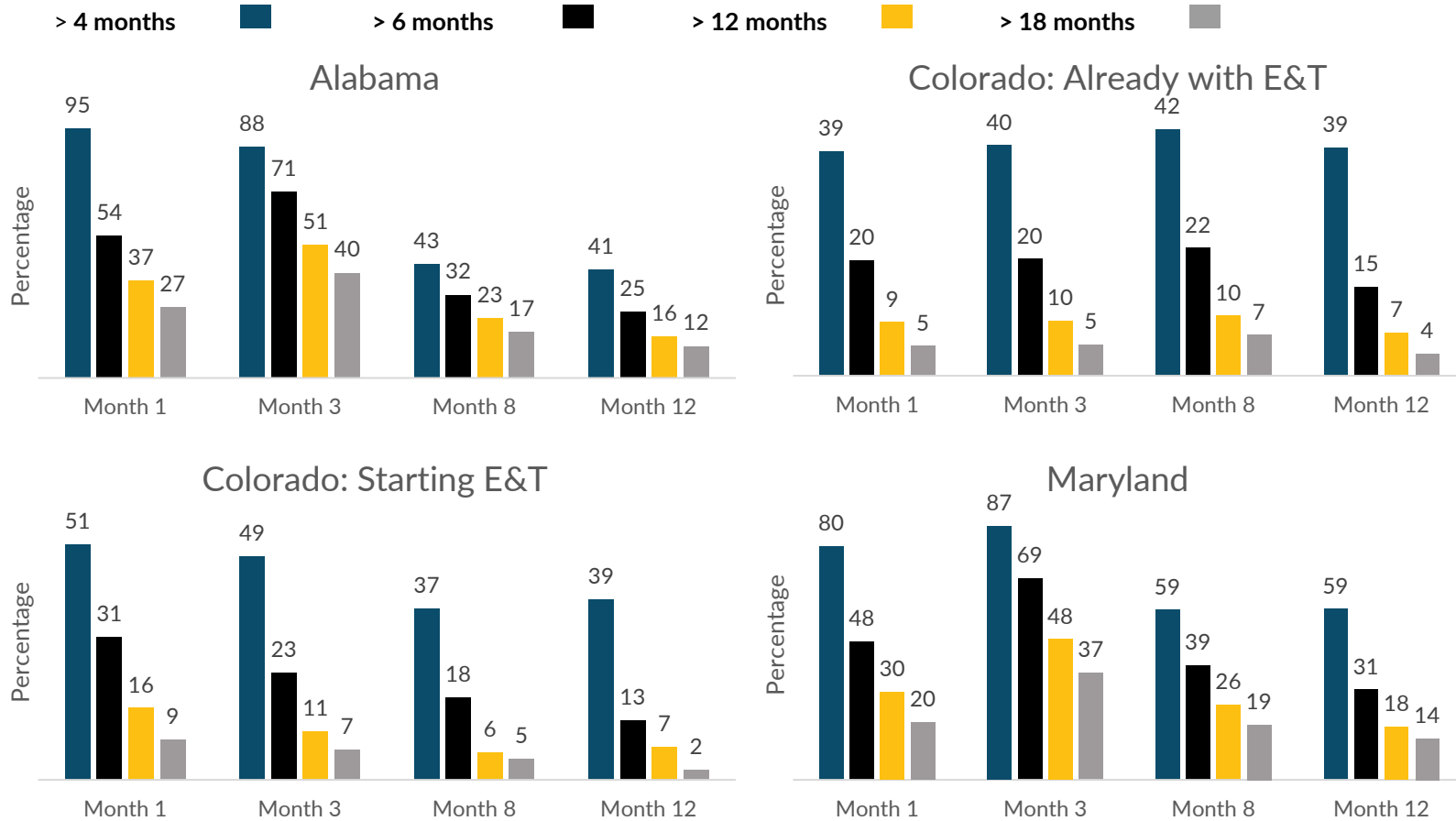
Spell lengths of six months or more are most prevalent for exits after the third month of time limit reinstatement in all States but Colorado. ABAWDs exiting after the third month tend to have longer spells than those who exit later, because the time limit makes it more difficult for the later groups to

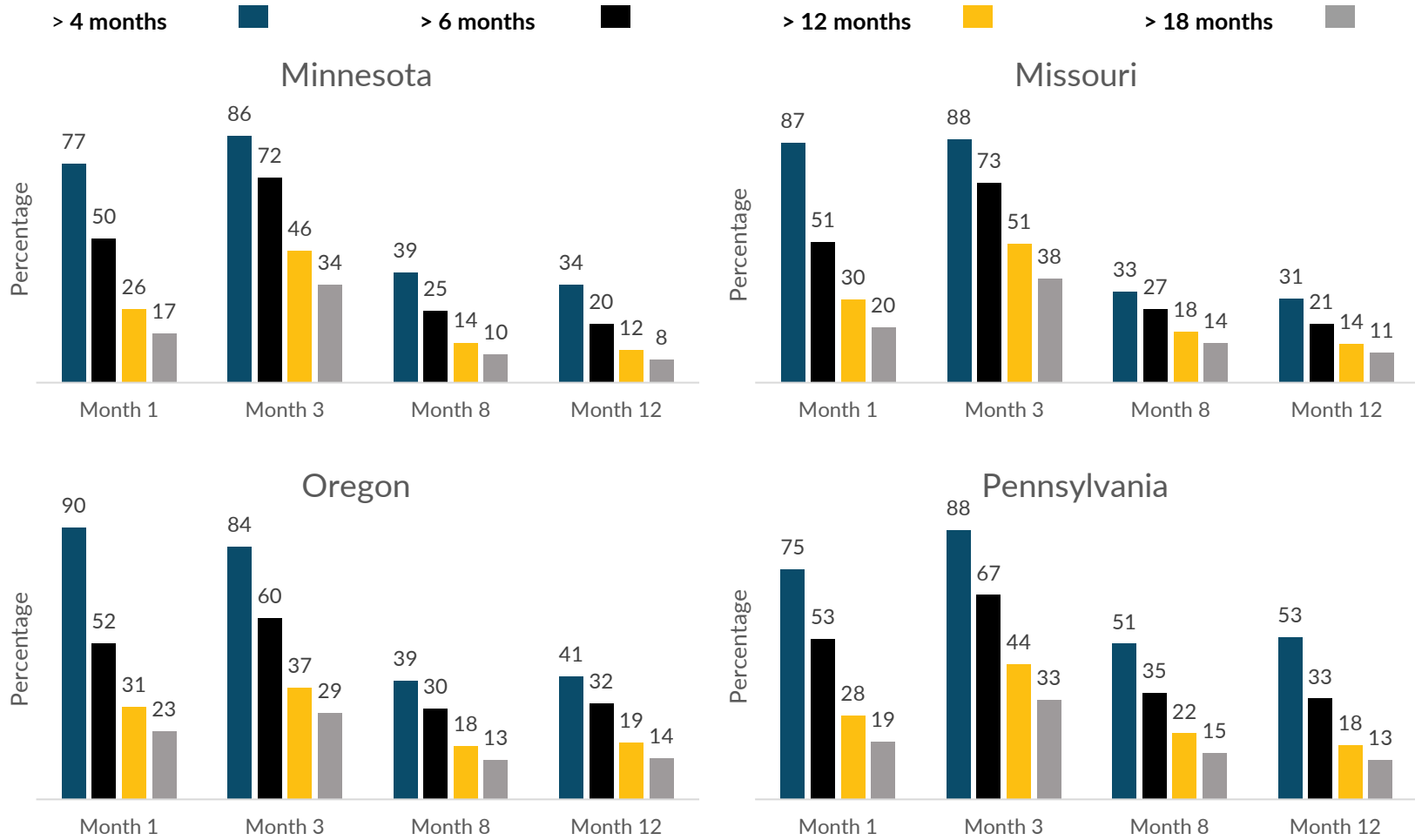
acquire months of participation. A possible explanation for longer spell length for ABAWDs exiting in the third month relative to the first month is that the first month exits are made up of participants reaching the “natural” end of their spell of participation. As such, the ABAWDs exiting in the first month may include a higher share of participants who turned to SNAP during a short spell of unemployment or lower earnings and are now re-employed. In contrast, the ABAWDs exiting after the third month likely include a higher share of longer-term SNAP recipients, with less connection to the work force.

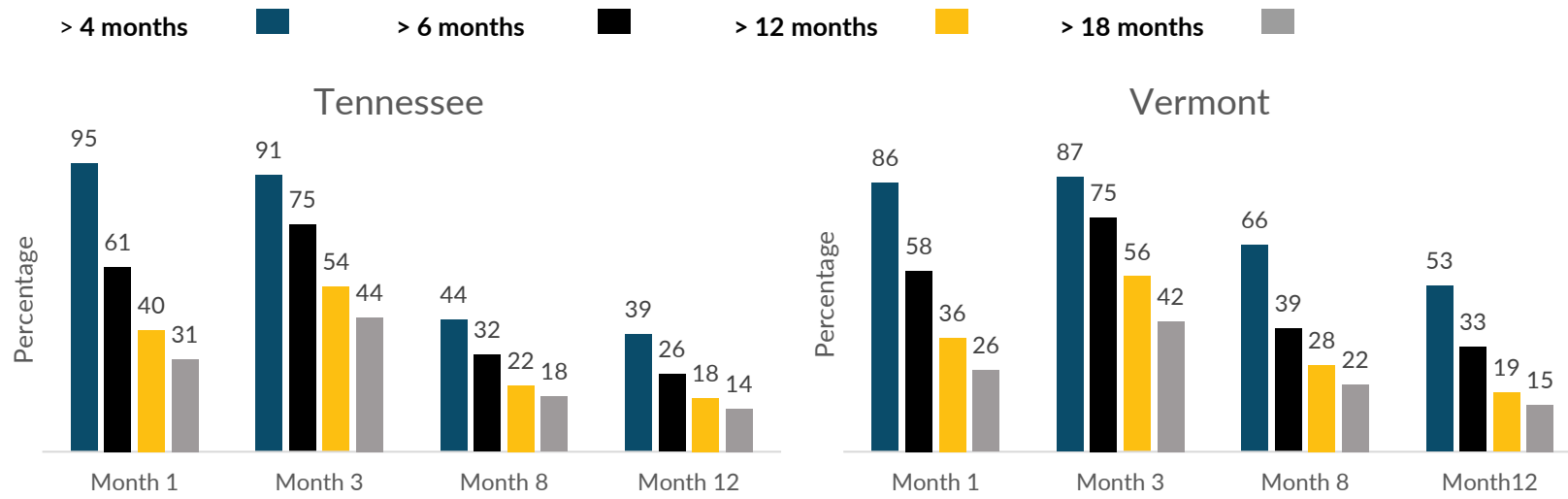
There is little difference in spell length for ABAWDs exiting SNAP in the first, third, eighth, and twelfth months of time limit reinstatement in Colorado counties that already had mandatory E&T when the time limit was reinstated. This is consistent with the fact that the number of participants remained relatively stable during this period. Spell length was shorter in Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit than in other States in the first and third month of time limit reinstatement. Fifty-one percent of ABAWDs exiting after the first month had participated for more than four months as had 49 percent of those exiting after the third month.

FIGURE 24

Spell Length of ABAWDs Exiting SNAP in the Next Month in Areas that were Time-Limited in the Eighteen Months Following Time Limit Reinstatement, by State and Colorado County Group







Source: Authors' tabulations of Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont SNAP Administrative data.

Note: The time limit went into effect on November 1, 2013 in Minnesota and Vermont, March 1, 2016 in Pennsylvania, and January 1, 2016 in all other states. Colorado "Already with E&T" counties had mandatory E&T prior to ABAWD time limit reinstatement. Colorado "Starting E&T" counties simultaneously introduced mandatory E&T and the ABAWD time limit.

Impact of the ABAWD Time Limit on SNAP Participation and Employment

A central objective of this study is to estimate the impact of reinstatement of the ABAWD time limit on SNAP participation and employment. For all nine study States, we use a quasi-experimental research design to estimate the impact of the reinstatement of the ABAWD time limit on ABAWD SNAP participation, and for three study States that provided quarterly earnings data—Colorado, Missouri, and Pennsylvania—we assess the impact on employment. Our primary analytic approach compares outcomes for a cohort of ABAWDs observed during the time limit period to a comparison cohort of ABAWDs in the same areas of each State before the time limit went into effect. We examine SNAP and employment outcomes over the four quarters after the time limit went into effect. We provide two sets of estimates for Colorado—one for a group of counties that had mandatory Employment and Training (E&T) at the time the ABAWD time limit was reinstated, and one for a group of counties that introduced mandatory E&T at the same time as the ABAWD time limit. These latter estimates reflect the joint impact of introducing mandatory E&T and the ABAWD time limit. We provide estimates for a broadly defined and narrowly defined group of ABAWDs in Oregon to address a key data limitation.

We find that reinstatement of the time limit reduces SNAP participation. All States show a statistically significant reduction in SNAP participation in the time limit cohort relative to the comparison cohort in the fourth month of time limit reinstatement. Statistically significant reductions are present in the twelfth month in all States except in one group of Colorado counties and in the narrowly defined ABAWD group in Oregon. It is possible that preexisting mandatory E&T requirements in this group of Colorado counties reduced the effect of the time limit. Both mandatory E&T and data limitations may factor into the Oregon result. We discuss the possible effects of mandatory E&T requirements on the impact of reinstatement of the ABAWD time limit, though our methods do not permit firm conclusions.

Our primary analysis finds that the ABAWD time limit has a small negative impact on employment, while our sensitivity analysis finds no statistically significant impact of the ABAWD time limit on employment among older participants (ages 47 to 49) in Colorado and Pennsylvania, and a small positive effect in Missouri. Taken together, the results from the main analysis and sensitivity analysis provide no evidence of improved employment due to reinstatement of the time limit in Colorado or Pennsylvania, whereas the employment effects for Missouri are inconclusive. We find that the main effect of the reinstatement of the time limit is to reduce SNAP participation among ABAWDs, regardless of whether they have earnings. As a result, average annual income from earnings and SNAP falls, with reductions

ranging from \$617 in Pennsylvania to \$1,432 in Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit.

We begin by describing the data and methodology used for the impact analysis. We then examine the impact of the reinstatement of the ABAWD time limit on monthly SNAP participation and the amount of annual SNAP benefits. Next, we examine the impacts on quarterly employment and annual earnings. Finally, we examine the impact of the reinstatement of the time limit on SNAP and employment outcomes together. We conclude by presenting results from the sensitivity analysis and discussing possible limitations of the study design.

Data

We analyze SNAP outcomes using the SNAP administrative data provided by the nine study States. The SNAP data provide information on monthly SNAP participation and benefit amounts. We count a person as participating in SNAP in a given month if they are an eligible member of a SNAP household with a positive benefit in that month. We calculate SNAP benefits as the participant's share of the household's benefit. For example, if a household contains three eligible participants, each will have a SNAP benefit equal to one third of the household's total benefit.⁴³

We measure employment outcomes for three study States using quarterly earnings records from the Unemployment Insurance (UI) system, which are linked with the SNAP data. The study States that provided UI quarterly wage data are Colorado, Missouri, and Pennsylvania.⁴⁴ These States provided a linking identifier that allowed the monthly SNAP caseload file to be matched to the quarterly earnings file. The earnings data provide quarterly earnings for SNAP participants before, during, and after their time on SNAP. The quarterly earnings file includes everyone in the State with covered earnings who received SNAP during the study period.⁴⁵ The earnings are those of the individual rather than the total for the individual's household.

We define individuals with earnings above \$100 in a quarter as “employed” and individuals with earnings less than or equal to \$100 in a quarter as “not employed”. Individuals without earnings are

⁴³ We report SNAP benefits in nominal dollars. The maximum monthly SNAP benefit remained the same throughout the period covered by the impact analysis in all study States except Minnesota and Vermont.

⁴⁴ We invited five States to provide quarterly UI earnings records to link with SNAP administrative case records; three States were able to participate in this phase of the study.

⁴⁵ Most earnings are covered; however, there are types of employment that are not covered by the UI system, including, federal employment, military, postal service, railroad, self-employment, some agricultural employment, and some employment where earnings are primarily based on commission. The data do not capture earnings from jobs in other States.

included in the analyses as having zero earnings. Earnings considered outliers – above the 99th percentile for all earnings in each quarter – are top-coded.⁴⁶ We report earnings in constant (inflation-adjusted) dollars, with 2017 Q1 as the base quarter.⁴⁷

Methodology

We examine outcomes for “participants potentially subject to the time limit” rather than for the more specific group of “ABAWDs subject to the time limit.” We use this definition because we can only reliably identify ABAWDs subject to the time limit in areas where the time limit is in effect, because it is only then that the State data report whether a person is pregnant or unfit for work and is therefore exempt from the ABAWD time limit. This allows a consistent definition in the waiver and time limit periods. For ease of presentation, we use the term “ABAWD” when discussing the methods and results.

We restrict the analysis to areas of each State that reinstated the time limit and kept the time limit in place for the remainder of the study period. Minnesota and Vermont reinstated the ABAWD time limit for nearly all areas in November 2013. Pennsylvania reinstated the ABAWD time limit in parts of the State in March 2016. Colorado, the only “pledge” State in the study, chose to apply the time limit in several counties prior to 2016. We focus on two groups of Colorado counties that reinstated the time limit in January 2016. The remaining study States reinstated the time limit in January 2016. All study States except Missouri continued to have some waived areas in the first year that the time limit was reinstated.

We compare SNAP and employment outcomes for two cohorts. The first cohort is a “waiver” or “comparison” cohort consisting of ABAWDs participating in SNAP approximately one year and three months prior to time limit reinstatement. We observe SNAP and employment outcomes for this cohort for the four quarters prior to time limit reinstatement. Outcomes for this cohort represent a period entirely under waiver. The second cohort is a “time limit” or “treatment” cohort consisting of ABAWDs participating in SNAP three months prior to time limit reinstatement. We observe SNAP and employment outcomes for this cohort for the four quarters after time limit reinstatement. This design allows us to compare quarterly results for the time limit cohort to the corresponding quarter for the comparison cohort in the prior year. It is possible for the same individual to be in both cohorts. Figure 25 displays the two cohorts and the observation windows used to estimate the impact of time limit reinstatement on ABAWD

⁴⁶ We top coded earnings at the 99th percentile in each quarter, which was approximately \$17,621 to \$20,413 in each quarter in Colorado (in 2017 Q1 dollars); approximately \$14,323 to \$17,203 in each quarter in Missouri (in 2017 Q1 dollars); and, approximately \$16,432 to \$18,913 in each quarter in Pennsylvania (in 2017 Q1 dollars).

⁴⁷ We used the monthly Consumer Price Index (CPI-U) for all items (U.S. city average, not seasonally adjusted) to adjust quarterly earnings into constant dollars. We used the average of the CPI for January through March 2017 as the base, as that was the most recent quarter of observed earnings.

SNAP participation and employment, using the example of a State that reinstated the time limit on January 1, 2016. Both the comparison cohort and time limit cohort exclude ABAWDs ages 48 and 49 who may “age out” of ABAWD status during the observation window.

FIGURE 25

Cohorts and Observation Windows: Analysis of the Impact of ABAWD Time Limit Reinstatement

Calendar Year	2014			2015					2016																		
Calendar Quarter	Q4			Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4									
Month	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
<i>Comparison Cohort Observation Quarters</i>	Q0			Q1		Q2		Q3		Q4																	
<i>Time Limit Cohort Observation Quarters</i>											Q0		Q1		Q2		Q3		Q4								

Time Limit Countable Months Begin

Notes: Quarter zero (Q0) is the selection quarter. Quarters one through four (Q1-Q4) are the follow-up quarters. This example is for States that reinstated the ABAWD time limit in January 2016.

As previously noted, we analyze the impact of time limit reinstatement on ABAWD SNAP participation and employment in States/areas of States where the time limit was reinstated and remained in effect for the remaining months of the study period. Some States chose to use discretionary exemptions to cover entire counties or delay time limit reinstatement. We treat counties covered entirely by discretionary exemptions as “waived” and exclude them from the data for the impact analysis. Pennsylvania and Vermont used discretionary exemptions to delay time limit reinstatement. In these States, the month of reinstatement is the month in which the State began administering the ABAWD time limit.

We provide estimates for two sets of Colorado counties—one in which mandatory E&T was in effect prior to time limit reinstatement and one in which mandatory E&T and the ABAWD time limit were introduced at the same time. Thirty-seven percent of Colorado’s SNAP population resided in counties that already had mandatory E&T when the ABAWD time limit was reinstated in January 2016, and four percent were in counties that simultaneously implemented mandatory E&T and the ABAWD time limit.⁴⁸ The findings for the second group of counties reflect the joint impact of implementing mandatory E&T and the ABAWD time limit.

We present two sets of estimates for Oregon to attempt to compensate for a data limitation that prevents us from precisely identifying people potentially subject to the time limit when drawing the analysis cohorts. The Oregon data identify some participants as being exempt from mandatory E&T due to

⁴⁸ These percentages are based on the active SNAP caseload in Colorado in October 2015.

an “other barrier” in the months prior to time limit reinstatement. Following time limit reinstatement, some of these participants are reclassified as exempt from general work requirements due to disability, working full-time, care of an incapacitated person, receipt of UI benefits, or participation in an alcohol or drug treatment program, while others are classified as subject to general work requirements and the ABAWD time limit. In order to preserve consistency in the definition used to select people into the time limit and comparison cohorts, we cannot use this later information to reclassify participants as ABAWDs. Instead, we present two estimates for Oregon—one for a “broad group” that includes the participants with uncertain ABAWD status, and one for a “narrow group” that excludes these participants.⁴⁹ The estimates for both groups may understate the effect of the ABAWD time limit—the broad group because it includes some participants who are exempt from general work requirements (and so are not affected by the time limit) and the narrow group because it excludes ABAWDs identified as having “other barriers” to participation in mandatory E&T who may be less able to meet the ABAWD work requirement than participants without these barriers.

When constructing the analysis cohorts, we exclude ABAWDs ages 48 and 49 who may turn 50 before the end of the observation window. We also exclude ABAWDs with missing values of the model covariates.⁵⁰ Once ABAWDs in waived areas, those ages 48 to 49, and those with missing values on the model’s covariates are dropped, the proportion of the State’s ABAWD population in the analysis sample ranges from 6 to 7 percent in Tennessee⁵¹ and the group of Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit to 89 percent in Minnesota and Missouri (see Table 2). This wide range reflects the variation across the study States in the share of the State’s ABAWD population living in areas subject to the time limit (figure 5).

⁴⁹ In reviewing the data, we observed large reductions in the “other barrier” group in the months following time limit reinstatement, and substantial increases in the number of people classified as ABAWD, disabled, in an alcohol or drug treatment program, or caring for an incapacitated person. This appears to reflect a more precise classification of participants into each group once the ABAWD time limit was in place than was used for administering E&T.

⁵⁰ The number of observations with missing values on model covariates ranges from less than 0.1 percent in Alabama to 12.2 in Oregon.

⁵¹ We also exclude Knox and Davidson counties in Tennessee because they had mandatory E&T in the waiver period but not in the time limit period. Tennessee’s other time-limited counties did not operate mandatory E&T programs.

TABLE 2

Percentage of ABAWD and All SNAP Participants Included in the Analysis and Month of Selection into Cohort, by Study Cohort, State, and Colorado County Group

State	TLC, Percentage of ABAWD Participants	TLC, Percentage of All SNAP Participants	TLC, Month Selected	CC, Percentage of ABAWD Participants	CC, Percentage of All SNAP Participants	CC, Month Selected
Alabama	82.0	6.1	October 2015	82.6	6.7	October 2014
Colorado: Already with E&T	31.2	1.4	October 2015	31.5	1.4	October 2014
Colorado: Starting E&T	6.6	0.3		6.2	0.3	
Maryland	31.9	1.6	October 2015	33.6	1.3	October 2014
Minnesota	89.3	8.7	July 2013	89.0	9.0	July 2012
Missouri	89.4	5.9	October 2015	88.8	5.9	October 2014
Oregon: Broad Group	21.5	3.0	October 2015	21.9	3.1	October 2014
Oregon: Narrow Group	8.4	1.2		8.8	1.2	
Pennsylvania	20.8	1.3	January 2016	21.3	1.2	January 2015
Tennessee	6.4	0.5	October 2015	6.4	0.5	October 2014
Vermont	85.0	7.7	August 2013	84.6	7.2	August 2012

Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont.

Notes: CC = comparison cohort; TLC = time limit cohort. Colorado “Already with E&T” counties had mandatory E&T prior to ABAWD time limit reinstatement. Colorado “Starting E&T” counties simultaneously introduced mandatory E&T and the ABAWD time limit. See text for a description of the Oregon narrow and broad groups. To be included in the analysis, an ABAWD must live in an area in which the time limit is reinstated and remains in effect for all months of the observation window, be younger than 48 (to avoid aging out of ABAWD status), and have nonmissing values for all model covariates. The percentage of ABAWD participants is equal to the number of ABAWDs included in the analysis divided by the total number of ABAWD participants in the State (including in waived areas) in the month of selection. The percentage of SNAP participants is equal to the number of ABAWD participants included in the analysis divided by the total number of SNAP participants in the State in the month of selection. Minnesota’s data exclude Minnesota Family Investment Program (MFIP) participants. Including MFIP participants would reduce the percentage of ABAWDs as a share of all SNAP participants.

For each State, we compare the time limit and comparison cohort to ensure that they closely match in demographic and economic characteristics. Table 3 displays the characteristics of each cohort and indicates if there are statistically significant differences between them. States vary in the characteristics that are available in the caseload data; when data are not available, or have high missing rates, the variable is excluded from the analysis. Table 3 indicates this with a “-”. We identify statistically significant differences at the 0.05 level using two-tailed tests. While there are significant differences in some of the characteristics, most of these differences are small in magnitude. Although the time limit and comparison

cohorts are drawn from the same areas of each State, the geographic distribution within these areas (by Urban area and border county) may differ somewhat between the two cohorts. The average local area unemployment rate and poverty rate are also affected by the geographic distribution of the time limit and comparison cohorts, as well as by differences in economic conditions between the two years. Our methods control for these and other differences between the two cohorts.

TABLE 3

Characteristics of ABAWDs in the Time Limit (T) and Comparison (C) Cohorts, by State, Colorado County Group, and Oregon Sample

Characteristic	AL, T	AL, C	CO, AET, T	CO, AET, C	CO, SET, T	CO, SET, C	MD, T	MD, C	MN, T	MN, C	MO, T	MO, C
Age (mean)	31.8*	31.5	31.4	31.7	31.0	31.0	32.1*	31.9	29.5*	29.2	31.1*	31.3
Female (%)	45.8*	44.7	50.4	51.8	41.4	45.5	36.4	36.7	36.4	36.5	39.1	38.9
Race/ethnicity (%)												
White	46.8*	45.5	-	-	-	-	33.0	32.9	53.2	53.1	55.8*	54.9
Black	49.3*	50.9	-	-	-	-	62.0	62.5	33.9	34.2	41.9*	42.9
Hispanic	0.9*	0.7	-	-	-	-	2.3	2.2	4.3	4.2	1.6	1.5
Other	3.1	2.9	-	-	-	-	2.7	2.4	8.6	8.5	0.7	0.7
Education level (%)												
Less than high school	-	-	-	-	-	-	-	-	28.8*	29.7	33.5*	34.2
High school	-	-	-	-	-	-	-	-	55.9	55.2	50.0	49.5
Some college	-	-	-	-	-	-	-	-	9.8*	9.3	12.3	12.4
Bachelor's degree or higher	-	-	-	-	-	-	-	-	5.6	5.7	4.2*	3.9
Single person household (%)	70.0*	68.7	78.7*	76.2	74.2*	68.3	85.2*	83.9	84.2*	83.5	78.4*	77.8
Proportion of three quarters prior to observation on SNAP (%)	74.6	74.6	47.8	46.9	52.0	49.2	71.5*	68.2	68.1*	67.0	72.6*	71.5
Proportion of three quarters prior to observation employed (%)	-	-	37.2	36.6	35.6	35.6	-	-	-	-	35.8*	31.3
Local unemployment rate ¹ (mean)	6.0*	6.2	3.4*	4.0	3.0*	3.6	4.2*	4.9	4.2*	5.0	5.0*	5.5
Local poverty rate ² (mean)	17.9*	19.1	11.2*	11.5	9.2	9.2	8.3*	8.5	12.8*	12.4	16.7*	17.8
Urban area ¹ (%)	18.7*	24.8	41.3*	44.7	24.2*	31.8	100	100	64.6*	65.3	57.9*	60.3
Border county ² (%)	44.5*	39.0	44.8*	42.4	42.5	39.6	83.6	83.8	20.1*	19.5	72.1*	73.1
Observations (N)	53,581	61,028	5,468	5,502	1,163	1,086	12,258	10,543	40,718	40,479	50,197	49,409

TABLE 3

Characteristics of ABAWDs in the Time Limit (T) and Comparison (C) Cohorts, by State, Colorado County Group, and Oregon Sample (Continued)

Characteristic	OR NG, T	OR NG, C	OR BG, T	OR BG, C	PA, T	PA, C	TN, T	TN, C	VT, T	VT, C
Age (mean)	30.2	30.1	31.3*	31.1	31.3	31.3	31.5*	30.8	30.2	30.2
Female (%)	37.3	38.0	37.5	37.3	37.3	37.8	41.7	41.8	42.1	41.1
Race/ethnicity¹ (%)										
White	68.4*	70.7	70.8	71.6	67.2	67.4	72.2	72.5	95.8*	95.1
Black	16.0*	14.7	15.4	15.4	23.5*	24.5	25.0	25.0	2.7	3.0
Hispanic	8.6*	7.4	7.4*	6.7	4.9	4.7	1.6	1.5	0.7	0.7
Other	7.1	7.1	6.4	6.3	4.4*	3.4	1.1	1.0	0.7*	1.2
Education level (%)										
Less than high school	-	-	-	-	16.2	16.1	-	-	26.6	27.8
High school	-	-	-	-	59.3*	61.3	-	-	51.3	51.2
Some college	-	-	-	-	9.4	9.4	-	-	12.0	11.3
Bachelor's degree or higher	-	-	-	-	15.1*	13.3	-	-	10.2	9.7
Single person household (%)	90.7	90.3	91.6	91.5	75.5*	74.0	79.5	79.6	80.4*	78.8
Proportion of three quarters prior to observation on SNAP (%)	71.0	71.7	72.7*	74.1	65.4*	66.5	76.8*	73.0	75.1*	71.4
Proportion of three quarters prior to observation employed (%)	-	-	-	-	37.9*	36.0	-	-	-	-
Local unemployment rate ² (mean)	4.2*	4.9	4.2*	4.9	4.9*	4.8	3.8*	4.6	4.0*	4.5
Local poverty rate ² (mean)	13.3*	14.8	13.2*	14.7	10.1*	10.5	10.1*	10.6	12.0*	12.4
Urban area ² (%)	100	100	100	100	65.8	65.9	91.4	91.2	0.0	0.0
Border county ³ (%)	83.4*	82.2	81.1*	80.4	24.8	24.9	31.6	30.2	76.9	77.5
Observations (N)	8,346	9,214	21,330	22,945	21,287	19,487	6,350	6,679	7,345	6,803

Source: SNAP administrative data and UI wage records.

AET = Already with E&T; BG = Broad group; NG = Narrow group; SET = Starting E&T; T = Time limit cohort; C = Comparison cohort; "-" = Data element not available or has a high missing rate and was not used.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts: Alabama, Colorado, Maryland, Missouri, Oregon, and Tennessee: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. For the time limit cohort, baseline (Quarter 0) is October 1, 2015 through December 31, 2015. The time limit went into effect on January 1, 2016. For the comparison cohort, baseline is October 1, 2014 through December 31, 2014.

Minnesota: The time limit cohort includes ABAWDs on SNAP in July 2013. The comparison cohort includes ABAWDs on SNAP in July 2012. For the time limit cohort, baseline (Quarter 0) is July 1, 2013 through September 30, 2013. The time limit went into effect on November 1, 2013. For the comparison cohort, baseline is July 1, 2012 through September 30, 2012.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. For the time limit cohort, baseline (Quarter 0) is January 1, 2016 through March 31, 2016. The time limit went into effect on March 1, 2016. For the comparison cohort, baseline is January 1, 2015 to March 31, 2015.

Vermont: The time limit cohort includes ABAWDs on SNAP in August 2013. The comparison cohort includes ABAWDs on SNAP in August 2012. For the time limit cohort, baseline (Quarter 0) is August 1, 2013 through October 31, 2013. The time limit went into effect on November 1, 2013. For the comparison cohort, baseline is August 1, 2012 through October 31, 2012.

Notes: Colorado “Already with E&T” counties had mandatory E&T prior to ABAWD time limit reinstatement. Colorado “Starting E&T” counties simultaneously introduced mandatory E&T and the ABAWD time limit. See text for a description of the Oregon Narrow and Broad groups.

¹ Race/ethnicity was excluded from the Colorado models due to a high missing rate.

² Local unemployment rate, local poverty rate, and urban area were measured in the calendar year of the baseline quarter for both cohorts.

³ Border county is an indicator variable for whether the ABAWD lives in a county that borders another State and therefore may have out-of-State employment.

*Denotes statistically significant differences between time limit and comparison cohorts at the 0.05 level, using two-tailed tests. T-tests are used to detect statistically significant differences.

We use multivariate regression models to estimate the impact of time limit reinstatement. We use ordinary least squares (OLS) models to estimate continuous outcomes and logistic models to estimate dichotomous outcomes.⁵² The regression-based estimates control for the characteristics listed in Table 3 above where available—age, gender, race/ethnicity, highest education level achieved, single person household, proportion of the three quarters prior to the observation window on SNAP, proportion of the three quarters prior to the observation window employed,⁵³ local unemployment rate, local poverty rate, rural/urban status, and whether the ABAWD is in a county that borders another State (and therefore may have out-of-State employment).

Results

Impact of ABAWD Time Limit Reinstatement on SNAP Outcomes

We examine two separate SNAP outcomes in the twelve-month observation window: monthly SNAP participation and total annual SNAP benefits. We calculate the impact by subtracting the regression-adjusted outcome of the comparison cohort from the regression-adjusted outcome of the time limit cohort. We present regression-adjusted means and impact estimates below, and results from the full multivariate models in Appendix 10.⁵⁴

⁵² As a sensitivity check, we ran the continuous outcomes from the main analysis using a generalized linear model (GLM) with a log-link function to compare the continuous outcomes under the natural log distribution to the continuous outcomes under the normal distribution used in OLS. Across outcomes and States, all impacts from the GLM models are in the same direction (negative) as the impacts from the OLS models. The impact significances are also the same across outcomes and States in the GLM models as compared to the OLS models except for the annual benefits impact for Oregon: broad group. In the OLS model, this impact is insignificant and in the GLM model the impact is significant; however, the p-values are very similar. In the OLS model, the p-value is 0.0525 and the p-value in the GLM model is 0.0472. The regression-adjusted means and impact estimates from the GLM models are generally nominally smaller than those from the OLS models. The logistic models in the main analysis produce the predicted log of the odds and the implied predicted probabilities. We test for differences in the predicted probabilities based on the coefficients produced in the logistic regression model.

⁵³ Only included in the models for Colorado, Missouri, and Pennsylvania—States that provided quarterly earnings data.

⁵⁴ We calculated the regression-adjusted means using the lsmeans procedure in SAS. The program predicts the risk-adjusted mean, evaluating the model coefficients of the control variables at their means over the full sample (combining both cohorts) with alternative values of dummy variables indicating cohort. For the participation and employment models, we use the option ilink to obtain probabilities from the logit model. Impact estimates presented in the main report may differ slightly from those in the full multivariate model results in Appendix 10 due to rounding.

MONTHLY SNAP PARTICIPATION

Figure 26 shows the percentage of the time limit and comparison cohorts that participate in SNAP in each month of the 12-month observation period. The percentages are regression-adjusted to control for differences in economic conditions and characteristics of the time limit and comparison cohorts. Some participants leave SNAP between the month that the cohort is drawn and the first month of the observation window, because they reach the end of a certification period and do not recertify or lose eligibility due to increased income or other reasons. We expect departure rates to be similar for the treatment and comparison groups prior to time limit reinstatement, unless awareness of the forthcoming policy change causes some time limit cohort members to choose not to recertify. Our estimates count cohort members in each month that they participate, regardless of whether they participate in the first month of the observation window.

As expected, we see that some cohort members no longer receive SNAP in the first month of the observation period. First-month participation is lowest (57 percent) in the time limit cohort for Colorado counties that already had mandatory E&T when the time limit was reinstated and highest (85 percent) in Vermont's comparison group.

There is no statistically significant difference in first-month participation between the time limit and comparison cohort in five of the study States. First-month participation for the time limit cohort is 1 to 2 percentage points lower than the comparison cohort in Minnesota, Missouri, and Vermont. In Colorado, participation in the first month of the observation window is 5 percentage points lower in the time limit cohort than in the comparison cohort in counties that already had mandatory E&T and 8 percentage points lower in counties that simultaneously introduced mandatory E&T and the ABAWD time limit. We are not aware of policy changes to explain the lower first-month participation in the time limit cohort. One possibility is that this reflects a behavioral effect. Some participants who are due for recertification and learn of the policy change may decide not to recertify. This effect could be more pronounced in some States than others, due to differences in when and how participants learn of the upcoming implementation of the time limit and the relative effort to recertify. However, we did not investigate the extent of these differences across the study States.

We expect participation to decline between the first and third month of the observation window as members of each cohort leave SNAP over time, and then to see a substantial drop in participation for the time limit cohort relative to the comparison cohort in the fourth month of the observation window—the first month in which participants in the time limit cohort can lose eligibility due to the time limit. We expect that participation would then remain lower in the time limit cohort than the comparison cohort for the remaining months of the observation window.

We see this expected pattern clearly in all of the study States but Colorado and Oregon. For example, in Missouri, 80 percent of the comparison cohort and 79 percent of the time limit cohort participates in the first month of the observation window (January 2016). Participation then trends downward in both groups as additional cohort members leave SNAP, reaching 71 percent for the comparison cohort and 67 percent for the time limit cohort by the third month. The time limit cohort's participation then falls almost 40 percentage points in the fourth month, to 29 percent. At the same time, the comparison cohort's participation drops just three percentage points (to 68 percent). The gap between Missouri's time limit cohort and comparison cohort narrows to 31 percentage points by the 12th month, as participants in the comparison cohort continue to leave SNAP over time.

We refer to the difference in participation for the time limit cohort relative to the comparison cohort in the fourth month of the observation window as the impact of the ABAWD time limit in the fourth month of time limit reinstatement (table 4). The impact in the fourth month ranges from -5 percentage points in Colorado counties that already had mandatory E&T when the time limit was reinstated to -41 percentage points in Vermont. One year after ABAWD time limit reinstatement, the impact ranges from 0 percentage points (not statistically significant) in Colorado counties that already had mandatory E&T when the ABAWD time limit was reinstated to -32 percentage points in Vermont.

Investigating the reasons for the different levels of impact across States is beyond the scope of this study, though we suspect that Oregon's results may be understated due to data limitations. A question for future research is whether the smaller impacts in Colorado arise from interactions with mandatory E&T requirements. A participant might lose eligibility for SNAP due to noncompliance with mandatory E&T requirements before reaching the three-month ABAWD time limit. As the only "pledge" State included in the study, Colorado was required to commit to offer a position in a work program to any ABAWD at risk of losing eligibility, which might have helped preserve eligibility for ABAWDs who were willing and able to meet the work requirement. In Colorado counties that were already operating mandatory E&T programs when the ABAWD time limit was reinstated, sanctions for noncompliance with mandatory E&T requirements may have already removed most ABAWDs who would otherwise lose eligibility due to the time limit, explaining the small impact of time limit reinstatement.⁵⁵ In Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit, sanctions for noncompliance with mandatory E&T might explain the reduction in SNAP participation in the first few months of the observation window. These possibilities would need to be confirmed through further analysis of the implementation and interaction of mandatory E&T and the ABAWD time limit in Colorado.

⁵⁵ Oregon was also operating mandatory E&T when the ABAWD time limit was reinstated, providing another possible explanation (besides data issues) for the relatively smaller impacts of ABAWD time limit reinstatement in Oregon relative to other study States.

FIGURE 26

Percent of Time Limit Cohort and Comparison Cohort Participating in SNAP, by Month of Observation Window (Regression-Adjusted Estimates), by State, Colorado County Group, and Oregon Sample

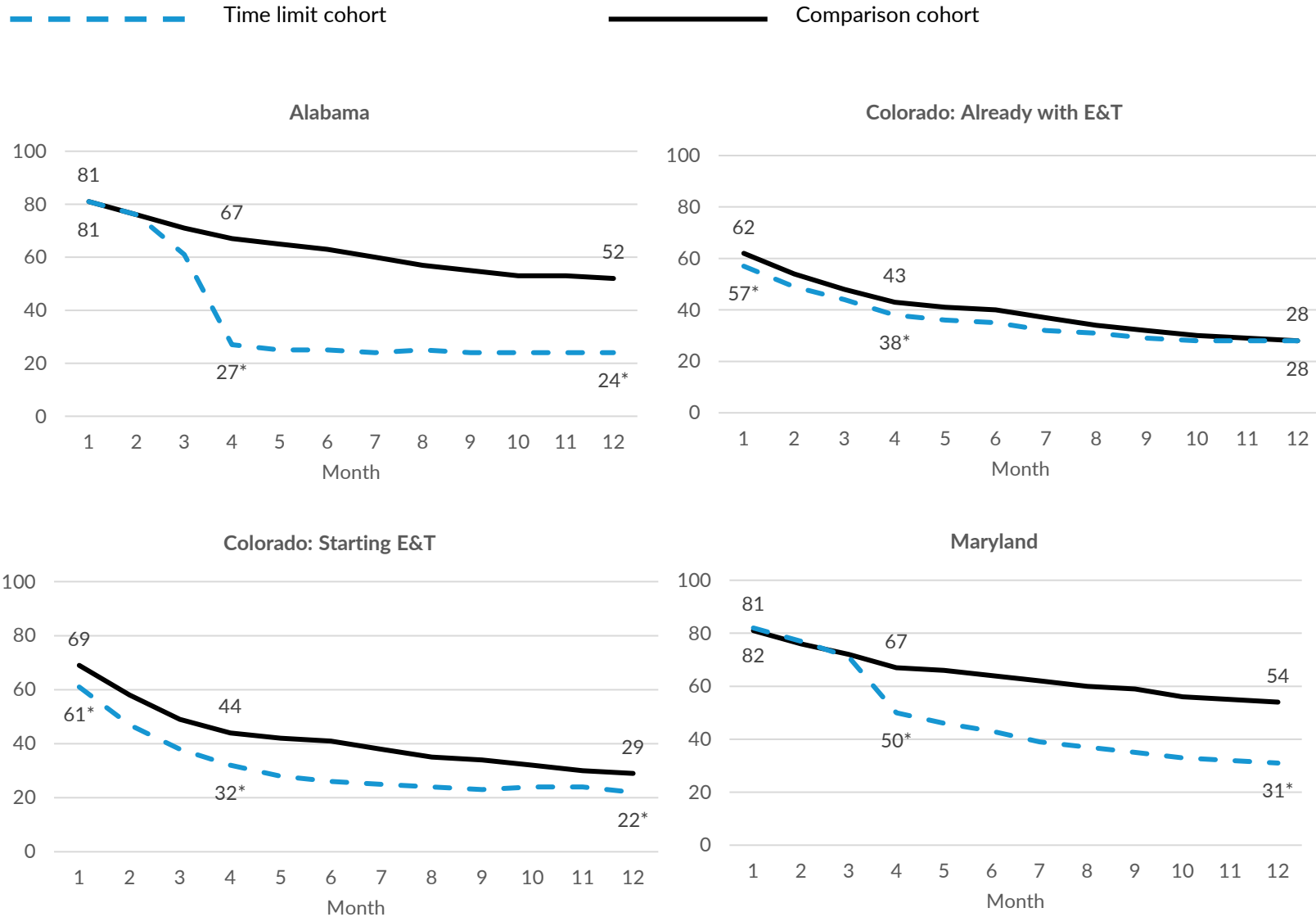


FIGURE 26

Percent of Time Limit Cohort and Comparison Cohort Participating in SNAP, by Month of Observation Window (Regression-Adjusted Estimate), by State, Colorado County Group, and Oregon Sample (continued)

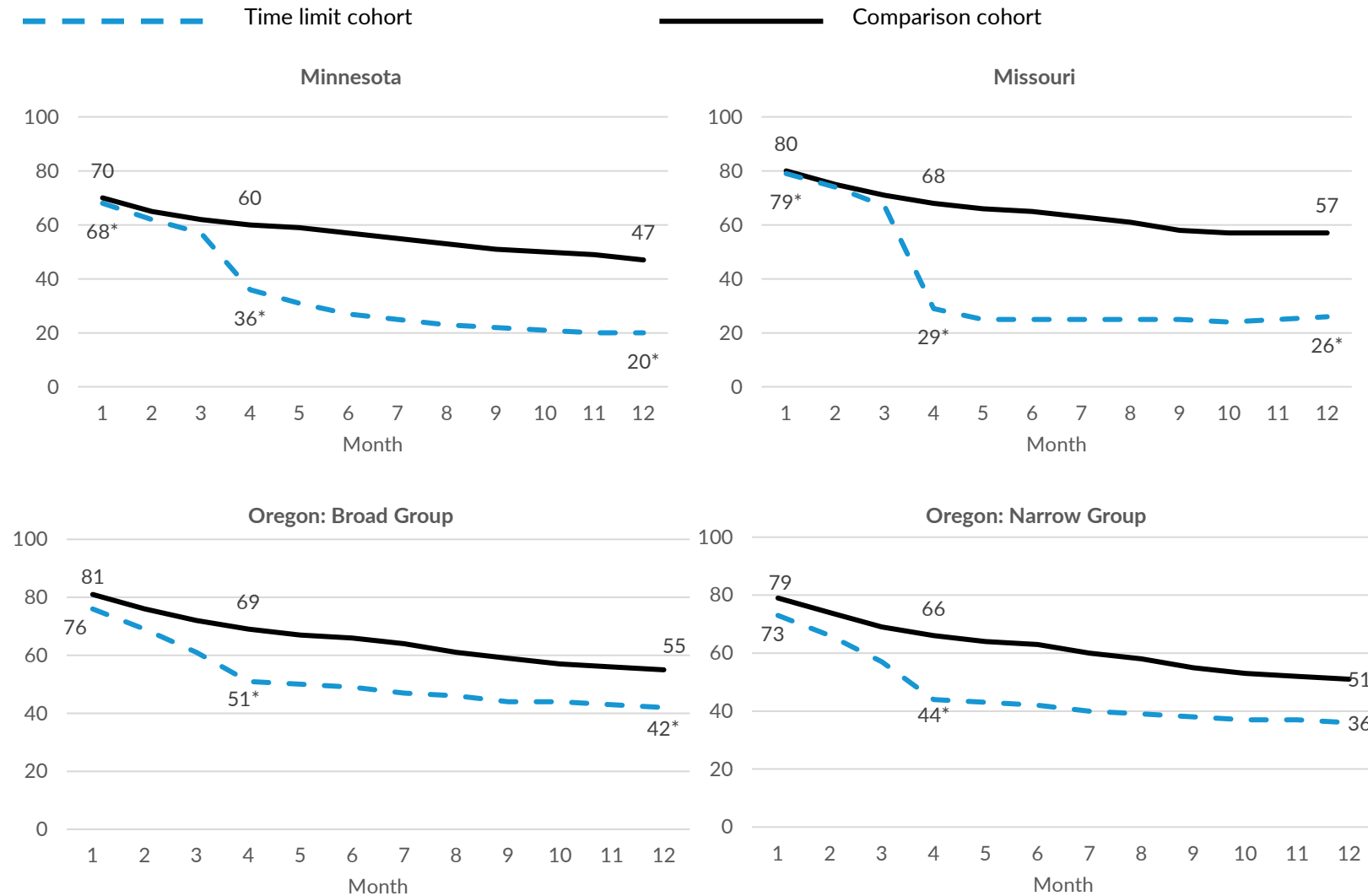
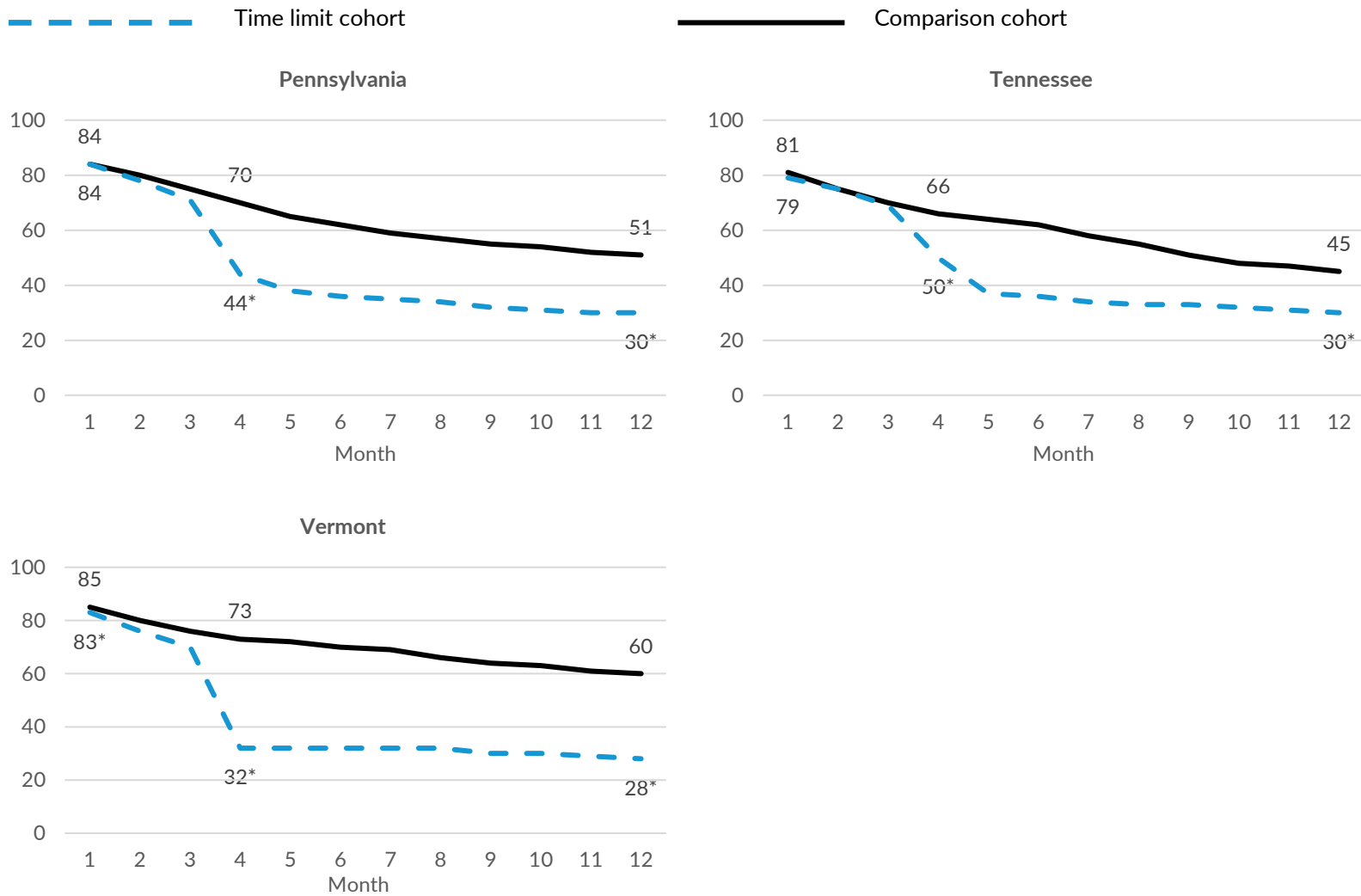


FIGURE 26

Percent of Time Limit Cohort and Comparison Cohort Participating in SNAP, by Month of Observation Window (Regression-Adjusted Estimate) by State, Colorado County Group, and Oregon Sample (continued)



Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Alabama, Colorado, Maryland, Missouri, Oregon, and Tennessee: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. The 12-month period is January to December 2016 for the time limit cohort and January to December 2015 for the comparison cohort.

Minnesota: The time limit cohort includes ABAWDs on SNAP in July 2013. The comparison cohort includes ABAWDs on SNAP in July 2012. The time limit went into effect on November 1, 2013. The 12-month period is November 2013 to October 2014 for the time limit cohort and November 2012 to October 2013 for the comparison cohort.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. The 12-month period is March 2016 to February 2017 for the time limit cohort and March 2015 to February 2016 for the comparison cohort.

Vermont: The time limit cohort includes ABAWDs on SNAP in August 2013. The comparison cohort includes ABAWDs on SNAP in August 2012. The time limit went into effect on November 1, 2013. The 12-month period is November 2013 to October 2014 for the time limit cohort and November 2012 to October 2013 for the comparison cohort.

Dependent variable: SNAP participation in each month in the 12-month analysis period.

Notes: Estimates are predicted probabilities of SNAP participation from logit models for each State that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Alabama, Colorado, Maryland, Oregon and Tennessee), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (only available in Colorado, Missouri, and Pennsylvania; four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban (not included for Maryland, Oregon, or Vermont), and an indicator for border county (not included for Oregon). Colorado counties “starting E&T”, Minnesota, and Vermont introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties and States should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated. See text for definition of the Oregon Narrow and Broad Group.

* Denotes statistically significant differences between time limit and comparison cohorts at the 0.05 level, using two-tailed tests. T-tests are used to detect statistically significant differences.

TABLE 4

Percentage Point Impact of the ABAWD Time Limit on SNAP Participation in the Fourth and Twelfth Month of Time Limit Reinstatement, by State, Colorado County Group, and Oregon Sample

State	Fourth Month of Time Limit Reinstatement	Twelfth Month of Time Limit Reinstatement
Alabama	-40*	-28*
Colorado: Already with E&T	-5*	0
Colorado: Starting E&T	-12*	-7*
Maryland	-17*	-23*
Minnesota	-24*	-27*
Missouri	-39*	-31*
Oregon: Narrow Group	-22*	-15
Oregon: Broad Group	-18*	-13*
Pennsylvania	-26*	-21*
Tennessee	-16*	-15*
Vermont	-41*	-32*

Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Alabama, Colorado, Maryland, Missouri, Oregon, and Tennessee: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. The fourth month of time limit reinstatement is April 2016, the first month that ABAWDs could lose eligibility due to the time limit. The twelfth month of time limit reinstatement is December 2016.

Minnesota: The time limit cohort includes ABAWDs on SNAP in July 2013. The comparison cohort includes ABAWDs on SNAP in July 2012. The time limit went into effect on November 1, 2013. The fourth month of time limit reinstatement is February 2014, the first month that ABAWDs could lose eligibility due to the time limit. The twelfth month of time limit reinstatement is October 2014.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. The fourth month of time limit reinstatement is June 2016, the first month that ABAWDs could lose eligibility due to the time limit. The twelfth month of time limit reinstatement is February 2017.

Vermont: The time limit cohort includes ABAWDs on SNAP in August 2013. The comparison cohort includes ABAWDs on SNAP in August 2012. The time limit went into effect on November 1, 2013. The fourth month of time limit reinstatement is February 2014, the first month that ABAWDs could lose eligibility due to the time limit. The twelfth month of time limit reinstatement is October 2014.

Dependent variable: SNAP participation in the fourth month and in the twelfth month of the 12-month observation period. Time limit cohort participation is estimated in the fourth and twelfth month of time limit reinstatement. Comparison cohort participation is estimated for the corresponding months, one year earlier.

Notes: Estimates are differences in predicted probabilities of SNAP participation from logit models for each State that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Alabama, Colorado, Maryland, Oregon and Tennessee), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (only available in Colorado, Missouri, and Pennsylvania; four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban (not included for Maryland, Oregon, or Vermont), and an indicator for border county (not included for Oregon). Colorado counties “starting E&T”, Minnesota, and Vermont introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties and States should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated. See text for definition of the Oregon Narrow and Broad Group.

* Denotes statistically significant differences between time limit and comparison cohorts at the 0.05 level, using two-tailed tests.

ANNUAL SNAP BENEFITS

We expect the time limit to reduce annual SNAP benefits if participants receive SNAP in fewer months of the year or have lower benefit amounts due to increased earnings. We calculate the impact by comparing the regression-adjusted average annual benefits for the time limit cohort to the comparison cohort. We include zero amounts for members of each cohort who did not participate at all during the twelve-month period. Therefore, the analysis captures the effects of fewer months of eligibility and reduced benefit amounts due to higher earnings.

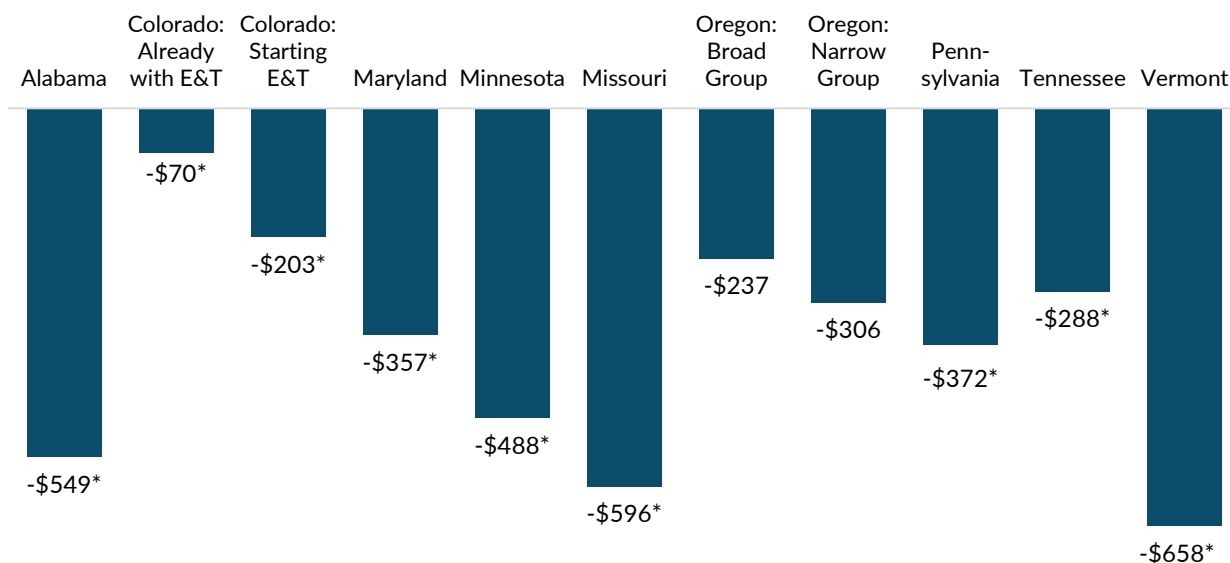
We find that in all States, ABAWD time limit reinstatement reduces the average annual benefits of ABAWDs, although the difference is not statistically significant in Oregon (figure 27). For example, the impact of -\$357 for Maryland indicates that, in the first 12 months of time limit reinstatement, ABAWDs received an average of \$357 less in SNAP benefits than similar participants during the waiver period one year earlier. The time limit cohort received \$815 per year in SNAP benefits compared with \$1,172 received by the comparison cohort (see Table 5).

The impact of time limit reinstatement on annual SNAP benefits ranges from -\$70 in Colorado counties that already had mandatory E&T to -\$658 in Vermont.⁵⁶ Among States with ABAWDs not subject to mandatory E&T requirements, the impact on annual benefits ranges from -\$288 in Tennessee to -\$596 in Missouri.

⁵⁶ In Minnesota and Vermont, some of the reduction in SNAP benefits observed for the time limit cohort may be attributable to lower maximum SNAP benefits during the time limit period relative to the comparison period. The maximum monthly SNAP benefit for a one-person household in the contiguous United States was reduced from \$200 to \$189 in November 2013 (the first month of the observation window for the time limit cohort in Minnesota and Vermont) and increased to \$194 in October 2014 (the last month of the observation window for the time limit cohort in these two States). A one-person household that received the maximum SNAP benefit for twelve months would have received \$116 less in annual SNAP benefits in the time limit cohort than in the comparison group. The maximum SNAP benefit remained the same during all months of the observation window for the time limit and comparison group in the other study States.

FIGURE 27

Impact of ABAWD Time Limit Reinstatement on Annual SNAP Benefits, by State, Colorado County Group, and Oregon Sample



Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont. **Population:** SNAP participants potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Alabama, Colorado, Maryland, Missouri, Oregon, and Tennessee: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. The 12-month period is January to December 2016 for the time limit cohort and January to December 2015 for the comparison cohort.

Minnesota: The time limit cohort includes ABAWDs on SNAP in July 2013. The comparison cohort includes ABAWDs on SNAP in July 2012. The time limit went into effect on November 1, 2013. The 12-month period is November 2013 to October 2014 for the time limit cohort and November 2012 to October 2013 for the comparison cohort.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. Annual SNAP benefits are measured for April 2016 to March 2017 for the time limit cohort and April 2015 to March 2016 for the comparison cohort.

Vermont: The time limit cohort includes ABAWDs on SNAP in August 2013. The comparison cohort includes ABAWDs on SNAP in August 2012. The time limit went into effect on November 1, 2013. The 12-month period is November 2013 to October 2014 for the time limit cohort and November 2012 to October 2013 for the comparison cohort.

Dependent variable: Annual SNAP benefit (including \$0 benefits) in nominal dollars for the 12-month analysis period. The maximum monthly SNAP benefit remained the same throughout the analysis period for the time limit and comparison cohort in all study States except Minnesota and Vermont. In Minnesota and Vermont, some of the estimated reduction in SNAP benefits may be attributable to lower maximum monthly SNAP benefits during the time limit period than in the comparison period.

Notes: Estimates are differences in predicted dollar amounts from separate OLS models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Alabama, Colorado, Maryland, Oregon and Tennessee), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (only available in Colorado, Missouri, and Pennsylvania; four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban (not included for Maryland, Oregon, or Vermont), and an indicator for border county (not included for Oregon). Colorado counties "starting E&T", Minnesota, and Vermont introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties and States should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties "already with E&T" already had mandatory E&T when the ABAWD time limit was reinstated. See text for definition of the Oregon Narrow and Broad Group.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests.

TABLE 5

**Average Annual SNAP Benefits Received in the Time Limit and Comparison Cohort
(Regression-Adjusted Estimate) by State, Colorado County Group, and Oregon Sample**

State	Time Limit Cohort (\$)	Comparison Cohort (\$)
Alabama	656*	1,205
Colorado: Already with E&T	647*	717
Colorado: Starting E&T	564*	767
Maryland	815*	1,172
Minnesota	616*	1,104
Missouri	660*	1,256
Oregon: Narrow Group	878	1,184
Oregon: Broad Group	1,001	1,238
Pennsylvania	712*	1,084
Tennessee	865*	1,153
Vermont	683*	1,341

Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Alabama, Colorado, Maryland, Missouri, Oregon, and Tennessee: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. The 12-month period is January to December 2016 for the time limit cohort and January to December 2015 for the comparison cohort.

Minnesota: The time limit cohort includes ABAWDs on SNAP in July 2013. The comparison cohort includes ABAWDs on SNAP in July 2012. The time limit went into effect on November 1, 2013. The 12-month period is November 2013 to October 2014 for the time limit cohort and November 2012 to October 2013 for the comparison cohort.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. Annual SNAP benefits are measured for April 2016 to March 2017 for the time limit cohort and April 2015 to March 2016 for the comparison cohort.

Vermont: The time limit cohort includes ABAWDs on SNAP in August 2013. The comparison cohort includes ABAWDs on SNAP in August 2012. The time limit went into effect on November 1, 2013. The 12-month period is November 2013 to October 2014 for the time limit cohort and November 2012 to October 2013 for the comparison cohort.

Dependent variable: Annual SNAP benefit (including \$0 benefits) in nominal dollars for 12-month analysis period. The maximum monthly SNAP benefit remained the same throughout the analysis period for the time limit and comparison cohort in all study States except Minnesota and Vermont. In Minnesota and Vermont, some of the estimated reduction in SNAP benefits may be attributable to lower maximum monthly SNAP benefits during the time limit period than in the comparison period.

Notes: Estimates are predicted dollar amounts from separate OLS models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Alabama, Colorado, Maryland, Oregon and Tennessee), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (only available in Colorado, Missouri, and Pennsylvania; four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban (not included for Maryland, Oregon, or Vermont), and an indicator for border county (not included for Oregon). Colorado counties "starting E&T", Minnesota, and Vermont introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties and States should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties "already with E&T" already had mandatory E&T when the ABAWD time limit was reinstated. See text for definition of the Oregon Narrow and Broad Group.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests.

To provide insight into the relative effects of departure from SNAP and reduced benefits on annual SNAP benefits, we examine ABAWDs in the time limit cohort who are participating in SNAP in the third

month of time limit reinstatement, to see what happens to their participation and benefits in the fourth month (table 6). We find that only a small share (between 2 and 11 percent) of those participating in the third month remain on SNAP and receive lower benefits in the fourth month. In contrast, between 19 and 58 percent no longer receive benefits in the fourth month. In all States, the percentage of ABAWDs that receive no benefits in the fourth month is higher than the percentage that remain on SNAP with lower benefits. These findings are consistent with the large and significant impacts on SNAP participation and suggest that the majority of the observed impact on SNAP benefit amounts is due to ABAWDs losing eligibility or exiting SNAP rather than to a reduction in benefit amounts among those who remain on SNAP.

TABLE 6
Distribution of ABAWDs by SNAP Benefit Status in the Fourth Relative to Third Month of ABAWD Time Limit Reinstatement, by State, Colorado County Group, and Oregon Sample

State	Benefits Remain the Same (%)	No Benefits in Fourth Month (%)	Higher Benefits in Fourth Month (%)	Lower Benefits in Fourth Month (%)
Alabama	35.1	56.1	3.5	5.3
Colorado: Already with E&T	62.9	19.6	9.2	8.4
Colorado: Starting E&T	54.6	27.0	10.8	7.6
Maryland	54.2	34.1	6.2	5.4
Minnesota	54.0	38.5	3.1	4.5
Missouri	30.8	57.5	5.5	6.3
Oregon: Narrow Group	67.6	27.4	2.4	2.6
Oregon: Broad Group	74.7	20.5	2.3	2.4
Pennsylvania	58.0	37.8	2.0	2.2
Tennessee	61.5	33.4	1.4	3.7
Vermont	30.0	53.7	5.4	10.9

Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont.

Population: SNAP participants potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period. This table focuses on time limit cohort participants who were participating in SNAP in the third month of time limit reinstatement.

Cohorts and Periods Covered: Alabama, Colorado, Maryland, Missouri, Oregon, and Tennessee: The time limit cohort includes ABAWDs on SNAP in October 2015. The time limit went into effect on January 1, 2016, and the third month of time limit reinstatement is March 2016.

Minnesota: The time limit cohort includes ABAWDs on SNAP in July 2013. The time limit went into effect on November 1, 2013, and the third month of time limit reinstatement is January 2014.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The time limit went into effect on March 1, 2016, and the third month of time limit reinstatement is May 2016.

Vermont: The time limit cohort includes ABAWDs on SNAP in August 2013. The time limit went into effect on November 1, 2013, and the third month of time limit reinstatement is January 2014.

Notes: Colorado counties “starting E&T” introduced mandatory E&T at the same time as the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated. See text for definition of the Oregon Narrow and Broad Group.

Impact of ABAWD Time Limit Reinstatement on Employment Outcomes

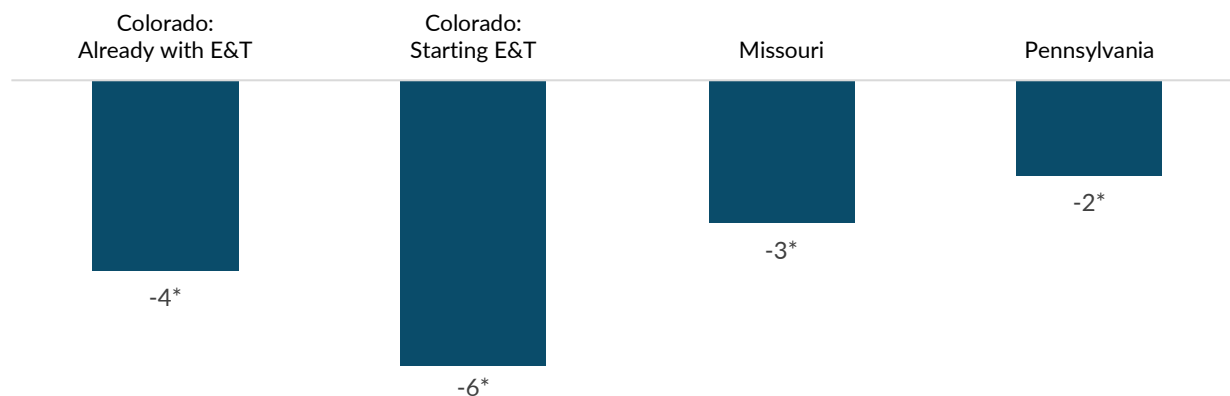
We examine the impact of ABAWD time limit reinstatement on two employment outcomes in the three States that provided UI wage data: employment in the fourth quarter of the observation window and annual earnings. We present regression-adjusted means and impact estimates below and show results from the full multivariate models in Appendix 10.

EMPLOYMENT

We find no evidence that time limit reinstatement improves employment for ABAWDs in Colorado, Missouri, or Pennsylvania. Figure 28 shows the percentage point impacts in the fourth quarter of the year of time limit reinstatement and Table 7 presents the regression adjusted probability of employment for each cohort. In all three States (including both groups of Colorado counties) the time limit reinstatement has a small, negative impact on employment, ranging from -2 percentage points in Pennsylvania to -6 percentage points in Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit. Across the three States, fourth-quarter employment ranges from 26 percent to 40 percent in the time limit cohort and from 32 percent to 43 percent in the comparison cohort.

FIGURE 28

Percentage Point Impact of ABAWD Time Limit Reinstatement on the Probability of Employment in the Fourth Quarter of Time Limit Reinstatement, by State and Colorado County Group



Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Colorado and Missouri: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016, and the fourth quarter of time limit reinstatement is October to December 2016.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016, and the fourth quarter of time limit reinstatement is January to March 2017.

Dependent variable: Employed in the quarter, defined as having quarterly earnings over \$100 according to UI wage data. Time limit cohort employment is estimated in the fourth quarter of time limit reinstatement. Comparison cohort participation is estimated for the same quarter, one year earlier.

Notes: Estimates are differences in predicted probabilities of employment from separate logit models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Colorado), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban, and an indicator for border county. Colorado counties “starting E&T” introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests.

TABLE 7

Probability of Employment in the Fourth Quarter of the Analysis Period in the Time Limit and Comparison Cohort (Regression-Adjusted Estimate) by State and Colorado County Group

State	Time Limit Cohort (%)	Comparison Cohort (%)
Colorado: Already with E&T	30*	34
Colorado: Starting E&T	26*	32
Missouri	40*	43
Pennsylvania	38*	40

Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Colorado and Missouri: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016, and the fourth quarter of time limit reinstatement is October to December 2016.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016, and the fourth quarter of time limit reinstatement is January to March 2017.

Dependent variable: Employed in the quarter, defined as having quarterly earnings over \$100 according to UI wage data. Time limit cohort employment is estimated in the fourth quarter of time limit reinstatement. Comparison cohort participation is estimated for the same quarter, one year earlier.

Notes: Estimates are predicted probabilities of employment from separate logit models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Colorado), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban, and an indicator for border county. Colorado counties “starting E&T” introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests

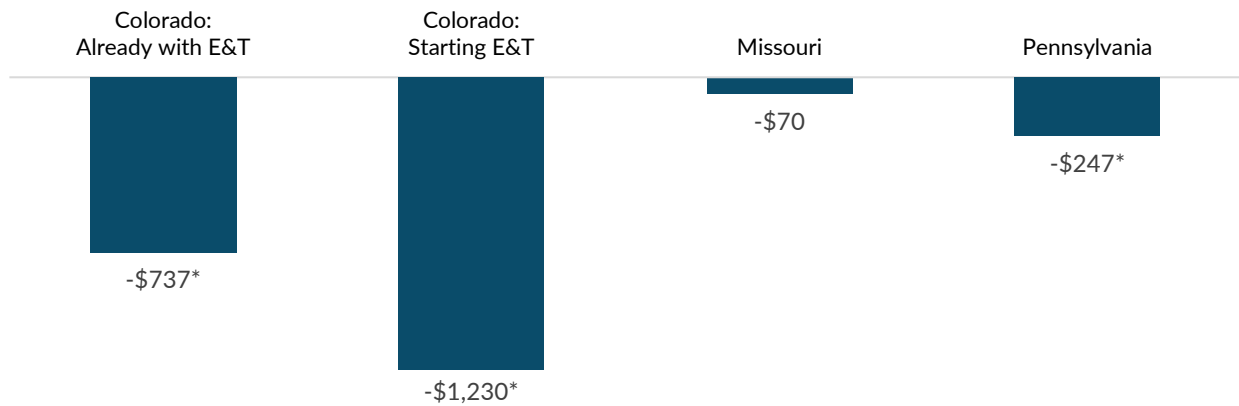
EARNINGS

As would be expected given the findings regarding employment, we do not find evidence that time limit reinstatement improves annual earnings. Average annual earnings are significantly lower for the time limit cohort than the comparison cohort in Colorado and Pennsylvania, although results for Missouri are not

statistically significant. Average annual earnings fall by \$247 in Pennsylvania, \$737 in Colorado counties that already had mandatory E&T, and \$1,230 in Colorado counties that simultaneously introduced mandatory E&T and the ABAWD time limit (see Figure 29). For all States and cohorts, annual earnings are low, ranging from \$4,958 to \$6,578 (see Table 8). These averages include those with no annual earnings. Among those with earnings, average annual earnings are between \$9,730 and \$12,910 (not shown).

FIGURE 29

Impact of ABAWD Time Limit Reinstatement on Annual Earnings, by State and Colorado County Group



Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Colorado and Missouri: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. Annual earnings are measured for January to December 2016 for the time limit cohort and for January to December 2015 for the comparison cohort. Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. Annual earnings are measured for April 2016 to March 2017 for the time limit cohort and for April 2015 to March 2016 for the comparison cohort.

Dependent variable: Annual earnings (including \$0 earnings), reported in inflation-adjusted dollars with January to March 2017 as the base quarter.

Notes: Estimates are differences in predicted dollar amounts from separate OLS models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Colorado), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban, and an indicator for border county. Colorado counties "starting E&T" introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties "already with E&T" already had mandatory E&T when the ABAWD time limit was reinstated.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests.

TABLE 8

**Average Annual Earnings in the Time Limit and Comparison Cohort
(Regression-Adjusted Estimate) by State and Colorado County Group**

State	Time Limit Cohort (\$)	Comparison Cohort (\$)
Colorado: Already with E&T	5,270*	6,007
Colorado: Starting E&T	4,958*	6,188
Missouri	5,705	5,775
Pennsylvania	6,331*	6,578

Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Colorado and Missouri: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. Annual earnings are measured for January to December 2016 for the time limit cohort and for January to December 2015 for the comparison cohort. Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. Annual earnings are measured for April 2016 to March 2017 for the time limit cohort and for April 2015 to March 2016 for the comparison cohort.

Dependent variable: Annual earnings (including \$0 earnings), reported in inflation-adjusted dollars with January to March 2017 as the base quarter.

Notes: Estimates are predicted dollar amounts from separate OLS models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Colorado), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban, and an indicator for border county. Colorado counties "starting E&T" introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties "already with E&T" already had mandatory E&T when the ABAWD time limit was reinstated.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests.

Impact of ABAWD Time Limit Reinstatement on Combined Earnings and SNAP Benefits

We examine two outcomes for the combined effect of ABAWD time limit reinstatement on SNAP participation and employment: 1) the distribution of ABAWDs by their employment status and SNAP participation status before and after time limit reinstatement, and 2) combined annual SNAP benefits and earnings. We present regression-adjusted means and impact estimates below and provide the full multivariate model results in Appendix 10.

SNAP PARTICIPATION AND EMPLOYMENT AT BASELINE AND IN THE FOURTH QUARTER

Figure 30 shows the regression-adjusted estimates for the distribution of ABAWDs by SNAP and employment status in the baseline quarter (the quarter in which the cohorts were selected) and in the fourth quarter of the observation window. The SNAP and employment results reflect the findings from the separate examinations of SNAP receipt and employment described above. SNAP participation reflects

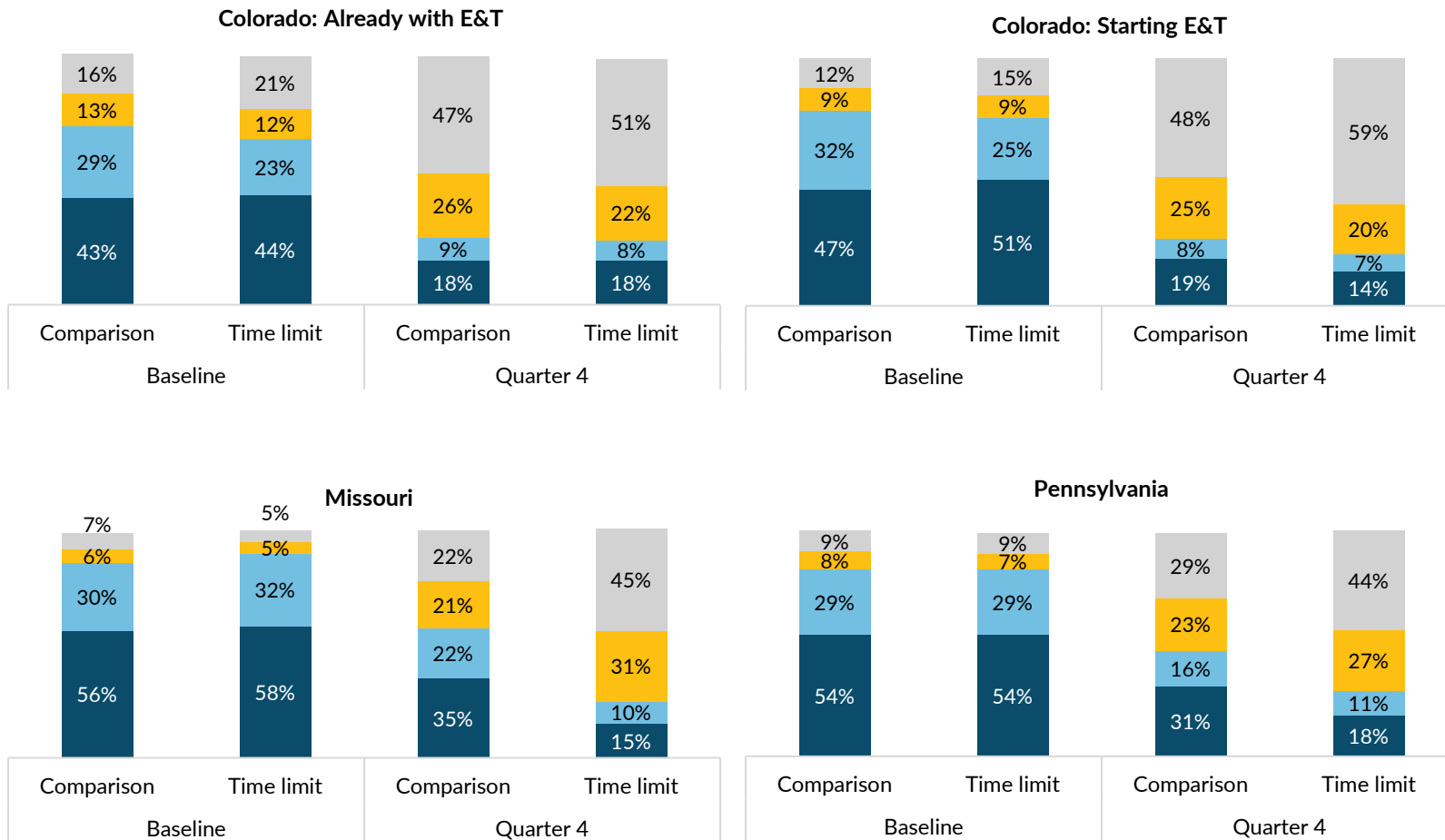
participation in the final month of the quarter. Employment is defined as having more than \$100 in UI wage earnings in the quarter.

We find that SNAP participation falls for both cohorts between the baseline and fourth quarter, though the reduction is greater for the time limit cohort. For example, in Missouri, SNAP participation falls from 90 percent in the last month of the baseline quarter to 25 percent in the last month of the fourth quarter for the time limit cohort, and from 86 percent to 57 percent for the comparison cohort. There are small changes in the share of each cohort that is employed (as measured by UI wage earnings). In Missouri, 37 percent of the time limit cohort is employed in the baseline quarter and 41 percent is employed in the fourth quarter, compared with 36 percent and 43 percent for the comparison cohort, respectively.

When we examine SNAP and employment changes together, we find that the main effect of ABAWD time limit reinstatement is to change the extent to which ABAWDs receive SNAP, regardless of whether they have earnings. The most likely outcome for the time limit cohort is to be off SNAP and not employed four quarters after time limit reinstatement. For example, in Missouri, 45 percent of the time limit cohort is off SNAP and without UI wage earnings in the fourth quarter of the observation window, compared with 22 percent of the comparison cohort.

FIGURE 30

Distribution of ABAWDS by SNAP Participation and Employment Status at Baseline and in Fourth Quarter, by State and Colorado County Group (Regression-Adjusted Estimate)



Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Colorado and Missouri: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. The baseline quarter is October to December 2015 for the time limit cohort and October to December 2014 for the comparison cohort. The fourth quarter is October to December 2016 for the time limit cohort and October to December 2015 for the comparison cohort.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. The baseline quarter is January to March 2016 for the time limit cohort and January to March 2015 for the comparison cohort. The fourth quarter is January to March 2017 for the time limit cohort and January to March 2016 for the comparison cohort.

Dependent variable: Combined SNAP and employment with four categories: (1) On SNAP and not employed, (2) on SNAP and employed, (3) off SNAP and not employed, (4) off SNAP and employed.

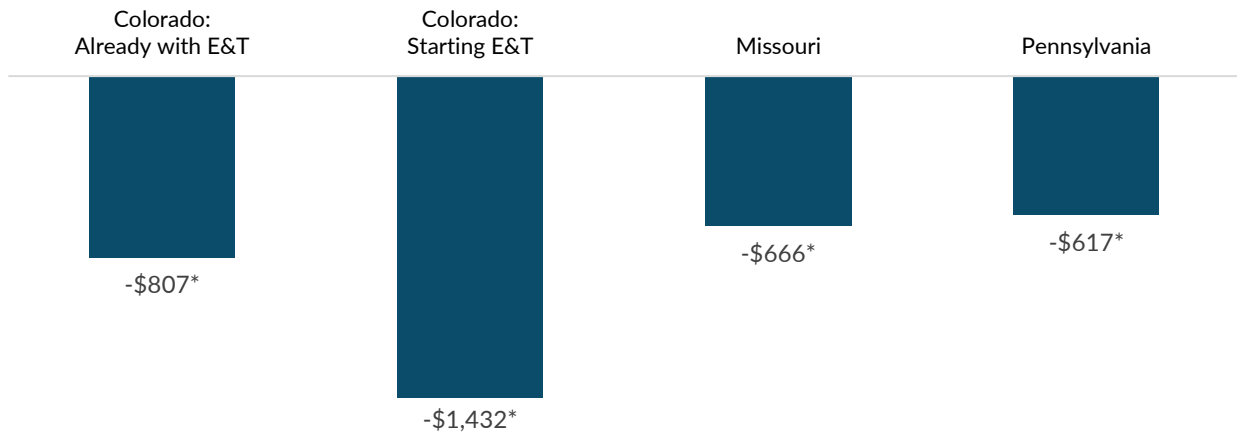
Notes: Estimates are predicted probabilities from separate multinomial logit models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Colorado), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban, and an indicator for border county. "On SNAP" is defined as participating in SNAP in the last month of the quarter. Employed is defined as having earnings greater than \$100 for the quarter, according to the UI wage data. Colorado counties "starting E&T" introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties "already with E&T" already had mandatory E&T when the ABAWD time limit was reinstated.

COMBINED EARNINGS AND SNAP BENEFITS

Figure 31 presents the regression adjusted estimates of the impact of ABAWD time limit reinstatement on annual combined SNAP benefits and earnings. Combined annual SNAP benefits and earnings are lower for the time limit cohort than the waiver cohort for all three study States (see Table 9). The impacts range from -\$617 in Pennsylvania to -\$1,432 in Colorado counties that simultaneously implemented mandatory E&T and the ABAWD time limit.

FIGURE 31

Impact of ABAWD Time Limit Reinstatement on Combined Annual SNAP Benefits and Earnings, by State and Colorado County Group



Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Colorado and Missouri: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. Annual earnings and SNAP benefits are measured for January to December 2016 for the time limit cohort and for January to December 2015 for the comparison cohort.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. Annual earnings and SNAP benefits are measured for April 2016 to March 2017 for the time limit cohort and for April 2015 to March 2016 for the comparison cohort.

Dependent variable: Combined annual earnings and SNAP benefits. Earnings are reported in inflation-adjusted dollars with January to March 2017 as the base quarter. SNAP benefits are not inflation-adjusted. The maximum SNAP benefit did not change during the time period covered by the comparison and time limit cohorts.

Notes: Estimates are differences in predicted dollar amounts from separate OLS models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Colorado), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban, and an indicator for border county. Colorado counties “starting E&T”

introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests.

TABLE 9

Average Combined Annual SNAP Benefits and Earnings in the Time Limit and Comparison Cohort (Regression-Adjusted Estimate) by State and Colorado County Group

State	Time Limit Cohort (\$)	Comparison Cohort (\$)
Colorado: Already with E&T	5,917*	6,724
Colorado: Starting E&T	5,522*	6,954
Missouri	6,365*	7,031
Pennsylvania	7,044*	7,661

Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Population: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Cohorts and Periods Covered: Colorado and Missouri: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. Annual earnings and SNAP benefits are measured for January to December 2016 for the time limit cohort and for January to December 2015 for the comparison cohort.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. Annual earnings and SNAP benefits are measured for April 2016 to March 2017 for the time limit cohort and for April 2015 to March 2016 for the comparison cohort.

Dependent variable: Combined annual earnings and annual SNAP benefits. Earnings are reported in inflation-adjusted dollars with January to March 2017 as the base quarter. SNAP benefits are not inflation-adjusted. The maximum SNAP benefit did not change during the time period covered by the comparison and time limit cohorts.

Notes: Estimates are predicted dollar amounts from separate OLS models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Colorado), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban, and an indicator for border county. Colorado counties “starting E&T” introduced mandatory E&T at the same time as the ABAWD time limit. Results for these counties should be interpreted as showing the simultaneous effect of implementing mandatory E&T and the ABAWD time limit. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests.

Sensitivity Analysis

Although our main analysis is designed to control for differences in the demographic characteristics and economic circumstances of the time limit and comparison cohort, differences between the two groups may remain, potentially affecting the results. As an additional check, we perform sensitivity analyses that compare outcomes for ABAWDs just under age 50 (ages 45 to 47) with outcomes for SNAP participants just above 50 (ages 50 to 52) who are not subject to the time limit because of their

age but who otherwise meet the definition of ABAWD. This type of analysis, referred to as difference-in-difference (DID) analysis, seeks to control for differences between the time limit and comparison cohort due to factors other than the presence of the time limit.⁵⁷ It does this by observing differences in outcomes between the time limit and comparison cohorts for ABAWDs ages 45 to 47 relative to the parallel differences (if any) for participants ages 50 to 52. This approach makes use of the fact that participants between the ages of 45 and 52 likely face similar changes in external conditions (such as improving job opportunities for workers in this age range) but that only the younger (45 to 47) age group is affected by the ABAWD time limit. As with our main analysis, we exclude ABAWDs ages 48 to 49 who may age out of ABAWD status during the analysis period.

The sensitivity analysis is more rigorous than the primary analysis because it adjusts for changes in SNAP participation and employment between the waiver period and the time limit period that are due to factors other than the change in time limit policy and are not fully captured by the model's covariates for local area unemployment rate and local area poverty rate. However, the results only provide direct evidence on how the time limit affects SNAP participation and employment for older ABAWDs. We exclude Colorado counties that implemented mandatory E&T at the same time as the ABAWD time limit from the sensitivity analyses because implementation of mandatory E&T also affects the above 50 group and so results are not comparable with the main analysis. We present regression-adjusted means and impact estimates below and include the full multivariate models in Appendix 10.

The sensitivity analysis supports the findings from the main analysis for SNAP participation. Twelve months after ABAWD time limit reinstatement, the impacts on SNAP participation range from 0 to -32 percentage points in the main analysis and from 0 to -31 percentage points in the sensitivity analysis, with no more than an 8 percentage point difference between the two estimates in any State (figure 32).⁵⁸ The confidence intervals for the sensitivity analysis overlap the confidence intervals for the main analysis in all States in the twelfth month, with most States having largely overlapping

⁵⁷ The logistic models used in the DID analysis are used to produce the predicted log of the odds and the implied predicted probabilities. We test for differences in the predicted probabilities based on the coefficients produced in the logistic regression model.

⁵⁸ We also compared ABAWD SNAP participation in month 4 in the main analysis to the sensitivity analysis. The difference in the main analysis and sensitivity estimates in month 4 were somewhat larger than those in month 12, in keeping with the somewhat larger point estimates in month 4.

confidence intervals, suggesting that the findings from the sensitivity analysis are not likely statistically different from the main analysis.⁵⁹

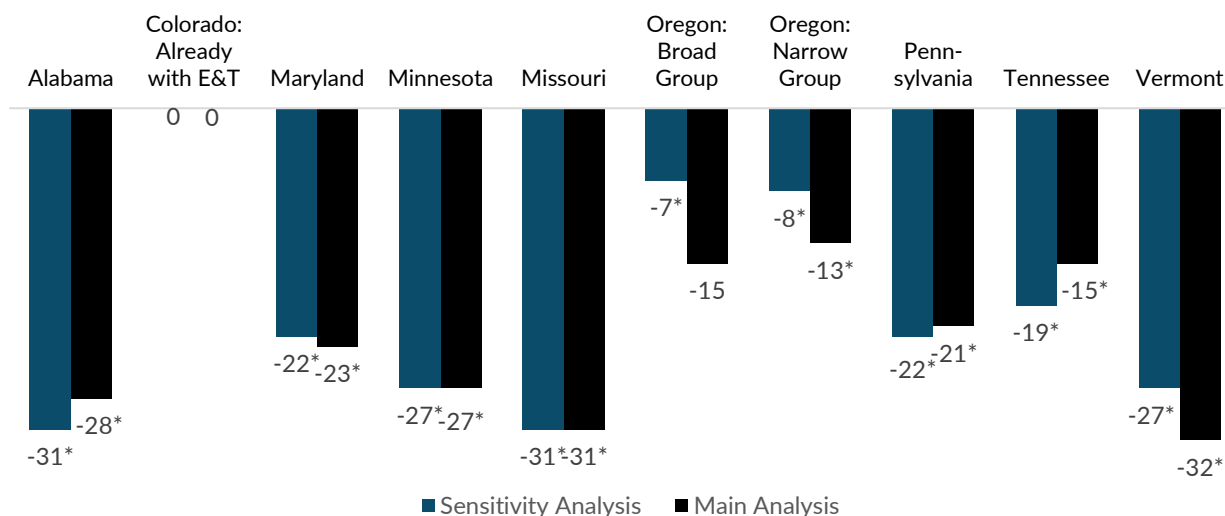
The employment effects for the sensitivity analysis differ somewhat from the main analysis. The main analysis finds small statistically significant decreases in employment among ABAWDs twelve months after time limit reinstatement in all three States. The sensitivity analysis finds no statistically significant impact on employment in Pennsylvania or the group of Colorado counties that already had mandatory E&T when the time limit was reinstated, but a 3 percentage-point increase in employment in Missouri. The lack of overlapping confidence intervals of the impacts for Missouri suggest that the Missouri main analysis employment findings may be inconclusive. However, the difference in impacts in Missouri may be due to the different populations used in the main analysis (all ABAWDs) and sensitivity analysis (ABAWDs ages 47 to 49).⁶⁰ Taken together, the results from the main analysis and sensitivity analysis provide no evidence of improved employment due to ABAWD time limit reinstatement in Colorado or Pennsylvania.

⁵⁹ The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -1.2966 to -1.2455 and is -1.412 to -1.2126 for the sensitivity analysis result for Alabama. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -0.1111 to 0.0644 and is -0.3075 to 0.3109 for the sensitivity analysis result for Colorado counties that already had mandatory E&T. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -1.021 to -0.8558 and is -1.1216 to -0.6882 for the sensitivity analysis result for Maryland. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -1.3328 to -1.2632 and is -1.3121 to -1.0287 for the sensitivity analysis result for Minnesota. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -1.4006 to -1.3456 and is -1.4316 to -1.2026 for the sensitivity analysis result for Missouri. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -1.0166 to -0.0359 and is -0.5602 to -0.1805 for the sensitivity analysis result for the Oregon broad group. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -1.43 to 0.1761 and is -0.7334 to -0.0467 for the sensitivity analysis result for the Oregon narrow group. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -0.9157 to -0.8321 and is -1.042 to -0.7068 for the sensitivity analysis result for Pennsylvania. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -0.8804 to -0.4573 and is -1.0634 to -0.4613 for the sensitivity analysis result for Tennessee. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -1.418 to -1.269 and is -1.5017 to -0.8456 for the sensitivity analysis result for Vermont.

⁶⁰ The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -0.3015 to -0.096 and is -0.1529 to 0.7144 for the sensitivity analysis result for Colorado counties that already had mandatory E&T. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -0.1222 to -0.0649 and is 0.023 to 0.2949 for the sensitivity analysis result for Missouri. The 95 percent confidence interval for the logistic coefficient impact of the main analysis result is -0.1297 to -0.0371 and is -0.1832 to 0.2344 for the sensitivity analysis result for Pennsylvania.

FIGURE 32

Impact of the ABAWD Time Limit on SNAP Participation in the Twelfth Month of Time Limit Reinstatement: Sensitivity Analysis and Main Analysis, by State and Oregon Sample



Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont and UI wage records from Colorado, Missouri, and Pennsylvania.

Population for Main Analysis: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Population for Sensitivity Analysis: ABAWDs ages 45 to 47 and SNAP participants ages 50 to 52 who are just above the ABAWD age limit but otherwise meet the ABAWD criteria.

Cohorts and Periods Covered: Alabama, Colorado, Maryland, Missouri, Oregon, and Tennessee: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016. The twelfth month of time limit reinstatement is December 2016.

Minnesota: The time limit cohort includes ABAWDs on SNAP in July 2013. The comparison cohort includes ABAWDs on SNAP in July 2012. The time limit went into effect on November 1, 2013. The twelfth month of time limit reinstatement is October 2014.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016. The twelfth month of time limit reinstatement is February 2017.

Vermont: The time limit cohort includes ABAWDs on SNAP in August 2013. The comparison cohort includes ABAWDs on SNAP in August 2012. The time limit went into effect on November 1, 2013. The twelfth month of time limit reinstatement is October 2014.

Dependent variable: SNAP participation in the twelfth month of the 12-month observation period. Time limit cohort participation reflects the twelfth month of time limit reinstatement. Comparison cohort participation is estimated for the corresponding month, one year earlier.

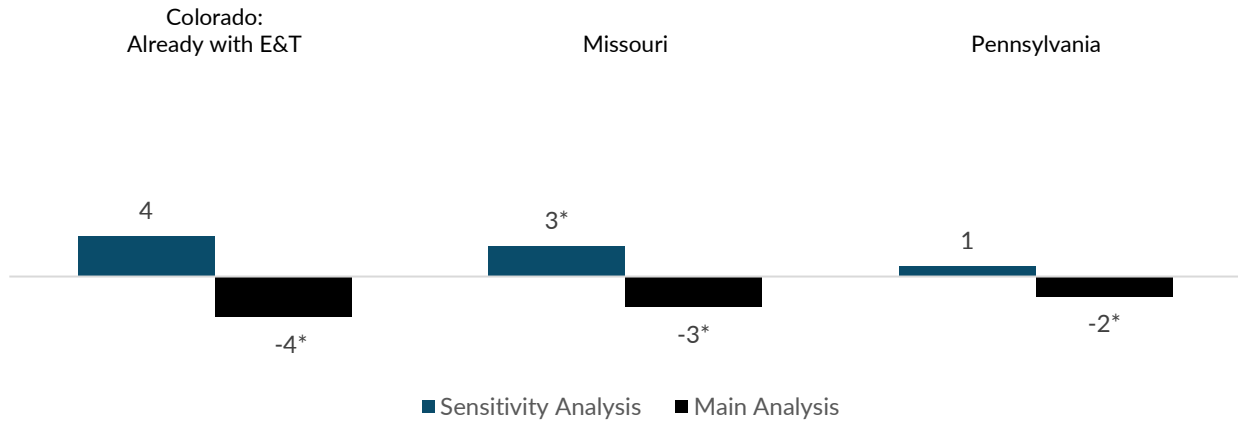
Notes: Estimates are differences in predicted probabilities of SNAP participation from logit models for each State that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Alabama, Colorado, Maryland, Oregon and Tennessee), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (only available in Colorado, Missouri, and Pennsylvania; four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban (not included for Maryland, Oregon, or Vermont), and an indicator for border county (not included for Oregon). Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated.

The sensitivity analysis uses a difference-in-difference approach that compares outcomes for ABAWDs ages 45 to 47 with those who are just above the ABAWD age limit.

* Denotes statistically significant differences between time limit and comparison cohorts at the 0.05 level, using two-tailed tests.

FIGURE 33

Impact of the ABAWD Time Limit on Employment in the Fourth Quarter of Time Limit Reinstatement: Sensitivity Analysis and Main Analysis, by State



Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Population for Main Analysis: SNAP participants ages 18 to 47 potentially subject to the ABAWD time limit (referred to as ABAWDs in the following notes) living in areas where the time limit was reinstated and remained in effect for the remainder of the analysis period.

Population for Sensitivity Analysis: ABAWDs ages 45 to 47 and SNAP participants ages 50 to 52 who are just above the ABAWD age limit but otherwise meet the ABAWD criteria.

Cohorts and Periods Covered: Colorado and Missouri: The time limit cohort includes ABAWDs on SNAP in October 2015. The comparison cohort includes ABAWDs on SNAP in October 2014. The time limit went into effect on January 1, 2016, and the fourth quarter of time limit reinstatement is October to December 2016.

Pennsylvania: The time limit cohort includes ABAWDs on SNAP in January 2016. The comparison cohort includes ABAWDs on SNAP in January 2015. The time limit went into effect on March 1, 2016, and the fourth quarter of time limit reinstatement is January to March 2017.

Dependent variable: Employed in the quarter, defined as having quarterly earnings over \$100 according to UI wage data. Time limit cohort employment is estimated in the fourth quarter of time limit reinstatement. Comparison cohort participation is estimated for the same quarter, one year earlier.

Notes: Estimates are differences in predicted probabilities of employment from separate logit models that include the following covariates: age, gender, race/ethnicity (excluded in Colorado due to high missing rate), education level (not available in Colorado), single person household, proportion of the three quarters prior to the observation window on SNAP (four quarters used in Pennsylvania), proportion of the three quarters prior to the observation window employed (four quarters used in Pennsylvania), local unemployment rate, local poverty rate, rural/urban, and an indicator for border county. Colorado counties “already with E&T” already had mandatory E&T when the ABAWD time limit was reinstated. The sensitivity analysis uses a difference-in-difference approach that compares outcomes for ABAWDs ages 45 to 47 with those who are just above the ABAWD age limit.

* Denotes statistically significant differences at the 0.05 level, using two-tailed tests.

Limitations

We considered several possible limitations of the multivariate analysis: the study design, the influence of mandatory E&T policies, the ABAWD definition, the source of earnings data, and the generalizability of the findings.

Pre-Post Design

We chose a pre-post design rather than comparing outcomes for waived and nonwaived parts of the State because economic circumstances in the waived areas are by definition worse, and it would be difficult to separate the effect of the better economy in the areas subject to time limit from the effect of the time limit. Also, the time limit was reinstated Statewide in Missouri and for most areas of Alabama, Minnesota, and Vermont.

To identify the impacts of the reinstatement of the ABAWD time limit, this study examined a cohort of ABAWDS who were on SNAP just prior to the ABAWD time limit reinstatement and compared their outcomes to a cohort of ABAWDs who were on SNAP in the prior year when waivers were in effect. Potential differences between the time limit and comparison cohorts were accounted for using regression analysis; however, it is possible that unobserved differences may remain that could bias the impact estimates. To investigate this possible limitation, sensitivity analyses were performed using a more rigorous design approach that uses DID methods to compare changes in outcomes for ABAWDs ages 45 to 47 with changes in outcomes (if any) for participants just above the ABAWD age limit who otherwise meet the ABAWD criteria. Although the results of the sensitivity analysis for employment outcomes differ somewhat from the main analysis, the results from the sensitivity analysis are generally consistent with the main analysis results for SNAP participation. Taken together, the results of the main analysis and sensitivity analysis provide no evidence of improved employment due to ABAWD time limit reinstatement in Colorado or Pennsylvania and inconclusive results in Missouri.

Mandatory E&T Policies

We examine States with voluntary and mandatory E&T programs and include States that changed status during the study period. However, our methods do not enable us to examine the interactions of mandatory E&T requirements and ABAWD time limit reinstatement.

Mandatory E&T policies can affect the impact of the ABAWD time limit in two ways. First, if mandatory E&T policies are already in place when the ABAWD time limit is reinstated, then the time limit may have a smaller effect because some ABAWDs will have already left SNAP due to sanctions for noncompliance with mandatory E&T requirements. Those that remain, by definition, are more likely to be working or participating in E&T and may be more likely to meet the ABAWD work requirement. Second, if a State implements mandatory E&T at the same time as the ABAWD time limit, then some ABAWDs may leave SNAP even before the ABAWD time limit is reached, due to sanctions for noncompliance with mandatory E&T.

Although mandatory E&T policies can be expected to affect the impact of the ABAWD time limit, the level of effect may vary, depending on the extent to which ABAWDs are referred to E&T opportunities. If a State refers relatively few ABAWDs to E&T opportunities, then relatively few will be sanctioned for noncompliance, and so the mandatory E&T policy may have little effect on the impact of ABAWD time limit reinstatement. However, if a State refers many ABAWDs to E&T, then more are likely to be sanctioned for noncompliance, potentially reducing the impact of ABAWD time limit reinstatement.

One group of Colorado counties and Oregon already had mandatory E&T when the ABAWD time limit was reinstated and retained mandatory E&T for the duration of the study period. Therefore, our estimates of the impact of ABAWD time limit reinstatement reflect the impact in a setting in which some participants may have already been removed from eligibility due to noncompliance with mandatory E&T requirements. Another group of Colorado counties, Minnesota, and Vermont simultaneously implemented mandatory E&T and the ABAWD time limit. Results for these counties and States should be interpreted as the impact of simultaneously implementing mandatory E&T and the ABAWD time limit. Alabama, Maryland, and Tennessee transitioned from mandatory to voluntary E&T a few months prior to ABAWD time limit reinstatement. In Alabama and Maryland, the comparison cohort was subject to mandatory E&T in the first eight months of the observation window, but E&T was voluntary in all months for the time limit cohort. Our methods do not control for this policy change. We avoid this limitation in Tennessee by excluding the two time-limited counties that had operated mandatory E&T from the impact analysis. Missouri and Pennsylvania had voluntary E&T programs throughout the study period.

To fully understand the implications of mandatory E&T for the estimates, we would need to know the extent to which ABAWDs in States with mandatory E&T are referred to E&T and sanctioned for noncompliance. E&T programs typically serve a small percentage of SNAP participants, though we lack

data on the extent of referral and sanction for noncompliance. This is an area that would benefit from further research.

ABAWD Definition

We defined “ABAWD” for this analysis as a SNAP participant who meets our definition for being “potentially subject to the ABAWD time limit.” We took this approach because it is only after time limit reinstatement that the data reliably identify whether someone is unfit for work or is in the first or second trimester of a pregnancy. Therefore, our definition of “ABAWD” covers a slightly broader population than ABAWDs who would be directly subject to the time limit. Nevertheless, most participants “potentially subject to the ABAWD time limit” are ABAWDs. In addition, the administrative steps required to determine whether a participant is mentally or physically unfit for work or is in the first or second trimester of pregnancy may, in some cases, cause loss of SNAP even for those who would qualify for an exemption.

Earnings Data from the UI System

As previously noted, quarterly earnings data from the UI system cover most, but not all earnings. Because of this limitation, the estimated employment outcomes presented may be somewhat lower than reality. However, there is no reason to believe that the impact estimates are biased because there is no evidence that under-coverage differs between the time limit and waiver cohorts.

Generalizability

Results from this study reflect a subset of States and counties at the point of ABAWD time limit reinstatement following the Great Recession and may not hold for other counties, States, or time periods. However, they add to a growing body of research that find that the ABAWD time limit reduces SNAP participation. The employment findings reflect the experiences of three States and for the most part support findings from other studies that the ABAWD time limit does not result in improved employment outcomes.

Conclusion

This study examines the reinstatement of the ABAWD time limit in nine States following the Great Recession. We find that reinstatement of the time limit substantially reduced SNAP participation among people subject to the ABAWD time limit but did not improve employment or earnings.

Although the ABAWD time limit was partially and temporarily suspended due to the economic downturn caused by the COVID-19 pandemic, the findings should prove relevant as the economy recovers and more areas in more States begin to implement the ABAWD time limit again. Insights from our interviews with the SNAP Regional Directors may help guide time limit reinstatement, especially if waivers are in place for an extended period and expertise is lost due to staff turnover. Our estimates of the effects of the ABAWD time limit on SNAP participation may also provide some insight, with the caveat that effects can vary across States and may play out differently in a post COVID-19 economy than in the economy following the Great Recession.

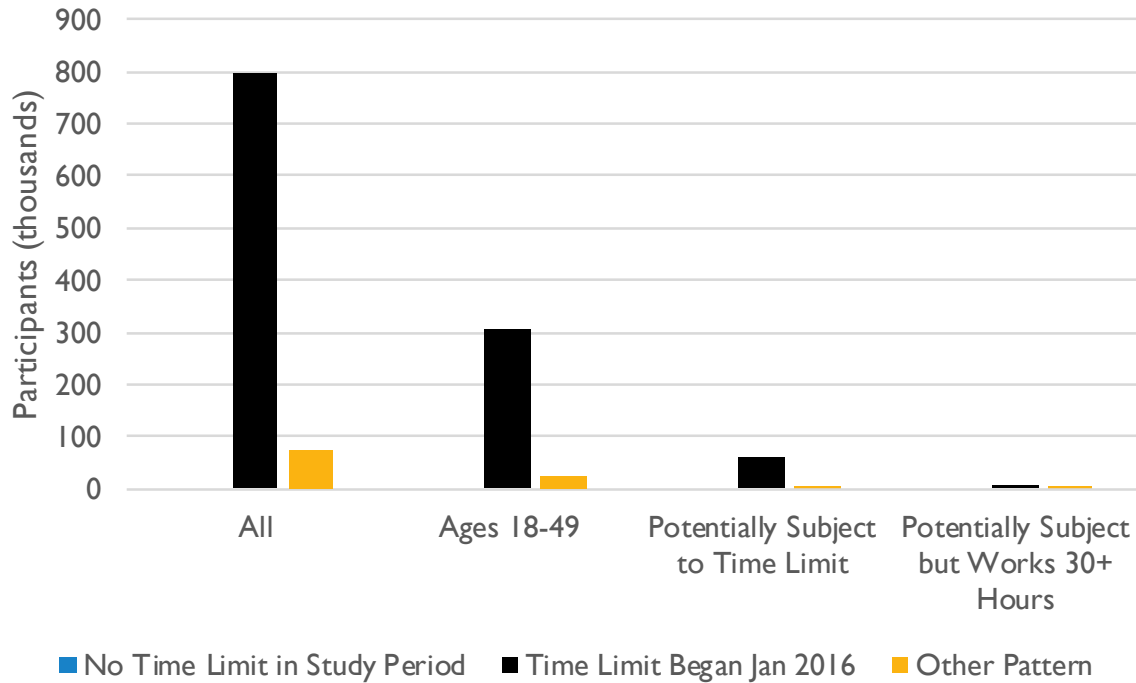
An important area for future research would be to investigate the interaction of the ABAWD time limit and E&T, especially in a mandatory E&T environment. We find relatively little effect of the ABAWD time limit on SNAP participation in Colorado counties that already had mandatory E&T. Future research could investigate whether this is because sanctions have already removed people from SNAP who do not work or meet mandatory E&T requirements, or because participants have better access to E&T or workfare opportunities with which to meet the ABAWD work requirement, or both. We find that in Colorado counties that introduced mandatory E&T and the ABAWD time limit at the same time, participation begins to fall prior to the fourth month of reinstatement, possibly due to sanctions for noncompliance with mandatory E&T. Future research could weigh the pros and cons of administering the ABAWD time limit in a mandatory E&T environment, and also investigate whether employment outcomes for participants subject to the ABAWD time limit differ depending on the nature and characteristics of a State's E&T program.

Our primary analysis finds that the ABAWD time limit has a small negative impact on employment, while our sensitivity analysis finds no statistically significant impact of the ABAWD time limit on employment among older participants (ages 47 to 49) in Colorado and Pennsylvania, and a small positive effect in Missouri. Taken together, the results from the main analysis and sensitivity analysis provide no evidence of improved employment due to ABAWD time limit reinstatement in Colorado or Pennsylvania, whereas the employment effects for Missouri are inconclusive. The employment findings reflect the experiences of three States in the aftermath of the Great Recession and may not be generalizable to other States and time periods. However, they contribute to a growing body of literature on the impact of the ABAWD time limit that will help inform future policy consideration.

Appendix 1: Alabama

ALABAMA FIGURE 1

Alabama SNAP Participants by Area Time Limit Policy within the Study Period



Source: Alabama SNAP Administrative data, January 2016.

Note: SNAP participants are tabulated based on their area of residence in January 2016. Time limit status refers to the area's status during the study period (January 2014 to July 2017). Areas with "time limit began Jan 2016" reinstated the ABAWD time limit in January 2016 and retained the time limit through the end of the study period. Areas with "other pattern" had the time limit in effect for some (but not all) months of the study period but do not fit this pattern. A participant who is "Potentially Subject to Time Limit" is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is "Potentially Subject but Works Full Time" meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements.

ALABAMA TABLE 1

Characteristics of SNAP Participants Ages 18-49, Alabama

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	In time limit area				In time limit area			
	All Adults 18-49	All	All	Subject to Time Limit	All Adults 18-49	All	All	Subject to Time Limit
Number	330,690	65,956	58,827	58,679	294,348	31,754	24,406	23,201
Mean Age	32.10	32.93	33.08	33.10	32.13	32.51	32.75	33.19
Age								
18-29	43.1%	43.4%	42.8%	42.7%	42.2%	44.2%	43.2%	41.0%
30-39	33.2%	25.1%	25.2%	25.2%	34.8%	26.3%	26.4%	27.1%
40-49	23.7%	31.4%	32.0%	32.1%	22.9%	29.4%	30.4%	31.9%
Sex								
Male	31.1%	54.9%	54.1%	54.2%	28.0%	50.5%	47.2%	49.6%
Female	68.9%	45.1%	45.9%	45.8%	72.0%	49.4%	52.7%	50.3%
Race/ethnicity								
Non-Hispanic White	44.7%	43.0%	46.4%	46.4%	44.3%	39.6%	46.9%	46.8%
Non-Hispanic Black	51.4%	53.3%	49.6%	49.6%	51.8%	56.7%	48.7%	48.9%
Hispanic/Latino	1.4%	0.8%	0.9%	0.9%	1.4%	0.7%	0.9%	0.9%
Non-Hispanic Asian or Pacific Islander	0.3%	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%	0.2%
Non-Hispanic American Indian or Alaska Native	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%	0.2%	0.2%
Other	1.3%	1.9%	2.1%	2.1%	1.2%	1.8%	2.3%	2.4%
Multiple	0.6%	0.6%	0.6%	0.6%	0.6%	0.6%	0.7%	0.7%
General work requirements								
Subject to general work requirements	38.2%	100.0%	100.0%	100.0%	32.3%	100.0%	100.0%	100.0%
Time-limited area status								
In time-limited area	91.8%	89.2%	100.0%	100.0%	90.7%	76.9%	100.0%	100.0%
Works at least 20 hours per week								
Yes	16.7%	4.3%	4.8%	4.8%	19.0%	17.1%	22.0%	23.1%
Works at least 30 hours per week								
Yes	14.9%	0.0%	0.0%	0.0%	15.7%	0.0%	0.0%	0.0%
Poverty Status								
<= 50% of poverty	58.2%	82.5%	82.1%	82.1%	54.9%	76.2%	73.4%	72.9%
>50% and <=75% of poverty	24.5%	12.3%	12.5%	12.5%	25.9%	16.8%	18.7%	19.1%
>75% and <=100% of poverty	14.5%	4.5%	4.6%	4.6%	15.8%	6.0%	6.8%	6.9%
>100% and <=130% of poverty	2.6%	0.7%	0.7%	0.7%	3.0%	0.9%	1.0%	1.0%
>130% of poverty	0.3%	0.1%	0.1%	0.1%	0.3%	0.1%	0.1%	0.1%
Data not available	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Average area poverty Rate	18.6%	19.1%	17.7%	17.7%	18.7%	20.6%	17.5%	17.5%
Average area unemp. rate	6.2%	6.4%	6.0%	6.0%	6.2%	6.8%	5.9%	5.9%

Average county density	221	218	241	241	220	202	255	257
Urban/rural status								
Noncore	17.2%	19.3%	14.0%	14.0%	17.6%	24.1%	12.5%	12.4%
Micropolitan	12.3%	13.0%	11.3%	11.3%	12.3%	13.3%	9.3%	9.2%
Small metro	22.4%	20.4%	22.3%	22.3%	22.5%	18.9%	23.1%	22.9%
Medium metro	28.0%	28.6%	31.4%	31.4%	27.6%	25.9%	32.0%	32.1%
Large fringe metro	6.6%	5.3%	5.9%	5.9%	6.7%	5.1%	6.7%	6.7%
Large central metro	13.4%	13.4%	15.0%	15.0%	13.3%	12.7%	16.5%	16.8%
Data not available	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Alabama SNAP Administrative data for January 2016 and August 2016.

Note: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

ALABAMA TABLE 2

SNAP Participants Subject to Time Limit by Characteristic, and Percent Meeting the Work Requirement, Alabama

First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement		Eighth Month of Reinstatement	
	Subject to Time Limit	Percent meeting work requirement	Subject to Time Limit	Percent meeting work requirement
Number	58,679	5%	23,201	30%
Age				
18-29	25,073	6%	9,515	28%
30-39	14,781	5%	6,283	30%
40-49	18,825	5%	7,403	32%
Sex				
Male	31,821	3%	11,513	25%
Female	26,854	8%	11,670	35%
Urban/rural status				
Noncore	8,230	4%	2,883	37%
Micropolitan	6,651	4%	2,123	27%
Small metro	13,083	7%	5,310	31%
Medium metro	18,440	6%	7,453	30%
Large fringe metro	3,458	6%	1,544	30%
Large central metro	8,817	4%	3,888	26%

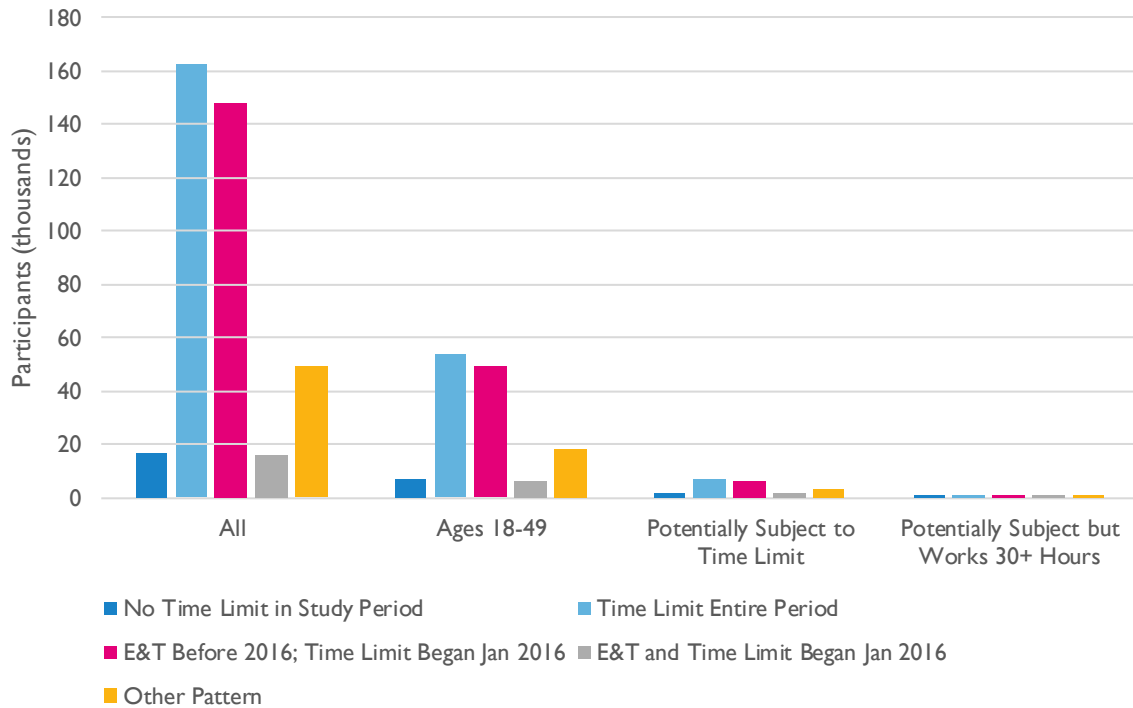
Source: Alabama SNAP Administrative data for January 2016 and August 2016.

Note: Participants who are “Subject to Time Limit” are people who are between the ages of 18 and 49, subject to the general work requirements, in a household without children under age 18, live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work. This table includes participants living in areas that reinstated the time limit in January 2016 and retained the time limit through the end of the study period.

Appendix 2: Colorado

COLORADO FIGURE 1

Colorado SNAP Participants by Area Time Limit Policy within the Study Period



Source: Colorado SNAP Administrative data, January 2016.

Note: SNAP participants are tabulated based on their area of residence in January 2016. Time limit status refers to the area’s status during the study period (January 2014 to July 2017). Areas with “E&T before 2016; time limit began Jan 2016” had mandatory employment and training programs in effect prior to January 2016, reinstated the time limit in January 2016, and retained the time limit through the end of the study period. Areas with “E&T and time limit began Jan 2016” implemented mandatory employment and training programs and the ABAWD time limit in January 2016 and retained them through the end of the study period. Areas with “other pattern” had the time limit in effect for some (but not all) months of the study period and do not fit any of the other categories. A participant who is “Potentially Subject to Time Limit” is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is “Potentially Subject but Works Full Time” meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements.

COLORADO TABLE 1

Characteristics of SNAP Participants Ages 18-49, Colorado

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

All State and Areas that Reinstated Time Limit but Had Pre-Existing Mandatory E&T

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	In Time Limit Area				In Time Limit Area			
	All Adults 18-49	All	All	Subject to Time Limit	All Adults 18-49	All	All	Subject to Time Limit
Number	133,685	17,667	5,954	5,827	129,171	16,451	5,408	5,332
Mean Age	32.48	33.12	33.02	33.21	32.53	33.35	33.29	33.42
Age								
18-29	40.1%	42.5%	43.1%	42.2%	39.8%	40.9%	41.3%	40.8%
30-39	36.3%	26.0%	26.0%	26.3%	36.9%	27.4%	26.8%	27.0%
40-49	23.5%	31.5%	30.9%	31.5%	23.3%	31.8%	31.8%	32.3%
Sex								
Male	34.2%	52.1%	49.2%	50.3%	33.7%	51.3%	47.4%	48.1%
Female	65.8%	47.9%	50.7%	49.7%	66.3%	48.7%	52.6%	51.9%
Race/ethnicity								
Non-Hispanic White	42.3%	49.2%	55.1%	55.0%	42.1%	48.9%	57.4%	57.5%
Non-Hispanic Black	9.6%	8.9%	4.5%	4.5%	9.8%	9.5%	3.8%	3.8%
Hispanic/Latino	38.3%	31.3%	29.2%	29.2%	37.3%	29.5%	25.9%	25.7%
Non-Hispanic Asian or Pacific Islander	2.2%	1.3%	1.5%	1.5%	2.2%	1.2%	1.3%	1.3%
Non-Hispanic American Indian or Alaska Native	1.1%	1.3%	1.0%	1.0%	1.1%	1.2%	1.3%	1.3%
Unknown	6.5%	8.0%	8.7%	8.7%	7.5%	9.6%	10.4%	10.5%
Homeless								
Yes	6.2%	18.4%	16.2%	16.2%	6.1%	18.0%	15.0%	15.0%
Citizenship status								
US citizen	94.5%	96.6%	96.0%	96.0%	94.8%	97.3%	97.3%	97.3%
Refugee	2.3%	1.7%	2.0%	2.0%	2.3%	1.5%	1.4%	1.4%
Other	3.0%	1.3%	1.7%	1.7%	2.8%	1.1%	1.2%	1.2%
Data not available	0.2%	0.3%	0.3%	0.3%	0.1%	0.1%	0.1%	0.1%
Marital status								
Married	26.1%	10.6%	10.8%	10.8%	26.3%	9.6%	9.7%	9.7%
Separated	6.9%	5.7%	5.6%	5.7%	7.3%	6.3%	6.3%	6.3%
Divorced	9.3%	11.4%	12.5%	12.7%	9.8%	12.1%	13.8%	13.9%
Widowed	0.8%	0.8%	0.8%	0.8%	0.8%	0.9%	0.8%	0.8%
Never married	48.9%	63.1%	64.7%	64.5%	50.9%	65.8%	65.2%	65.0%
Data not available	8.0%	8.5%	5.5%	5.5%	4.7%	5.3%	4.1%	4.2%
Pregnancy status								
Pregnant	1.8%	1.9%	2.1%	0.0%	1.2%	1.2%	1.4%	0.0%
General work requirements								
Subject to general work requirements	41.2%	100.0%	100.0%	100.0%	39.8%	100.0%	100.0%	100.0%
Time-limited area status								

In time-limited area	94.7%	92.2%	100.0%	100.0%	94.5%	91.8%	100.0%	100.0%
Works at least 20 hours per week								
Yes	27.1%	14.6%	15.9%	16.0%	27.6%	15.3%	17.2%	17.2%
Works at least 30 hours per week								
Yes	18.2%	0.0%	0.0%	0.0%	18.7%	0.0%	0.0%	0.0%
Monthly Income								
No income	40.3%	59.3%	58.2%	58.2%	38.8%	58.3%	54.3%	54.0%
Has earned income	37.9%	35.4%	36.8%	36.7%	38.3%	36.2%	40.6%	40.8%
Median earnings (excluding 0s)	\$1,105	\$628	\$650	\$654	\$1,136	\$650	\$651	\$650
Has unearned income	25.1%	6.1%	6.1%	6.1%	27.0%	6.4%	6.2%	6.3%
Median unearned income (excluding 0s)	\$733	\$156	\$200	\$200	\$733	\$140	\$200	\$200
Poverty Status								
<= 50% of poverty	43.8%	70.2%	68.5%	68.4%	42.6%	69.9%	66.2%	66.2%
>50% and <=75% of poverty	19.8%	10.6%	10.9%	10.8%	18.8%	10.1%	11.2%	11.2%
>75% and <=100% of poverty	19.1%	11.5%	12.3%	12.4%	18.4%	11.7%	12.9%	12.9%
>100% and <=130% of poverty	15.7%	7.1%	7.7%	7.8%	15.6%	7.6%	8.9%	8.9%
>130% of poverty	1.6%	0.5%	0.6%	0.6%	4.6%	0.6%	0.8%	0.8%
Data not available	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Average area poverty Rate	13.1%	13.5%	11.2%	11.2%	13.1%	13.6%	11.3%	11.2%
Average area unemp. rate	3.6%	3.6%	3.4%	3.4%	3.6%	3.6%	3.5%	3.5%
Average county density	826	854	293	294	838	940	292	293
Urban/rural status								
Noncore	9.9%	12.8%	4.0%	4.0%	9.8%	12.0%	4.4%	4.4%
Micropolitan	6.3%	7.9%	7.5%	7.6%	6.0%	6.8%	6.6%	6.6%
Small metro	12.8%	13.9%	11.8%	11.7%	13.4%	14.9%	13.7%	13.7%
Medium metro	28.7%	27.3%	36.1%	36.2%	28.4%	27.0%	36.9%	37.0%
Large fringe metro	27.1%	21.3%	40.5%	40.5%	26.9%	20.5%	38.4%	38.4%
Large central metro	15.2%	16.9%	0.0%	0.0%	15.5%	19.0%	0.0%	0.0%

Source: Colorado SNAP Administrative data, for January 2016 and August 2016.

Note: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

COLORADO TABLE 2

Characteristics of SNAP Participants Ages 18-49, Colorado

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

All State and Areas that Reinstated Time Limit and Implemented Mandatory E&T

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	In Time Limit Area				In Time Limit Area			
	All Adults 18-49	All	All	Subject to Time Limit	All Adults 18-49	All	All	Subject to Time Limit
Number	133,685	17,667	1,161	1,144	129,171	16,451	717	712
Mean Age	32.48	33.12	32.70	32.81	32.53	33.35	33.89	33.96
Age								
18-29	40.1%	42.5%	43.8%	43.3%	39.8%	40.9%	38.1%	37.6%
30-39	36.3%	26.0%	27.8%	28.1%	36.9%	27.4%	28.5%	28.7%
40-49	23.5%	31.5%	28.3%	28.7%	23.3%	31.8%	33.5%	33.7%
Sex								
Male	34.2%	52.1%	55.6%	56.4%	33.7%	51.3%	52.4%	52.8%
Female	65.8%	47.9%	44.4%	43.6%	66.3%	48.7%	47.6%	47.2%
Unknown	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Race/ethnicity								
Non-Hispanic White	42.3%	49.2%	74.3%	74.7%	42.1%	48.9%	75.3%	75.6%
Non-Hispanic Black	9.6%	8.9%	1.4%	1.4%	9.8%	9.5%	2.2%	2.2%
Hispanic/Latino	38.3%	31.3%	15.6%	15.0%	37.3%	29.5%	13.0%	12.9%
Non-Hispanic Asian or Pacific Islander	2.2%	1.3%	0.4%	0.4%	2.2%	1.2%	0.7%	0.7%
Non-Hispanic American Indian or Alaska Native	1.1%	1.3%	0.5%	0.5%	1.1%	1.2%	0.4%	0.4%
Unknown	6.5%	8.0%	7.8%	7.9%	7.5%	9.6%	8.4%	8.1%
Homeless								
Yes	6.2%	18.4%	11.1%	11.1%	6.1%	18.0%	9.3%	9.3%
Citizenship status								
US citizen	94.5%	96.6%	97.3%	97.4%	94.8%	97.3%	96.8%	96.9%
Refugee	2.3%	1.7%	0.7%	0.7%	2.3%	1.5%	1.1%	1.1%
Other	3.0%	1.3%	1.4%	1.3%	2.8%	1.1%	1.7%	1.5%
Data not available	0.2%	0.3%	0.6%	0.6%	0.1%	0.1%	0.4%	0.4%
Marital status								
Married	26.1%	10.6%	10.9%	10.8%	26.3%	9.6%	13.4%	13.5%
Separated	6.9%	5.7%	4.8%	4.9%	7.3%	6.3%	5.6%	5.5%
Divorced	9.3%	11.4%	11.6%	11.7%	9.8%	12.1%	10.9%	11.0%
Widowed	0.8%	0.8%	0.6%	0.6%	0.8%	0.9%	0.8%	0.8%
Never married	48.9%	63.1%	60.6%	60.4%	50.9%	65.8%	60.7%	60.5%
Data not available	8.0%	8.5%	11.5%	11.6%	4.7%	5.3%	8.6%	8.7%
Pregnancy status								
Pregnant	1.8%	1.9%	1.5%	0.0%	1.2%	1.2%	0.7%	0.0%
General work requirements								
Subject to general work requirements	41.2%	100.0%	100.0%	100.0%	39.8%	100.0%	100.0%	100.0%
Time-limited area status								
In time-limited area	94.7%	92.2%	100.0%	100.0%	94.5%	91.8%	100.0%	100.0%

Works at least 20 hours per week									
Yes	27.1%	14.6%	14.2%	14.3%	27.6%	15.3%	19.0%	19.0%	
Works at least 30 hours per week									
Yes	18.2%	0.0%	0.0%	0.0%	18.7%	0.0%	0.0%	0.0%	
Monthly Income									
No income	40.3%	59.3%	58.7%	58.6%	38.8%	58.3%	54.4%	54.5%	
Has earned income	37.9%	35.4%	36.0%	36.1%	38.3%	36.2%	40.7%	40.6%	
Median earnings (excluding 0s)	\$1,105	\$628	\$635	\$640	\$1,136	\$650	\$713	\$713	
Has unearned income	25.1%	6.1%	5.9%	5.9%	27.0%	6.4%	5.4%	5.5%	
Median unearned income (excluding 0s)	\$733	\$156	\$200	\$200	\$733	\$140	\$152	\$152	
Poverty Status									
<= 50% of poverty	43.8%	70.2%	67.7%	67.6%	42.6%	69.9%	64.3%	64.5%	
>50% and <=75% of poverty	19.8%	10.6%	12.5%	12.7%	18.8%	10.1%	10.6%	10.5%	
>75% and <=100% of poverty	19.1%	11.5%	11.7%	11.9%	18.4%	11.7%	13.9%	14.0%	
>100% and <=130% of poverty	15.7%	7.1%	7.4%	7.3%	15.6%	7.6%	10.3%	10.1%	
>130% of poverty	1.6%	0.5%	0.7%	0.6%	4.6%	0.6%	0.8%	0.8%	
Average area poverty Rate	13.1%	13.5%	9.6%	9.7%	13.1%	13.6%	9.0%	9.0%	
Average area unemp. rate	3.6%	3.6%	3.1%	3.1%	3.6%	3.6%	3.1%	3.1%	
Average county density	826	854	63	62	838	940	78	78	
Urban/rural status									
Noncore	9.9%	12.8%	17.0%	17.0%	9.8%	12.0%	12.8%	12.8%	
Micropolitan	6.3%	7.9%	44.4%	44.6%	6.0%	6.8%	44.2%	44.1%	
Small metro	12.8%	13.9%	0.0%	0.0%	13.4%	14.9%	0.0%	0.0%	
Medium metro	28.7%	27.3%	15.1%	15.2%	28.4%	27.0%	14.2%	14.3%	
Large fringe metro	27.1%	21.3%	23.5%	23.2%	26.9%	20.5%	28.7%	28.8%	
Large central metro	15.2%	16.9%	0.0%	0.0%	15.5%	19.0%	0.0%	0.0%	

Source: Colorado SNAP Administrative data for January 2016 and August 2016.

Note: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

COLORADO TABLE 3

Characteristics of SNAP Participants Ages 18-49, Colorado

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

All State and Areas Always Time-limited

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	In Time Limit Area				In Time Limit Area			
	All Adults 18-49	All	All	Subject to Time Limit	All Adults 18-49	All	All	Subject to Time Limit
Number	133,685	17,667	6,541	6,413	129,171	16,451	6,591	6,513
Mean Age	32.48	33.12	33.30	33.48	32.53	33.35	33.35	33.43
Age								
18-29	40.1%	42.5%	41.3%	40.5%	39.8%	40.9%	40.9%	40.4%
30-39	36.3%	26.0%	26.6%	26.8%	36.9%	27.4%	28.0%	28.1%
40-49	23.5%	31.5%	32.1%	32.7%	23.3%	31.8%	31.1%	31.5%
Sex								
Male	34.2%	52.1%	52.3%	53.3%	33.7%	51.3%	51.7%	52.3%
Female	65.8%	47.9%	47.7%	46.6%	66.3%	48.7%	48.3%	47.7%
Race/ethnicity								
Non-Hispanic White	42.3%	49.2%	42.4%	42.6%	42.1%	48.9%	41.5%	41.5%
Non-Hispanic Black	9.6%	8.9%	18.6%	18.5%	9.8%	9.5%	19.3%	19.3%
Hispanic/Latino	38.3%	31.3%	27.7%	27.5%	37.3%	29.5%	26.0%	25.8%
Non-Hispanic Asian or Pacific Islander	2.2%	1.3%	1.6%	1.6%	2.2%	1.2%	1.6%	1.6%
Non-Hispanic American Indian or Alaska Native	1.1%	1.3%	1.3%	1.3%	1.1%	1.2%	1.0%	1.0%
Unknown	6.5%	8.0%	8.4%	8.5%	7.5%	9.6%	10.6%	10.6%
Homeless								
Yes	6.2%	18.4%	24.4%	24.4%	6.1%	18.0%	23.6%	23.6%
Citizenship status								
US citizen	94.5%	96.6%	95.8%	95.8%	94.8%	97.3%	96.3%	96.3%
Refugee	2.3%	1.7%	2.6%	2.5%	2.3%	1.5%	2.2%	2.2%
Other	3.0%	1.3%	1.3%	1.4%	2.8%	1.1%	1.4%	1.4%
Data not available	0.2%	0.3%	0.4%	0.3%	0.1%	0.1%	0.1%	0.1%
Marital status								
Married	26.1%	10.6%	8.8%	8.7%	26.3%	9.6%	7.8%	7.8%
Separated	6.9%	5.7%	5.7%	5.7%	7.3%	6.3%	6.2%	6.2%
Divorced	9.3%	11.4%	10.2%	10.3%	9.8%	12.1%	10.8%	10.9%
Widowed	0.8%	0.8%	0.9%	0.9%	0.8%	0.9%	0.9%	0.9%
Never married	48.9%	63.1%	65.8%	65.6%	50.9%	65.8%	68.3%	68.2%
Data not available	8.0%	8.5%	8.6%	8.7%	4.7%	5.3%	6.0%	6.0%
Pregnancy status								
Pregnant	1.8%	1.9%	2.0%	0.0%	1.2%	1.2%	1.2%	0.0%
General work requirements								
Subject to general work requirements	41.2%	100.0%	100.0%	100.0%	39.8%	100.0%	100.0%	100.0%
Time-limited area status								
In time-limited area	94.7%	92.2%	100.0%	100.0%	94.5%	91.8%	100.0%	100.0%

Not in time-limited area	5.3%	7.8%	0.0%	0.0%	5.5%	8.2%	0.0%	0.0%
Works at least 20 hours per week								
Yes	27.1%	14.6%	15.3%	15.3%	27.6%	15.3%	15.1%	15.1%
Works at least 30 hours per week								
Yes	18.2%	0.0%	0.0%	0.0%	18.7%	0.0%	0.0%	0.0%
Monthly Income								
No income	40.3%	59.3%	59.1%	59.1%	38.8%	58.3%	59.1%	59.1%
Has earned income	37.9%	35.4%	35.1%	35.0%	38.3%	36.2%	34.4%	34.4%
Median earnings (excluding 0s)	\$1,105	\$628	\$650	\$650	\$1,136	\$650	\$664	\$666
Has unearned income	25.1%	6.1%	6.5%	6.6%	27.0%	6.4%	7.4%	7.4%
Median unearned income (excluding 0s)	\$733	\$156	\$110	\$114	\$733	\$140	\$100	\$100
Poverty Status								
<= 50% of poverty	43.8%	70.2%	71.6%	71.6%	42.6%	69.9%	72.2%	72.2%
>50% and <=75% of poverty	19.8%	10.6%	9.4%	9.5%	18.8%	10.1%	9.0%	9.0%
>75% and <=100% of poverty	19.1%	11.5%	11.3%	11.3%	18.4%	11.7%	11.2%	11.3%
>100% and <=130% of poverty	15.7%	7.1%	7.1%	7.1%	15.6%	7.6%	7.0%	7.0%
>130% of poverty	1.6%	0.5%	0.5%	0.5%	4.6%	0.6%	0.5%	0.5%
Data not available	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Average area poverty Rate	13.1%	13.5%	12.3%	12.3%	13.1%	13.6%	12.4%	12.4%
Average area unemp. rate	3.6%	3.6%	3.3%	3.3%	3.6%	3.6%	3.3%	3.3%
Average county density	826	854	2,005	2,008	838	940	2,074	2,073
Urban/rural status								
Noncore	9.9%	12.8%	0.0%	0.0%	9.8%	12.0%	0.0%	0.0%
Micropolitan	6.3%	7.9%	1.3%	1.2%	6.0%	6.8%	1.4%	1.4%
Small metro	12.8%	13.9%	0.0%	0.0%	13.4%	14.9%	0.0%	0.0%
Medium metro	28.7%	27.3%	38.0%	38.1%	28.4%	27.0%	35.4%	35.4%
Large fringe metro	27.1%	21.3%	15.2%	15.1%	26.9%	20.5%	15.9%	15.9%
Large central metro	15.2%	16.9%	45.5%	45.6%	15.5%	19.0%	47.3%	47.3%

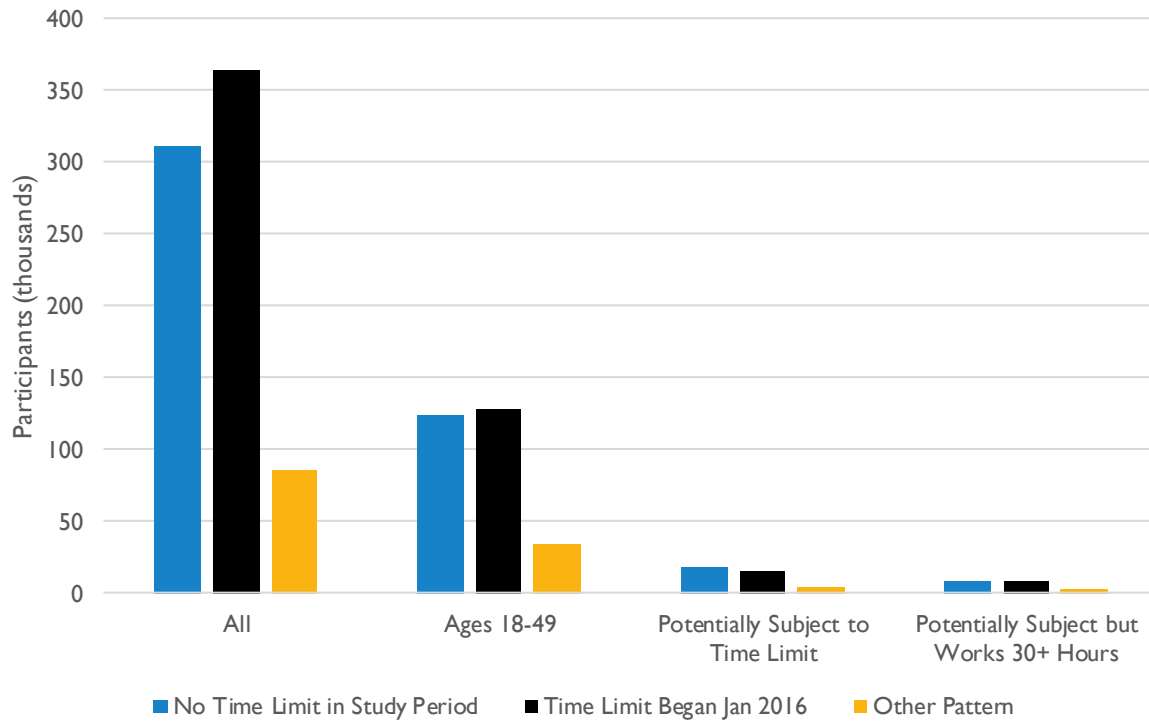
Source: Colorado SNAP Administrative data, for January 2016 and August 2016.

Note: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

Appendix 3: Maryland

MARYLAND FIGURE 1

Maryland SNAP Participants by Area Time Limit Policy within the Study Period



Source: Maryland SNAP Administrative data, January 2016.

Note: SNAP participants are tabulated based on their area of residence in January 2016. Time limit status refers to the area’s status during the study period (February 2014 to December 2017). Areas with “time limit began Jan 2016” reinstated the time limit in January 2016 and retained the time limit through the end of the study period. Areas with “other pattern” had the time limit in effect for some (but not all) months of the study period but do not fit this pattern. A participant who is “Potentially Subject to Time Limit” is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is “Potentially Subject but Works Full Time” meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements.

MARYLAND TABLE 1

Characteristics of SNAP Participants Ages 18-49, Maryland

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	In time limit area				In time limit area			
	All Adults 18-49	All	All	Subject to Time Limit	All Adults 18-49	All	All	Subject to Time Limit
Number	285,720	38,871	15,396	14,967	261,292	31,261	8,933	8,422
Mean Age	32.35	33.55	33.57	33.81	32.42	33.16	32.76	33.24
Age								
18-29	42.5%	40.7%	41.0%	39.9%	41.7%	42.3%	44.6%	42.4%
30-39	33.1%	28.3%	27.6%	27.8%	34.1%	28.3%	26.8%	27.4%
40-49	24.5%	31.0%	31.4%	32.3%	24.1%	29.3%	28.6%	30.2%
Sex								
Male	36.1%	63.7%	61.9%	63.7%	34.4%	63.1%	59.1%	62.7%
Female	63.9%	36.3%	38.1%	36.3%	65.6%	36.9%	40.9%	37.3%
Race/ethnicity								
Non-Hispanic White	31.0%	32.2%	29.8%	29.9%	30.7%	32.8%	32.7%	33.1%
Non-Hispanic Black	56.9%	56.9%	54.5%	54.5%	57.2%	57.5%	52.6%	52.5%
Hispanic/Latino	3.2%	1.3%	2.2%	2.2%	2.9%	1.1%	2.1%	2.0%
Non-Hispanic Asian or Pacific Islander	1.8%	1.0%	1.9%	1.9%	1.8%	1.0%	2.0%	2.0%
Non-Hispanic American Indian or Alaska Native	0.3%	0.4%	0.5%	0.5%	0.3%	0.3%	0.5%	0.5%
Unknown	6.7%	8.2%	11.1%	11.1%	7.0%	7.4%	10.1%	9.9%
Homeless								
Yes	4.9%	15.4%	15.7%	15.9%	5.4%	20.4%	28.2%	29.1%
Citizenship status								
US citizen	95.4%	97.4%	95.0%	95.1%	95.5%	97.6%	94.5%	94.5%
Other	4.6%	2.6%	5.0%	4.9%	4.5%	2.4%	5.5%	5.5%
Marital status								
Married	11.4%	4.5%	4.8%	4.8%	11.5%	4.2%	4.7%	4.7%
Separated	7.2%	7.1%	6.8%	6.9%	7.2%	6.9%	6.5%	6.6%
Divorced	4.2%	4.3%	3.6%	3.7%	4.4%	4.7%	4.2%	4.3%
Widowed	0.3%	0.3%	0.3%	0.3%	0.3%	0.4%	0.3%	0.4%
Never married	76.2%	83.0%	84.2%	84.0%	76.1%	83.2%	84.1%	83.8%
Data not available	0.6%	0.7%	0.4%	0.4%	0.6%	0.6%	0.2%	0.2%
Pregnancy status								
Pregnant	3.1%	2.3%	2.8%	0.0%	3.1%	3.3%	5.7%	0.0%
General work requirements								
Subject to general work requirements	28.7%	100.0%	100.0%	100.0%	27.8%	100.0%	100.0%	100.0%
Time-limited area status								
In time-limited area	44.9%	39.6%	100.0%	100.0%	48.4%	33.6%	100.0%	100.0%
Works at least 30 hours per week								
Yes	33.9%	0.0%	0.0%	0.0%	34.0%	0.0%	0.0%	0.0%

Poverty Status									
<= 50% of poverty	51.5%	84.8%	86.1%	86.1%	50.6%	84.1%	82.7%	82.5%	
>50% and <=75% of poverty	16.3%	7.5%	6.2%	6.2%	16.5%	7.9%	7.3%	7.4%	
>75% and <=100% of poverty	13.2%	4.3%	4.1%	4.1%	13.5%	4.5%	5.2%	5.4%	
>100% and <=130% of poverty	10.9%	2.3%	2.3%	2.3%	11.0%	2.3%	3.0%	3.0%	
>130% of poverty	8.1%	1.1%	1.2%	1.3%	8.3%	1.2%	1.7%	1.6%	
Average area poverty Rate	12.8%	13.7%	8.3%	8.3%	13.1%	14.8%	8.2%	8.2%	
Average area unemp. rate	5.1%	5.2%	4.2%	4.2%	5.1%	5.4%	4.2%	4.2%	
Average county density	2,845	3,249	1,535	1,535	2,952	3,617	1,504	1,501	
Urban/rural status									
Noncore	1.8%	1.7%	0.0%	0.0%	1.9%	2.0%	0.0%	0.0%	
Micropolitan	1.7%	1.9%	0.0%	0.0%	1.8%	2.1%	0.0%	0.0%	
Small metro	4.2%	4.6%	0.0%	0.0%	4.4%	5.9%	0.0%	0.0%	
Medium metro	8.0%	7.7%	0.0%	0.0%	8.1%	8.0%	0.0%	0.0%	
Large fringe metro	57.0%	50.6%	100.0%	100.0%	54.7%	41.6%	100.0%	100.0%	
Large central metro	27.1%	33.4%	0.0%	0.0%	29.1%	40.4%	0.0%	0.0%	

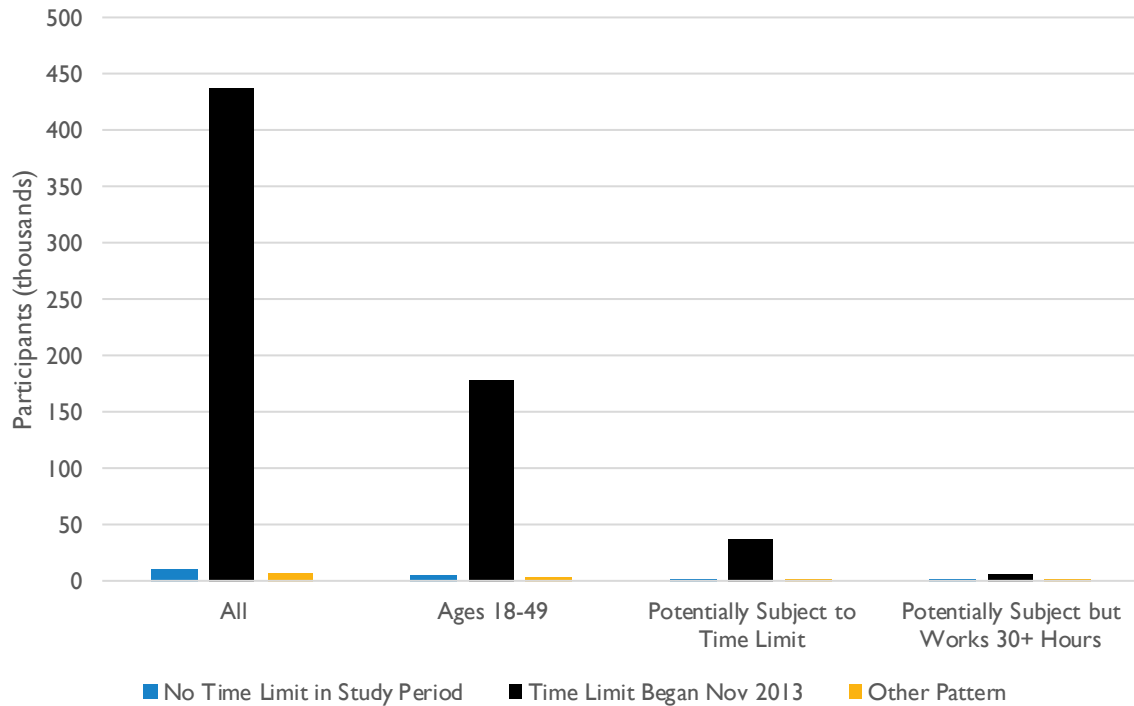
Source: Maryland SNAP Administrative data, for January 2016 and August 2016.

Note: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

Appendix 4: Minnesota

MINNESOTA FIGURE 1

Minnesota SNAP Participants by Area Time Limit Policy within the Study Period



Source: Minnesota SNAP Administrative data, November 2013.

Note: SNAP participants are tabulated based on their area of residence in November 2013. Time limit status refers to the area’s status during the study period (October 2011 to September 2015). Areas with “time limit began Nov 2013” reinstated the time limit in November 2013 and retained the time limit through the end of the study period. Areas with “other pattern” had the time limit in effect for some (but not all) months of the study period but do not fit this pattern. A participant who is “Potentially Subject to Time Limit” is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is “Potentially Subject but Works Full Time” meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements.

MINNESOTA TABLE 1

Characteristics of SNAP Participants Ages 18-49, Minnesota

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	In time limit area				In time limit area			
	All Adults 18-49	All	All	Subject to Time Limit	All Adults 18-49	All	All	Subject to Time Limit
Number	185,724	38,840	36,757	35,883	159,185	16,459	14,502	13,864
Mean Age	32.61	30.65	30.66	30.79	33.01	30.40	30.30	30.55
Age								
18-29	40.8%	53.6%	53.5%	52.8%	38.2%	54.5%	54.9%	53.6%
30-39	33.4%	23.6%	23.6%	23.9%	35.5%	24.0%	24.1%	24.7%
40-49	25.8%	22.9%	22.9%	23.3%	26.3%	21.5%	21.0%	21.8%
Sex								
Male	43.2%	63.7%	63.7%	65.1%	39.6%	58.7%	58.6%	61.1%
Female	56.8%	36.3%	36.3%	34.9%	60.4%	41.3%	41.4%	38.9%
Race/ethnicity								
Non-Hispanic White	55.0%	50.3%	51.7%	51.6%	55.1%	49.8%	52.2%	52.2%
Non-Hispanic Black	26.8%	32.9%	34.7%	34.9%	26.1%	29.6%	33.2%	33.4%
Hispanic/Latino	4.8%	3.8%	4.0%	3.9%	5.1%	4.6%	5.0%	4.9%
Non-Hispanic Asian or Pacific Islander	6.6%	3.5%	3.7%	3.6%	6.9%	3.1%	3.5%	3.4%
Non-Hispanic American Indian or Alaska Native	4.7%	6.8%	3.4%	3.4%	4.6%	10.1%	3.4%	3.3%
Multiple	1.6%	1.8%	1.7%	1.7%	1.6%	1.9%	1.8%	1.8%
Unknown	0.6%	0.9%	0.9%	0.9%	0.6%	0.9%	1.0%	1.1%
Homeless								
Yes	10.5%	28.4%	28.4%	28.6%	7.8%	25.2%	24.8%	25.1%
No	88.7%	71.5%	71.5%	71.3%	91.4%	74.6%	75.0%	74.6%
Data not available	0.8%	0.1%	0.1%	0.1%	0.8%	0.2%	0.2%	0.2%
Educational attainment								
Less than a high school degree	25.1%	29.3%	28.5%	28.6%	24.7%	28.2%	26.5%	26.4%
High school degree	56.7%	55.9%	56.3%	56.2%	56.1%	55.9%	56.6%	56.6%
1+ Years of college	12.4%	9.4%	9.6%	9.7%	13.4%	10.4%	11.0%	11.1%
Data not available	5.7%	5.4%	5.6%	5.5%	5.8%	5.5%	5.9%	5.8%
Marital status								
Married	18.5%	3.7%	3.7%	3.6%	20.6%	3.8%	3.8%	3.6%
Separated	9.4%	6.7%	6.7%	6.8%	9.6%	6.9%	6.8%	6.9%
Divorced	8.4%	6.6%	6.6%	6.7%	8.6%	6.8%	6.9%	7.0%
Widowed	0.4%	0.3%	0.3%	0.3%	0.5%	0.4%	0.3%	0.4%
Never married	63.2%	82.6%	82.5%	82.5%	60.6%	81.8%	81.9%	81.8%
Data not available	0.0%	0.1%	0.1%	0.1%	0.1%	0.2%	0.3%	0.3%
Pregnancy status								
Pregnant	2.7%	2.0%	2.0%	0.0%	2.6%	3.8%	4.0%	0.0%
General work requirements								
Subject to general work requirements	37.3%	100.0%	100.0%	100.0%	28.2%	100.0%	100.0%	100.0%
Time-limited area status								

In time-limited area	96.1%	95.0%	100.0%	100.0%	95.8%	89.2%	100.0%	100.0%
Works at least 20 hours per week								
Yes	26.7%	6.5%	6.7%	6.6%	28.6%	11.4%	12.3%	12.4%
Works at least 30 hours per week								
Yes	19.1%	0.0%	0.0%	0.0%	20.3%	0.0%	0.0%	0.0%
Monthly Income								
No income	42.3%	75.4%	75.3%	75.5%	38.2%	69.3%	68.0%	68.2%
Has earned income	38.4%	20.7%	21.2%	21.0%	40.6%	27.2%	29.3%	29.2%
Median earnings (excluding 0s)	\$1,200	\$640	\$640	\$640	\$1,195	\$720	\$723	\$725
Has unearned income	22.2%	4.4%	4.1%	4.0%	24.4%	4.2%	3.5%	3.3%
Median unearned income (excluding 0s)	\$710	\$400	\$392	\$362	\$721	\$400	\$400	\$400
Poverty Status								
<= 50% of poverty	39.7%	78.8%	78.5%	78.8%	34.1%	71.0%	69.5%	69.7%
>50% and <=75% of poverty	15.6%	8.8%	8.9%	8.8%	13.7%	9.7%	10.1%	10.0%
>75% and <=100% of poverty	19.5%	6.2%	6.3%	6.2%	24.2%	10.0%	10.7%	10.6%
>100% and <=130% of poverty	16.3%	4.1%	4.2%	4.1%	18.0%	6.2%	6.6%	6.5%
>130% of poverty	8.9%	2.1%	2.1%	2.0%	9.7%	2.9%	3.1%	3.0%
Data not available	0.0%	0.0%	0.0%	0.0%	0.3%	0.1%	0.1%	0.1%
Average area poverty Rate	12.3%	12.6%	12.4%	12.4%	12.5%	13.1%	12.8%	12.8%
Average area unemp. rate	5.1%	5.0%	4.9%	4.9%	4.3%	4.4%	4.2%	4.1%
Average county density	1,171	1,332	1,402	1,408	1,133	1,167	1,305	1,314
Urban/rural status								
Noncore	11.2%	9.0%	8.2%	8.2%	11.5%	11.0%	9.6%	9.5%
Micropolitan	12.7%	11.8%	9.5%	9.4%	13.2%	15.6%	10.3%	10.1%
Small metro	10.7%	9.4%	9.9%	9.8%	11.3%	10.3%	11.5%	11.4%
Medium metro	5.9%	5.9%	5.6%	5.7%	5.7%	6.4%	6.1%	6.1%
Large fringe metro	18.4%	13.8%	14.1%	14.0%	19.1%	13.3%	13.6%	13.6%
Large central metro	41.1%	50.0%	52.7%	52.9%	39.2%	43.5%	48.8%	49.2%

Source: Minnesota SNAP Administrative data for November 2013 and June 2014.

Notes: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in September 2015. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

MINNESOTA TABLE 2

SNAP Participants Subject to Time Limit by Characteristic, and Percent Meeting the Work Requirement, Minnesota

First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement		Eighth Month of Reinstatement	
	Subject to Time Limit	Percent meeting work requirement	Subject to time limit	Percent meeting work requirement
Number	35,883	5%	13,864	18%
Age				
18-29	18,946	6%	7,427	19%
30-39	8,566	4%	3,420	16%
40-49	8,371	5%	3,017	20%
Sex				
Male	23,344	4%	8,466	14%
Female	12,539	8%	5,398	24%
Homeless				
Yes	10,263	2%	3,486	9%
No	25,582	6%	10,348	21%
Data not available	38	0%	30	0%
Educational attainment				
Less than a high school degree	10,251	4%	3,660	14%
High school degree	20,181	5%	7,848	19%
1+ year of college	3,470	8%	1,545	24%
Data not available	1,981	5%	811	17%
Urban/rural status				
Noncore	2,930	8%	1,311	22%
Micropolitan	3,374	8%	1,405	22%
Small metro	3,527	8%	1,585	24%
Medium metro	2,030	4%	852	21%
Large fringe metro	5,022	5%	1,888	20%
Large central metro	19,000	4%	6,823	15%

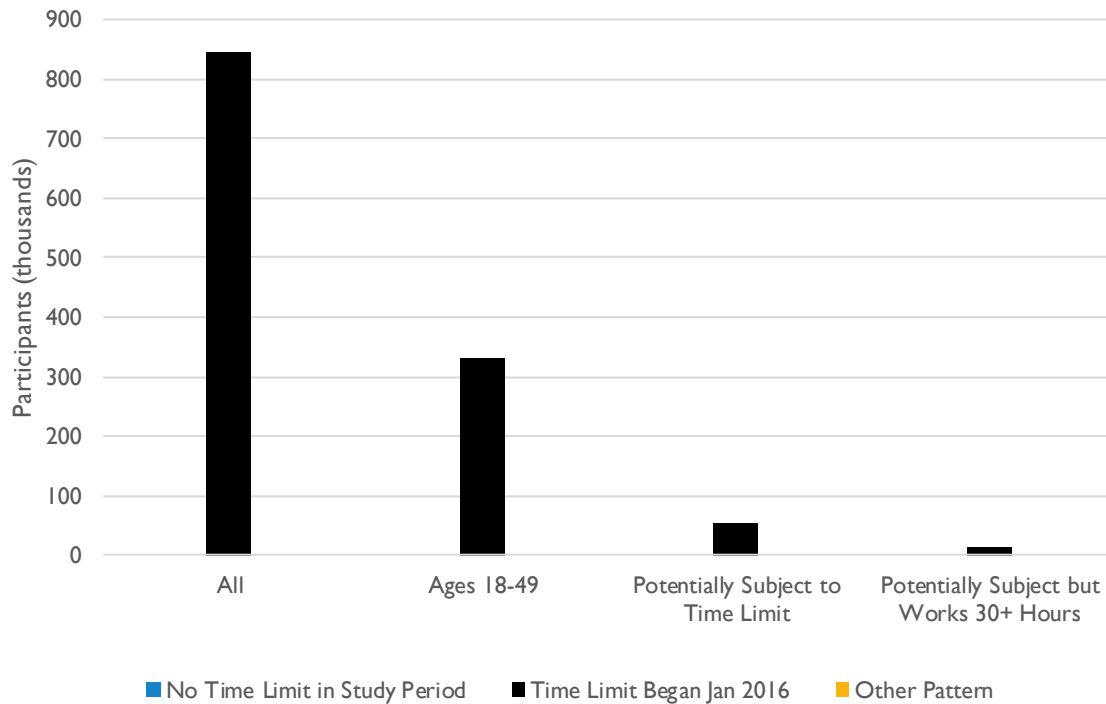
Source: Minnesota SNAP Administrative data, November 2013 and June 2014.

Note: Participants who are “Subject to Time Limit” are people who are between the ages of 18 and 49, subject to the general work requirements, in a household without children under age 18, live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work. This table includes participants living in areas that reinstated the time limit in November 2013 and retained the time limit through the end of the study period.

Appendix 5: Missouri

MISSOURI FIGURE 1

Missouri SNAP Participants by Area Time Limit Policy within the Study Period



Source: Missouri SNAP Administrative data, January 2016.

Note: SNAP participants are tabulated based on their area of residence in January 2016. Time limit status refers to the area's status during the study period (January 2014 to July 2017). Areas with "time limit began Jan 2016" reinstated the time limit in January 2016 and retained the time limit through the end of the study period. Areas with "other pattern" had the time limit in effect for some (but not all) months of the study period but do not fit this pattern. A participant who is "Potentially Subject to Time Limit" is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is "Potentially Subject but Works Full Time" meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements.

MISSOURI TABLE 1

Characteristics of SNAP Participants Ages 18-49, Missouri

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	In time limit area				In time limit area			
	All Adults 18-49	All	All	Subject to Time Limit	All Adults 18-49	All	All	Subject to Time Limit
Number	329,448	54,729	54,729	51,709	283,206	16,641	16,641	13,128
Mean Age	32.31	32.34	32.34	32.25	32.40	31.64	31.64	31.54
Age								
18-29	41.8%	45.8%	45.8%	46.1%	40.8%	48.7%	48.7%	48.7%
30-39	34.4%	25.8%	25.8%	25.9%	35.8%	24.5%	24.5%	25.3%
40-49	23.8%	28.5%	28.5%	28.0%	23.4%	26.8%	26.8%	26.1%
Sex								
Male	36.5%	60.5%	60.5%	61.6%	32.9%	52.6%	52.6%	58.1%
Female	63.5%	39.5%	39.5%	38.4%	67.1%	47.4%	47.4%	41.9%
Race/ethnicity								
Non-Hispanic White	62.1%	53.7%	53.7%	52.8%	62.9%	57.4%	57.4%	55.0%
Non-Hispanic Black	30.2%	40.0%	40.0%	41.1%	29.0%	34.9%	34.9%	37.1%
Hispanic/Latino	2.1%	1.6%	1.6%	1.6%	2.3%	2.3%	2.3%	2.4%
Non-Hispanic Asian or Pacific Islander	0.5%	0.3%	0.3%	0.3%	0.6%	0.5%	0.5%	0.5%
Non-Hispanic American Indian or Alaska Native	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Other	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%
Unknown	4.6%	4.0%	4.0%	3.9%	4.8%	4.6%	4.6%	4.6%
Homeless								
Yes	6.0%	23.1%	23.1%	23.6%	4.1%	18.8%	18.8%	20.0%
Educational attainment								
Less than a high school degree	31.0%	33.1%	33.1%	33.2%	30.1%	30.4%	30.4%	30.5%
High school degree	48.0%	49.7%	49.7%	49.8%	48.0%	50.8%	50.8%	50.9%
1 Year of college	6.5%	4.8%	4.8%	4.7%	6.7%	5.0%	5.0%	4.8%
2-3 Years of college	8.2%	5.9%	5.9%	5.8%	8.8%	6.5%	6.5%	6.5%
4+ Years of college	2.8%	2.2%	2.2%	2.2%	2.9%	2.8%	2.8%	2.8%
Data not available	3.6%	4.3%	4.3%	4.3%	3.5%	4.5%	4.5%	4.6%
Citizenship status								
US citizen	98.0%	98.6%	98.6%	98.6%	97.8%	98.0%	98.0%	97.8%
Refugee	1.1%	1.0%	1.0%	1.0%	1.3%	1.4%	1.4%	1.6%
Other	0.8%	0.4%	0.4%	0.4%	0.9%	0.5%	0.5%	0.5%
Data not available	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.1%
Marital status								
Married	16.6%	6.6%	6.6%	6.4%	17.6%	7.4%	7.4%	7.0%
Separated	4.4%	2.7%	2.7%	2.6%	4.7%	3.1%	3.1%	2.9%
Divorced	3.7%	2.7%	2.7%	2.6%	3.9%	2.9%	2.9%	2.8%
Widowed	0.2%	0.2%	0.2%	0.1%	0.2%	0.1%	0.1%	0.1%
Never married	40.9%	35.0%	35.0%	35.2%	42.4%	34.4%	34.4%	33.6%
Data not available	34.3%	52.8%	52.8%	53.0%	31.2%	52.2%	52.2%	53.6%
Pregnancy status								

Pregnant	0.5%	1.5%	1.5%	0.0%	0.9%	8.6%	8.6%	0.0%
General work requirements								
Subject to general work requirements	30.3%	100.0%	100.0%	100.0%	20.9%	100.0%	100.0%	100.0%
Time-limited area status								
In time-limited area	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Works at least 30 hours per week								
Yes	26.2%	0.0%	0.0%	0.0%	28.9%	0.0%	0.0%	0.0%
No	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Unknown	73.8%	100.0%	100.0%	100.0%	71.1%	100.0%	100.0%	100.0%
Income								
No income	46.6%	87.7%	87.7%	87.7%	43.7%	84.7%	84.7%	84.2%
Has earned income	30.4%	8.0%	8.0%	8.1%	33.2%	11.4%	11.4%	12.2%
Median earnings (excluding 0s)	\$1,142	\$353	\$353	\$350	\$1,159	\$510	\$510	\$517
Has unearned income	25.1%	4.6%	4.6%	4.5%	25.2%	4.4%	4.4%	4.0%
Median unearned income (excluding 0s)	\$733	\$150	\$150	\$150	\$733	\$200	\$200	\$200
Poverty								
<= 50% of poverty	57.8%	88.8%	88.8%	88.9%	58.0%	86.4%	86.4%	86.4%
>50% and <=75% of poverty	16.3%	6.1%	6.1%	6.1%	16.0%	6.7%	6.7%	6.7%
>75% and <=100% of poverty	14.6%	3.3%	3.3%	3.3%	14.5%	4.8%	4.8%	4.9%
>100% and <=130% of poverty	10.0%	1.6%	1.6%	1.5%	10.0%	1.9%	1.9%	1.8%
>130% of poverty	1.2%	0.2%	0.2%	0.2%	1.4%	0.3%	0.3%	0.3%
Average area poverty Rate	16.1%	16.7%	16.7%	16.8%	16.0%	16.4%	16.4%	16.5%
Average area unemp. rate	4.9%	5.0%	5.0%	5.0%	4.9%	4.9%	4.9%	4.9%
Average county density	1,089	1,495	1,495	1,524	1,023	1,270	1,270	1,325
Urban/rural status								
Noncore	16.7%	13.4%	13.4%	13.3%	16.9%	14.7%	14.7%	14.3%
Micropolitan	14.1%	12.0%	12.0%	11.8%	14.5%	13.0%	13.0%	12.6%
Small metro	11.2%	9.8%	9.8%	9.6%	11.5%	10.9%	10.9%	11.0%
Medium metro	7.9%	6.8%	6.8%	6.7%	8.1%	6.7%	6.7%	6.4%
Large fringe metro	26.1%	24.5%	24.5%	24.5%	26.2%	23.8%	23.8%	23.4%
Large central metro	24.0%	33.5%	33.5%	34.2%	22.8%	30.8%	30.8%	32.3%

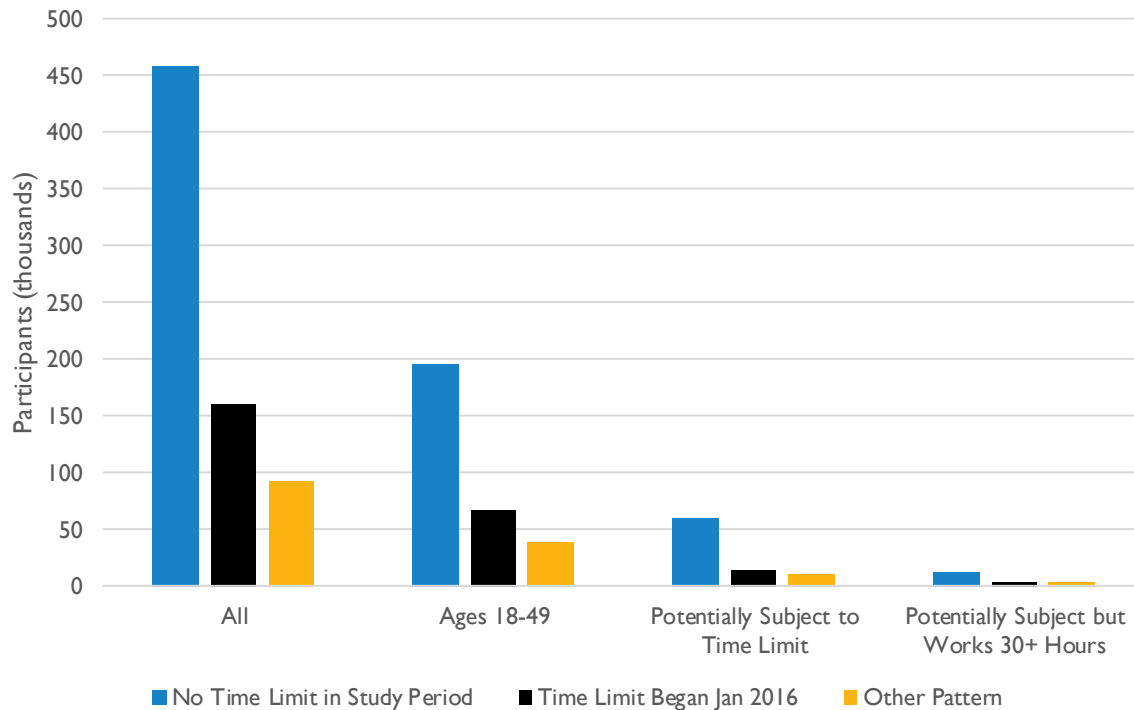
Source: Missouri SNAP Administrative data for January 2016 and August 2016.

Notes: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

Appendix 6: Oregon

OREGON FIGURE 1

Oregon SNAP Participants by Area Time Limit Policy within the Study Period



Source: Oregon SNAP Administrative data, January 2016.

Note: SNAP participants are tabulated based on their area of residence in January 2016. Time limit status refers to the area’s status during the study period (January 2014 to July 2017). Areas with “time limit began Jan 2016” reinstated the time limit in January 2016 and retained the time limit through the end of the study period. Areas with “other pattern” had the time limit in effect for some (but not all) months of the study period but do not fit this pattern. A participant who is “Potentially Subject to Time Limit” is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is “Potentially Subject but Works Full Time” meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements.

OREGON TABLE 1

Characteristics of SNAP Participants Ages 18-49, Oregon

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement	Eighth Month of Reinstatement			
	All Adults 18-49	All Adults 18-49	Potentially Subject to Time Limit		
			All	In time limit area	
			All	All	Subject to Time Limit
Number	300,131	294,547	58,651	3,168	3,139
Mean Age	32.30	32.60	31.77	30.27	30.22
Age					
18-29	42.5%	40.6%	48.2%	54.7%	54.9%
30-39	33.2%	34.1%	25.9%	27.5%	27.5%
40-49	24.3%	25.3%	25.9%	17.9%	17.6%
Sex					
Male	45.0%	43.7%	59.6%	54.0%	54.1%
Female	55.0%	56.3%	40.4%	46.0%	45.9%
Race/ethnicity					
Non-Hispanic White	75.8%	75.2%	80.1%	62.1%	62.0%
Non-Hispanic Black	4.6%	4.5%	2.6%	12.4%	12.5%
Hispanic/Latino	8.5%	8.9%	6.5%	8.4%	8.4%
Non-Hispanic Asian or Pacific Islander	2.5%	2.5%	1.4%	4.8%	4.8%
Non-Hispanic American Indian or Alaska Native	2.3%	2.5%	3.2%	1.5%	1.5%
Multiple	0.2%	0.2%	0.3%	0.3%	0.3%
Unknown	6.0%	6.2%	5.9%	10.6%	10.5%
Homeless					
Yes	12.2%	12.4%	24.9%	7.7%	7.6%
General work requirements					
Subject to general work requirements	38.2%	31.3%	100.0%	100.0%	100.0%
Time-limited area status					
In time-limited area	22.2%	20.1%	5.4%	100.0%	100.0%
Not in time-limited area	70.7%	73.4%	91.0%	0.0%	0.0%
Data not available	7.1%	6.5%	3.6%	0.0%	0.0%
Works at least 30 hours per week					
Yes	18.9%	18.7%	0.0%	0.0%	0.0%
No	0.0%	0.0%	0.0%	0.0%	0.0%
Data not available	81.1%	81.3%	100.0%	100.0%	100.0%
Poverty Status					
<= 50% of poverty	53.1%	54.0%	79.8%	69.6%	70.1%
>50% and <=75% of poverty	13.5%	13.1%	7.1%	9.0%	8.9%
>75% and <=100% of poverty	13.1%	12.6%	6.0%	10.7%	10.6%
>100% and <=130% of poverty	12.0%	11.9%	4.1%	5.8%	5.7%
>130% of poverty	8.3%	8.3%	3.0%	4.8%	4.7%
Average area poverty Rate	14.5%	14.7%	15.4%	13.0%	13.0%
Average area unemp. rate	5.0%	5.1%	5.4%	4.2%	4.2%
Average county density	481	446	178	1,488	1,490
Urban/rural status					

Noncore	2.0%	2.2%	2.9%	0.0%	0.0%
Micropolitan	15.1%	16.9%	20.9%	0.0%	0.0%
Small metro	12.2%	12.3%	16.4%	0.0%	0.0%
Medium metro	19.3%	19.0%	23.0%	0.0%	0.0%
Large fringe metro	12.0%	11.1%	9.0%	21.1%	21.0%
Large central metro	16.4%	15.0%	4.0%	73.8%	74.0%
Data not available	23.0%	23.5%	23.8%	5.0%	5.0%

Source: Oregon SNAP Administrative data for January 2016 and August 2016.

Notes: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

OREGON TABLE 2

SNAP Participants Subject to Time Limit by Characteristic, and Percent Meeting the Work Requirement, Oregon

First and Eighth Month of Time Limit Reinstatement

	First Month of Time Limit Reinstatement		Eighth Month of Time Limit Reinstatement	
	Subject to Time Limit	Percent meeting work requirement	Subject to Time Limit	Percent meeting work requirement
Number	13,019	7%	3,139	27%
Age				
18-29	6,522	7%	1,723	24%
30-39	3,921	7%	863	31%
40-49	2,576	9%	553	32%
Sex				
Male	7,989	6%	1,699	22%
Female	5,030	9%	1,440	33%
Homeless				
Yes	2,295	1%	239	10%
No	10,724	9%	2,900	29%
Urban/rural status				
Noncore	0	0%	0	0%
Micropolitan	0	0%	0	0%
Small metro	0	0%	0	0%
Medium metro	0	0%	0	0%
Large fringe metro	2,744	3%	660	22%
Large central metro	9,730	8%	2,323	29%
Data not available	545	7%	156	23%

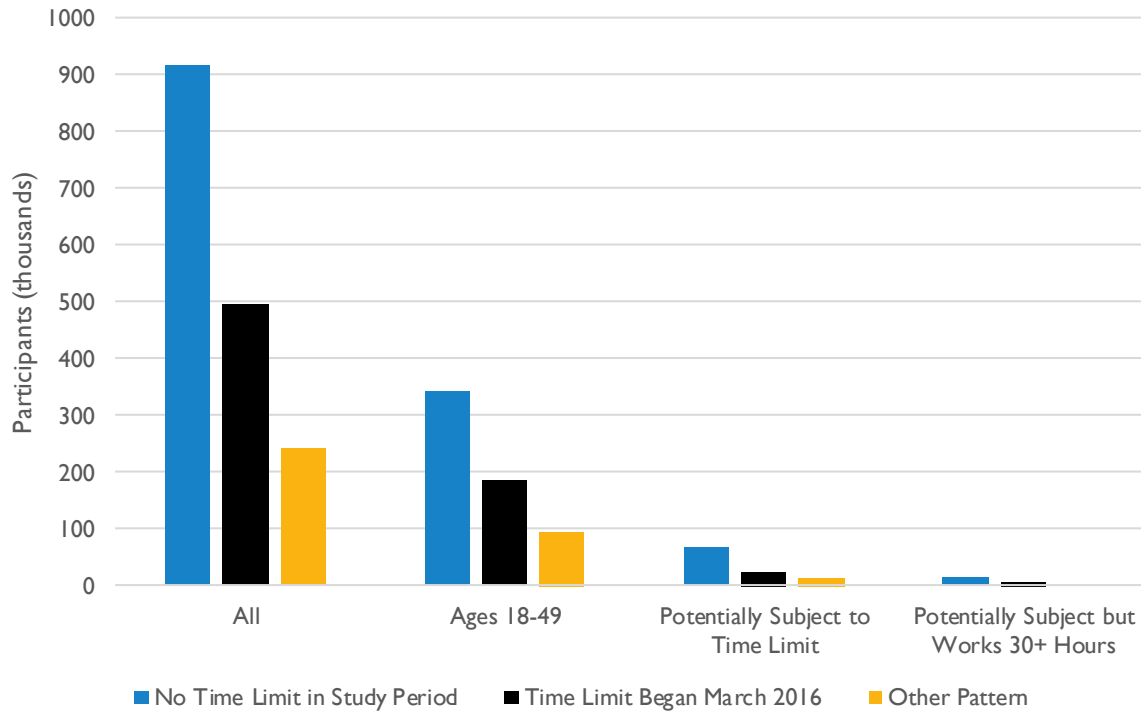
Source: Oregon SNAP Administrative data for January 2016 and August 2016.

Note: Participants who are “Subject to Time Limit” are people who are between the ages of 18 and 49, subject to the general work requirements, in a household without children under age 18, live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work. This table includes participants living in areas that reinstated the time limit in January 2016 and retained the time limit through the end of the study period.

Appendix 7: Pennsylvania

PENNSYLVANIA FIGURE 1

Pennsylvania SNAP Participants by Area Time Limit Policy within the Study Period



Source: Pennsylvania SNAP Administrative data, March 2016.

Note: SNAP participants are tabulated based on their area of residence in March 2016. Time limit status refers to the area's status during the study period (January 2014 to July 2017). Areas with "time limit began March 2016" reinstated the time limit in March 2016 and retained the time limit through the end of the study period. Areas with "other pattern" had the time limit in effect for some (but not all) months of the study period but do not fit this pattern. A participant who is "Potentially Subject to Time Limit" is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is "Potentially Subject but Works Full Time" meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements.

PENNSYLVANIA TABLE 1

Characteristics of SNAP Participants Ages 18-49, Pennsylvania

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

	First Month of Time Limit Reinstatement				Eighth Month of Time Limit Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	In time limit area				In time limit area			
	All Adults 18-49	All	All	Subject to Time Limit	All Adults 18-49	All	All	Subject to Time Limit
Number	624,208	102,845	23,165	21,011	614,865	96,239	16,335	13,438
Mean Age	32.77	32.62	32.74	32.59	32.81	32.57	32.67	32.20
Age								
18-29	40.6%	44.2%	43.5%	44.2%	40.1%	44.1%	43.5%	45.6%
30-39	33.2%	27.2%	27.6%	27.6%	34.1%	27.7%	28.2%	27.8%
40-49	26.1%	28.7%	28.8%	28.2%	25.9%	28.3%	28.4%	26.6%
Sex								
Male	37.9%	64.3%	62.0%	63.6%	37.0%	63.2%	58.7%	60.6%
Female	62.1%	35.7%	38.0%	36.4%	63.0%	36.8%	41.3%	39.4%
Race/ethnicity								
Non-Hispanic White	52.7%	49.4%	67.6%	67.1%	51.8%	46.3%	67.0%	65.1%
Non-Hispanic Black	29.9%	35.8%	23.2%	23.6%	30.1%	37.5%	22.7%	23.9%
Hispanic/Latino	13.1%	11.2%	4.8%	4.8%	13.6%	12.5%	5.7%	6.1%
Non-Hispanic Asian or Pacific Islander	1.7%	1.0%	0.9%	0.9%	1.8%	1.1%	1.0%	1.0%
Non-Hispanic American Indian or Alaska Native	0.2%	0.2%	0.3%	0.3%	0.2%	0.2%	0.3%	0.3%
Other	2.3%	2.3%	3.2%	3.3%	2.4%	2.4%	3.3%	3.5%
Educational attainment								
Less than a high school degree	18.6%	20.1%	15.9%	15.9%	18.9%	21.0%	16.4%	16.6%
High school degree or one year of college	62.0%	61.4%	59.4%	59.2%	61.6%	60.9%	59.0%	58.6%
2-3 Years of college	6.3%	4.5%	5.8%	5.7%	6.3%	4.5%	6.1%	6.1%
4+ Years of college	2.9%	2.9%	3.7%	3.7%	3.0%	2.8%	3.6%	3.7%
Data not available	10.2%	11.0%	15.2%	15.4%	10.2%	10.8%	14.9%	14.9%
Citizenship status								
US citizen	97.4%	98.5%	99.0%	98.9%	97.2%	98.3%	98.8%	98.7%
Refugee	0.7%	0.4%	0.4%	0.4%	0.7%	0.4%	0.5%	0.6%
Other	1.9%	1.1%	0.6%	0.6%	2.0%	1.2%	0.7%	0.7%
Marital status								
Married	14.8%	4.9%	5.5%	5.4%	14.7%	4.6%	5.4%	5.3%
Separated	7.3%	5.1%	5.7%	5.6%	7.1%	5.0%	5.9%	5.5%
Divorced	6.3%	5.7%	7.6%	7.3%	5.9%	5.1%	7.5%	6.8%
Widowed	0.6%	0.5%	0.6%	0.6%	0.5%	0.5%	0.6%	0.5%
Never married	71.1%	83.8%	80.5%	81.0%	71.3%	83.8%	79.2%	80.1%
Data not available	0.1%	0.0%	0.0%	0.0%	0.4%	1.0%	1.4%	1.6%
Pregnancy status								
Pregnant	3.7%	1.6%	1.8%	0.0%	3.8%	1.8%	2.4%	0.0%
General work requirements								
Subject to general work requirements	33.9%	100.0%	100.0%	100.0%	33.6%	100.0%	100.0%	100.0%

Time-limited area status									
In time-limited area	43.9%	34.5%	100.0%	100.0%	42.2%	26.1%	100.0%	100.0%	
Works at least 20 hours per week									
Yes	24.2%	8.9%	11.9%	12.8%	25.1%	11.6%	21.4%	25.5%	
Works at least 30 hours per week									
Yes	21.5%	0.0%	0.0%	0.0%	22.0%	0.0%	0.0%	0.0%	
Average area poverty Rate	15.6%	16.9%	10.1%	10.1%	15.7%	17.6%	10.1%	10.1%	
Average area unemp. rate	5.9%	6.0%	4.9%	4.9%	5.9%	6.1%	4.9%	4.9%	
Average county density	3,563	4,570	996	995	3,619	5,051	965	978	
Urban/rural status									
Noncore	2.9%	2.0%	0.4%	0.4%	2.8%	1.8%	0.4%	0.4%	
Micropolitan	8.5%	7.4%	1.6%	1.6%	8.6%	7.5%	1.8%	1.7%	
Small metro	7.7%	6.2%	9.5%	9.5%	7.8%	6.2%	9.6%	9.3%	
Medium metro	27.0%	23.3%	22.6%	22.9%	27.2%	23.0%	24.0%	25.0%	
Large fringe metro	18.5%	17.3%	34.2%	33.9%	18.0%	15.1%	33.4%	32.3%	
Large central metro	35.5%	43.8%	31.7%	31.7%	35.6%	46.5%	30.7%	31.3%	

Source: Pennsylvania SNAP Administrative data for March 2016 and October 2016.

Notes: "Time limit area" refers to areas that were time-limited beginning March 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

PENNSYLVANIA TABLE 2

SNAP Participants Subject to Time Limit by Characteristic, and Percent Meeting the Work Requirement, Pennsylvania

First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement		Eighth Month of Reinstatement	
	Subject to Time Limit	Percent meeting work requirement	Subject to Time Limit	Percent meeting work requirement
Number	21,011	12%	13,438	27%
Age				
18-29	9,277	13%	6,125	26%
30-39	5,806	11%	3,735	25%
40-49	5,928	12%	3,578	29%
Sex				
Male	13,368	9%	8,141	21%
Female	7,643	17%	5,297	34%
Educational attainment				
Less than a high school degree	3,348	9%	2,233	18%
High school degree or one year of college	12,448	12%	7,881	28%
2-3 Years of college	1,201	16%	819	32%
4+ Years of college	787	19%	500	37%
Data not available	3,227	11%	2,005	25%
Urban/rural status				
Micropolitan	329	18%	231	31%
Small metro	2,003	17%	1,250	33%
Medium metro	4,813	11%	3,365	23%
Large fringe metro	7,117	11%	4,335	26%
Large central metro	6,669	13%	4,201	28%

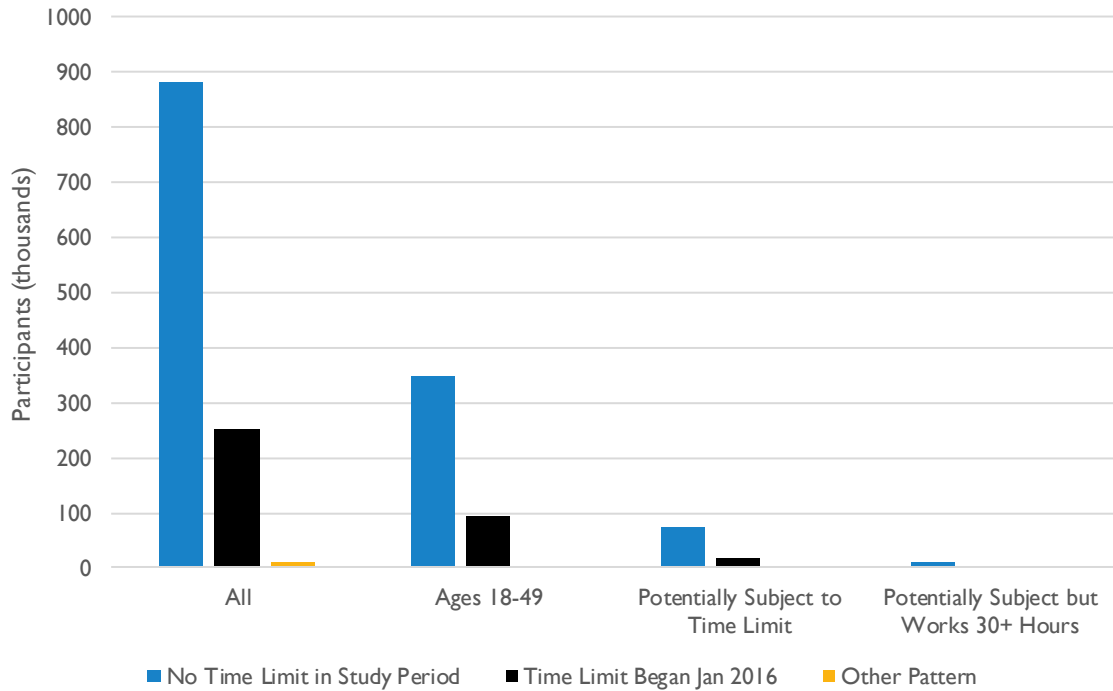
Source: Pennsylvania SNAP Administrative data for March 2016 and October 2016.

Note: Participants who are “Subject to Time Limit” are people who are between the ages of 18 and 49, subject to the general work requirements, in a household without children under age 18, live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work. This table includes participants living in areas that reinstated the time limit in March 2016 and retained the time limit through the end of the study period.

Appendix 8: Tennessee

TENNESSEE FIGURE 1

Tennessee SNAP Participants by Area Time Limit Policy within the Study Period



Source: Tennessee SNAP Administrative data, January 2016.

Note: SNAP participants are tabulated based on their area of residence in January 2016. Time limit status refers to the area’s status during the study period (January 2014 to July 2017). Areas with “time limit began January 2016” reinstated the time limit in January 2016 and retained the time limit through the end of the study period. Areas with “other pattern” had the time limit in effect for some (but not all) months of the study period but do not fit this pattern. A participant who is “Potentially Subject to Time Limit” is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is “Potentially Subject but Works Full Time” meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements. All of TN was time-limited in January and February 2016. Areas that reinstated waivers in March 2016 are counted as “waived” in January and February.

TENNESSEE TABLE 1

Characteristics of SNAP Participants Ages 18-49, Tennessee

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	All Adults 18-49	In time limit area			All Adults 18-49	In time limit area		
		All	All	Subject to Time Limit		All	All	Subject to Time Limit
Number	442,423	93,309	18,844	17,940	416,288	74,334	7,042	6,290
Mean Age	32.75	33.31	33.62	33.62	32.69	33.27	33.02	33.19
Age								
18-29	40.1%	40.6%	38.8%	38.7%	40.1%	40.5%	42.0%	41.0%
30-39	33.9%	27.9%	29.0%	29.3%	34.3%	28.4%	27.8%	28.7%
40-49	26.1%	31.6%	32.2%	32.0%	25.6%	31.1%	30.2%	30.3%
Sex								
Male	37.6%	60.2%	59.6%	61.0%	35.9%	58.5%	53.0%	56.1%
Female	62.4%	39.8%	40.4%	39.0%	64.1%	41.5%	47.0%	43.9%
Race/ethnicity								
Non-Hispanic White	63.1%	61.0%	58.4%	57.6%	62.6%	60.8%	59.4%	58.2%
Non-Hispanic Black	34.1%	37.7%	38.8%	39.5%	34.6%	38.0%	37.7%	38.7%
Hispanic/Latino	1.7%	0.8%	1.5%	1.5%	1.8%	0.8%	1.6%	1.6%
Non-Hispanic Asian or Pacific Islander	0.7%	0.3%	0.9%	0.9%	0.6%	0.2%	1.0%	1.1%
Non-Hispanic American Indian or Alaska Native	0.2%	0.1%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%
Other	0.3%	0.1%	0.3%	0.3%	0.3%	0.1%	0.2%	0.2%
Homeless								
Yes	1.0%	3.3%	7.2%	7.4%	0.7%	2.4%	5.0%	5.3%
Citizenship status								
US citizen	98.4%	99.2%	97.4%	97.4%	98.4%	99.2%	95.2%	94.9%
Refugee	0.7%	0.5%	1.9%	2.0%	0.7%	0.5%	4.0%	4.3%
Other	0.9%	0.3%	0.7%	0.7%	0.9%	0.2%	0.8%	0.8%
Marital status								
Married	19.1%	7.6%	6.2%	6.2%	19.0%	7.5%	5.7%	5.8%
Separated	9.6%	8.6%	7.5%	7.3%	9.6%	8.6%	7.2%	7.0%
Divorced	10.6%	11.5%	10.2%	10.0%	10.5%	11.4%	9.7%	9.7%
Widowed	0.7%	0.9%	0.8%	0.8%	0.7%	0.9%	0.8%	0.8%
Never married	59.9%	71.5%	75.3%	75.6%	60.2%	71.7%	76.6%	76.7%
Pregnancy status								
Pregnant	1.3%	1.6%	1.9%	0.0%	1.4%	2.2%	5.5%	0.0%
General work requirements								
Subject to general work requirements	35.9%	100.0%	100.0%	100.0%	34.0%	100.0%	100.0%	100.0%
Not subject to general work req.	59.8%	0.0%	0.0%	0.0%	63.5%	0.0%	0.0%	0.0%
Unknown	4.2%	0.0%	0.0%	0.0%	2.5%	0.0%	0.0%	0.0%
Time-limited area status								
In time-limited area	21.0%	20.2%	100.0%	100.0%	18.4%	9.5%	100.0%	100.0%
Works at least 20 hours per week								
Yes	25.1%	5.3%	5.5%	5.7%	26.4%	7.6%	19.5%	21.6%
Works at least 30 hours per week								

Yes	20.2%	0.0%	0.0%	0.0%	21.1%	0.0%	0.0%	0.0%
Monthly Income								
No income	55.9%	87.6%	89.4%	89.5%	54.8%	85.1%	80.2%	79.3%
Has earned income	27.1%	9.5%	8.1%	8.2%	28.1%	12.1%	17.3%	18.6%
Median earnings (excluding 0s)	\$1,097	\$412	\$450	\$455	\$1,099	\$446	\$673	\$679
Has unearned income	17.8%	3.1%	2.6%	2.4%	17.9%	2.9%	2.6%	2.3%
Median unearned income (excluding 0s)	\$733	\$150	\$200	\$191	\$733	\$150	\$263	\$250
Poverty Status								
<= 50% of poverty	57.3%	87.1%	89.2%	89.2%	56.4%	85.5%	82.0%	81.3%
>50% and <=75% of poverty	18.3%	7.2%	5.9%	5.9%	18.6%	8.0%	8.2%	8.4%
>75% and <=100% of poverty	14.6%	3.8%	3.2%	3.3%	14.9%	4.4%	6.9%	7.3%
>100% and <=130% of poverty	9.0%	1.7%	1.6%	1.6%	9.3%	2.0%	2.8%	2.8%
>130% of poverty	0.8%	0.1%	0.1%	0.1%	0.8%	0.2%	0.2%	0.2%
Average area poverty Rate	17.2%	17.3%	13.4%	13.4%	17.3%	17.8%	13.1%	13.1%
Average area unemp. rate	5.0%	5.1%	3.8%	3.8%	5.1%	5.2%	3.8%	3.8%
Average county density	513	539	820	826	507	498	785	794
Urban/rural status								
Noncore	13.2%	13.0%	3.0%	2.8%	13.4%	14.4%	2.5%	2.5%
Micropolitan	14.2%	13.3%	0.0%	0.0%	14.5%	15.0%	0.0%	0.0%
Small metro	8.9%	8.5%	0.0%	0.0%	9.1%	9.5%	0.0%	0.0%
Medium metro	23.2%	23.1%	28.6%	28.0%	23.2%	22.6%	28.6%	27.4%
Large fringe metro	12.6%	12.2%	29.8%	29.6%	12.2%	10.3%	34.4%	34.0%
Large central metro	27.8%	29.9%	38.6%	39.6%	27.6%	28.3%	34.5%	36.1%

Source: Tennessee SNAP Administrative data for January 2016 and August 2016.

Notes: "Time limit area" refers to areas that were time-limited beginning January 2016 through the end of our observation period in July 2017. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

TENNESSEE TABLE 2

SNAP Participants Subject to Time Limit by Characteristic, and Percent Meeting the Work Requirement, Tennessee

First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement		Eighth Month of Reinstatement	
	Subject to Time Limit	Percent meeting work requirement	Subject to Time Limit	Percent meeting work requirement
Number	17,940	7%	6,290	23%
Age				
18-29	6,940	7%	2,579	21%
30-39	5,253	6%	1,803	23%
40-49	5,747	6%	1,908	26%
Sex				
Male	10,936	6%	3,530	21%
Female	7,004	8%	2,760	25%
Homeless				
Yes	1,330	4%	331	10%
No	16,610	7%	5,959	24%
Urban/rural status				
Noncore	505	7%	158	46%
Micropolitan	0	0%	0	0%
Small metro	0	0%	0	0%
Medium metro	5,016	7%	1,723	30%
Large fringe metro	5,313	7%	2,137	28%
Large central metro	7,106	6%	2,272	12%

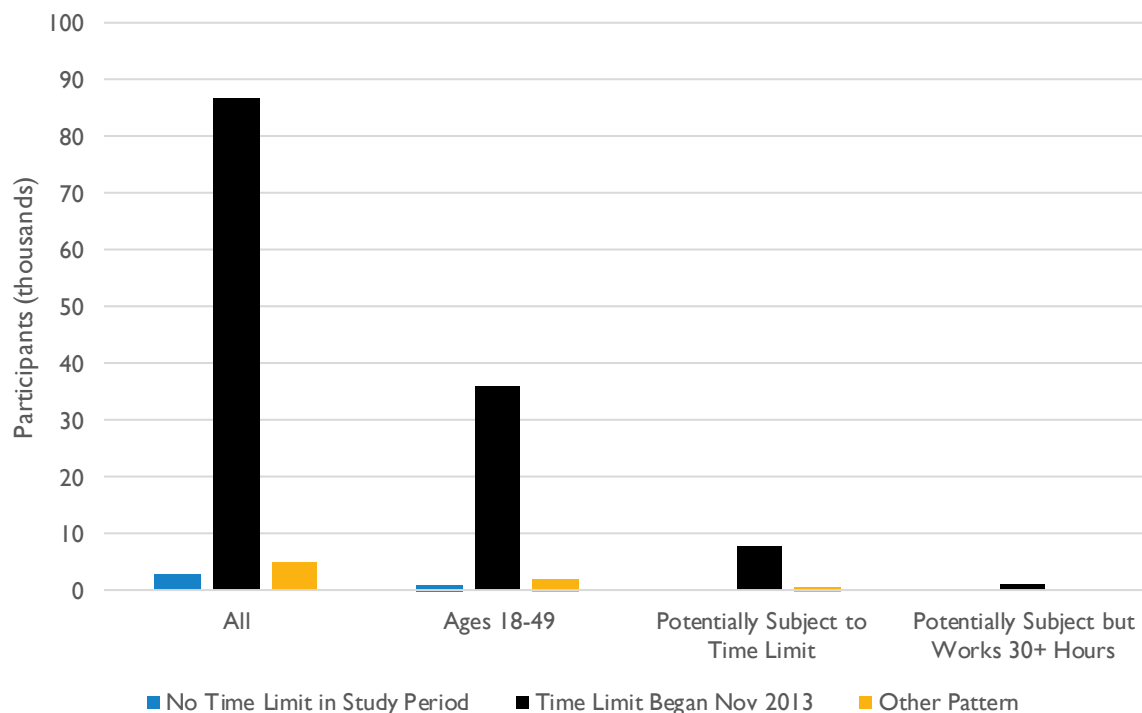
Source: Tennessee SNAP Administrative data for January 2016 and August 2016.

Note: Participants who are “Subject to Time Limit” are people who are between the ages of 18 and 49, subject to the general work requirements, in a household without children under age 18, live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work. This table includes participants living in areas that reinstated the time limit in January 2016 and retained the time limit through the end of the study period.

Appendix 9: Vermont

VERMONT FIGURE 1

Vermont SNAP Participants by Area Time Limit Policy within the Study Period



Source: Vermont SNAP Administrative data, November 2013.

Note: SNAP participants are tabulated based on their area of residence in November 2013. Time limit status refers to the area's status during the study period (November 2011 to November 2015). Areas with "time limit began November 2013." reinstated the time limit in November 2013 and retained the time limit through the end of the study period. Areas with "other pattern" had the time limit in effect for some (but not all) months of the study period but do not fit this pattern. A participant who is "Potentially Subject to Time Limit" is between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. A participant who is "Potentially Subject but Works Full Time" meets the criteria for being potentially subject to the time limit but works at least 30 hours per week and is therefore exempt from the general work requirements.

VERMONT TABLE 1

Characteristics of SNAP Participants Ages 18-49, Vermont

By Whether Potentially Subject to Time Limit and Area Time Limit Status in the First and Eighth Month of Time Limit Reinstatement

	First Month of Reinstatement				Eighth Month of Reinstatement			
	Potentially Subject to Time Limit				Potentially Subject to Time Limit			
	All Adults 18-49	In time limit area			All Adults 18-49	In time limit area		
All		All	Subject to Time Limit	All		All	Subject to Time Limit	
Number	39,225	8,473	7,703	7,448	32,636	3,313	2,863	2,709
Mean Age	32.95	31.32	31.29	31.48	33.31	31.09	31.08	31.37
Age								
18-29	39.2%	50.8%	50.6%	49.8%	37.0%	51.2%	51.2%	49.8%
30-39	33.9%	23.8%	24.3%	24.5%	35.3%	24.5%	25.1%	25.6%
40-49	26.9%	25.5%	25.2%	25.7%	27.7%	24.3%	23.6%	24.6%
Sex								
Male	41.3%	57.8%	57.7%	59.0%	39.0%	52.9%	52.0%	54.5%
Female	58.7%	42.2%	42.3%	41.0%	61.0%	47.1%	48.0%	45.5%
Race/ethnicity								
Non-Hispanic White	93.3%	94.5%	94.4%	94.5%	92.9%	93.0%	92.5%	92.4%
Non-Hispanic Black	2.7%	2.4%	2.5%	2.4%	2.9%	3.0%	3.3%	3.4%
Hispanic/Latino	0.7%	0.8%	0.8%	0.8%	0.8%	0.8%	0.8%	0.9%
Non-Hispanic Asian or Pacific Islander	1.0%	0.6%	0.6%	0.5%	1.2%	1.2%	1.4%	1.4%
Non-Hispanic American Indian or Alaska Native	0.3%	0.2%	0.2%	0.2%	0.3%	0.3%	0.3%	0.4%
Other	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Unknown	1.9%	1.5%	1.5%	1.5%	1.8%	1.5%	1.4%	1.4%
Educational attainment								
Less than a high school degree	23.2%	26.1%	25.9%	25.8%	23.2%	25.5%	25.2%	25.2%
High school degree	56.5%	51.3%	51.2%	51.4%	57.3%	49.7%	48.9%	48.5%
1 Year of college	3.2%	2.6%	2.6%	2.6%	3.1%	2.8%	3.0%	2.9%
2-3 Years of college	5.3%	3.8%	3.8%	3.7%	5.5%	4.6%	4.9%	4.8%
4+ Years of college	4.7%	5.3%	5.4%	5.4%	4.7%	6.7%	7.0%	7.3%
Data not available	7.1%	10.9%	11.0%	11.0%	6.2%	10.6%	11.1%	11.3%
Pregnancy status								
Pregnant	1.2%	1.8%	1.7%	0.0%	1.2%	4.3%	4.5%	0.0%
General work requirements								
Subject to general work requirements	36.6%	100.0%	100.0%	100.0%	25.5%	100.0%	100.0%	100.0%
Time-limited area status								
In time-limited area	96.0%	96.1%	100.0%	100.0%	95.5%	91.0%	100.0%	100.0%
Works at least 20 hours per week								
Yes	23.7%	11.2%	11.2%	11.2%	27.6%	30.4%	32.0%	33.3%
Works at least 30 hours per week								
Yes	16.0%	0.0%	0.0%	0.0%	16.8%	0.0%	0.0%	0.0%
Monthly Income								
No income	41.3%	71.5%	71.2%	71.4%	36.7%	59.0%	57.3%	56.5%
Has earned income	35.3%	24.6%	24.7%	24.7%	36.2%	37.8%	39.5%	40.3%
Median earnings (excluding 0s)	\$1,318	\$781	\$791	\$790	\$1,293	\$892	\$895	\$901
Has unearned income	26.3%	4.8%	4.9%	4.8%	30.1%	4.3%	4.4%	4.3%

Median unearned income (excluding 0s)	\$762	\$350	\$350	\$350	\$773	\$400	\$400	\$400
Poverty Status								
<= 50% of poverty	37.2%	69.1%	69.2%	69.6%	33.4%	58.1%	56.7%	56.2%
>50% and <=75% of poverty	11.3%	8.6%	8.5%	8.5%	11.8%	8.0%	8.3%	8.0%
>75% and <=100% of poverty	19.9%	7.7%	7.6%	7.6%	22.5%	13.0%	13.5%	13.8%
>100% and <=130% of poverty	14.5%	7.4%	7.4%	7.3%	15.5%	12.0%	12.4%	12.8%
>130% of poverty	17.1%	7.3%	7.2%	7.1%	16.8%	8.9%	9.1%	9.2%
Average area poverty Rate	12.6%	12.5%	12.4%	12.4%	12.3%	12.5%	12.0%	12.0%
Average area unemp. rate	4.6%	4.6%	4.5%	4.5%	4.2%	4.2%	4.0%	4.0%
Average county density	103	107	112	111	103	107	115	115
Urban/rural status								
Noncore	29.1%	28.0%	24.6%	24.7%	29.6%	30.8%	24.7%	24.7%
Micropolitan	42.2%	42.5%	44.0%	44.1%	41.7%	39.5%	42.1%	41.9%
Small metro	28.7%	29.5%	31.3%	31.2%	28.8%	29.7%	33.2%	33.4%
Medium metro	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Large fringe metro	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Large central metro	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Vermont SNAP Administrative data for November 2013 and June 2014.

Notes: "Time limit area" refers to areas that were time-limited beginning November 2013 through the end of our observation period in November 2015. Participants who are "Potentially Subject to Time Limit" are between the ages of 18 and 49, subject to the general work requirements, and in a household without children under age 18. Participants who are "Subject to Time Limit" are people who are "potentially subject to time limit," live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work.

VERMONT TABLE 2

SNAP Participants Subject to Time Limit by Characteristic, and Percent Meeting the Work Requirement, Vermont*First and Eighth Month of Time Limit Reinstatement*

	First Month of Reinstatement		Eighth Month of Reinstatement	
	Subject to Time Limit	Percent meeting work requirement	Subject to Time Limit	Percent meeting work requirement
Number	7,448	7%	2,709	35%
Age				
18-29	3,709	6%	1,348	33%
30-39	1,822	6%	694	34%
40-49	1,917	7%	667	42%
Sex				
Male	4,396	5%	1,477	29%
Female	3,052	9%	1,232	43%
Educational attainment				
Less than a high school degree	1,924	4%	682	28%
High school degree	3,827	7%	1,313	36%
1 year of college	196	12%	79	49%
2-3 Years of college	277	7%	129	36%
4+ Years of college	402	11%	199	60%
Data not available	822	5%	307	31%
Urban/rural status				
Noncore	1,843	7%	669	41%
Micropolitan	3,281	7%	1,136	35%
Small metro	2,324	6%	904	33%
Medium metro	0	0%	0	0%
Large fringe metro	0	0%	0	0%
Large central metro	0	0%	0	0%

Source: Vermont SNAP Administrative data for November 2013 and June 2014.

Note: Participants who are "Subject to Time Limit" are people who are between the ages of 18 and 49, subject to the general work requirements, in a household without children under age 18, live in an area in which the time limit has been reinstated, and are not exempt due to pregnancy or because they have been found unfit for work. This table includes participants living in areas that reinstated the time limit in November 2013 and retained the time limit through the end of the study period.

Appendix 10: Supplemental Multivariate Analysis Tables

Impact of ABAWD Time Limit Reinstatement on SNAP Outcomes

TABLE 1

Full results of logit regression model of the probability of ABAWD SNAP participation for time limit and waiver cohorts each month in the observation window, by State

Characteristic	AL	CO: Group 1	CO: Group 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
Months from time limit reinstatement [month 1, reference]											
Month 2	-0.29* (0.01)	-0.33* (0.02)	-0.48* (0.05)	-0.30* (0.02)	-0.22* (0.01)	-0.31* (0.01)	-0.27* (0.01)	-0.26* (0.02)	-0.33* (0.01)	-0.31* (0.02)	-0.31* (0.02)
Month 3	-0.54* (0.01)	-0.59* (0.03)	-0.85* (0.07)	-0.55* (0.02)	-0.38* (0.01)	-0.52* (0.01)	-0.50* (0.01)	-0.48* (0.02)	-0.60* (0.02)	-0.60* (0.03)	-0.52* (0.03)
Month 4	-0.73* (0.01)	-0.78* (0.03)	-1.06* (0.07)	-0.76* (0.02)	-0.45* (0.01)	-0.66* (0.01)	-0.66* (0.02)	-0.66* (0.02)	-0.84* (0.02)	-0.76* (0.03)	-0.69* (0.03)
Month 5	-0.84* (0.01)	-0.86* (0.03)	-1.14* (0.08)	-0.81* (0.03)	-0.51* (0.01)	-0.73* (0.01)	-0.73* (0.02)	-0.72* (0.03)	-1.07* (0.02)	-0.86* (0.03)	-0.78* (0.03)
Month 6	-0.93* (0.01)	-0.92* (0.03)	-1.18* (0.08)	-0.89* (0.03)	-0.58* (0.01)	-0.81* (0.01)	-0.79* (0.02)	-0.79* (0.03)	-1.20* (0.02)	-0.96* (0.03)	-0.84* (0.03)
Month 7	-1.06* (0.01)	-1.05* (0.03)	-1.30* (0.08)	-1.00* (0.03)	-0.66* (0.01)	-0.89* (0.01)	-0.89* (0.02)	-0.91* (0.03)	-1.31* (0.02)	-1.11* (0.03)	-0.92* (0.04)
Month 8	-1.16* (0.01)	-1.16* (0.03)	-1.43* (0.08)	-1.05* (0.03)	-0.73* (0.01)	-0.97* (0.01)	-0.99* (0.02)	-0.99* (0.03)	-1.39* (0.02)	-1.23* (0.03)	-1.02* (0.04)
Month 9	-1.27* (0.01)	-1.24* (0.04)	-1.47* (0.08)	-1.13* (0.03)	-0.80* (0.01)	-1.08* (0.01)	-1.09* (0.02)	-1.09* (0.03)	-1.47* (0.02)	-1.39* (0.03)	-1.14* (0.04)
Month 10	-1.33* (0.01)	-1.37* (0.04)	-1.58* (0.09)	-1.23* (0.03)	-0.84* (0.01)	-1.14* (0.01)	-1.17* (0.02)	-1.17* (0.03)	-1.52* (0.02)	-1.52* (0.04)	-1.17* (0.04)
Month 11	-1.35* (0.01)	-1.40* (0.04)	-1.64* (0.09)	-1.28* (0.03)	-0.90* (0.01)	-1.14* (0.01)	-1.20* (0.02)	-1.21* (0.03)	-1.61* (0.02)	-1.55* (0.04)	-1.24* (0.04)
Month 12	-1.37* (0.01)	-1.43* (0.04)	-1.72* (0.09)	-1.33* (0.03)	-0.96* (0.01)	-1.11* (0.01)	-1.25* (0.02)	-1.27* (0.03)	-1.65* (0.02)	-1.62* (0.04)	-1.30* (0.04)

Characteristic	AL	CO: Group 1	CO: Group 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
Months from time limit reinstatement interacted with intervention indicator [month 1 & comparison cohort, reference]											
Month 1 * intervention	-0.01 (0.02)	-0.22* (0.04)	-0.37* (0.10)	0.02 (0.05)	-0.11* (0.02)	-0.08* (0.02)	-0.32 (0.25)	-0.29 (0.41)	-0.02 (0.03)	-0.08 (0.11)	-0.13* (0.05)
Month 2 * intervention	-0.02 (0.01)	-0.22* (0.04)	-0.44* (0.10)	0.02 (0.04)	-0.16* (0.02)	-0.08* (0.02)	-0.37 (0.25)	-0.36 (0.41)	-0.12* (0.03)	-0.04 (0.11)	-0.24* (0.04)
Month 3 * intervention	-0.45* (0.01)	-0.14* (0.04)	-0.47* (0.10)	-0.02 (0.04)	-0.20* (0.02)	-0.20* (0.01)	-0.51* (0.25)	-0.55 (0.41)	-0.19* (0.02)	-0.04 (0.11)	-0.34* (0.04)
Month 4 * intervention	-1.73* (0.01)	-0.19* (0.04)	-0.52* (0.10)	-0.72* (0.04)	-0.96* (0.02)	-1.67* (0.01)	-0.75* (0.25)	-0.90* (0.41)	-1.09* (0.02)	-0.67* (0.11)	-1.76* (0.04)
Month 5 * intervention	-1.73* (0.01)	-0.20* (0.04)	-0.60* (0.10)	-0.82* (0.04)	-1.17* (0.02)	-1.77* (0.01)	-0.72* (0.25)	-0.86* (0.41)	-1.10* (0.02)	-1.11* (0.11)	-1.69* (0.04)
Month 6 * intervention	-1.65* (0.01)	-0.21* (0.04)	-0.66* (0.10)	-0.88* (0.04)	-1.25* (0.02)	-1.71* (0.01)	-0.70* (0.25)	-0.83* (0.41)	-1.04* (0.02)	-1.06* (0.11)	-1.63* (0.04)
Month 7 * intervention	-1.53* (0.01)	-0.19* (0.04)	-0.61* (0.10)	-0.91* (0.04)	-1.30* (0.02)	-1.63* (0.01)	-0.67* (0.25)	-0.80* (0.41)	-0.99* (0.02)	-0.98* (0.11)	-1.55* (0.04)
Month 8 * intervention	-1.41* (0.01)	-0.15* (0.04)	-0.54* (0.11)	-0.95* (0.04)	-1.32* (0.02)	-1.55* (0.01)	-0.60* (0.25)	-0.74 (0.41)	-0.97* (0.02)	-0.91* (0.11)	-1.45* (0.04)
Month 9 * intervention	-1.32* (0.01)	-0.15* (0.04)	-0.54* (0.10)	-0.95* (0.04)	-1.32* (0.02)	-1.46* (0.01)	-0.58* (0.25)	-0.71 (0.41)	-0.95* (0.02)	-0.77* (0.11)	-1.39* (0.04)
Month 10 * intervention	-1.29* (0.01)	-0.08 (0.04)	-0.41* (0.11)	-0.94* (0.04)	-1.33* (0.02)	-1.42* (0.01)	-0.54* (0.25)	-0.66 (0.41)	-0.95* (0.02)	-0.67* (0.11)	-1.38* (0.04)
Month 11 * intervention	-1.28* (0.01)	-0.05 (0.04)	-0.35* (0.11)	-0.94* (0.04)	-1.32* (0.02)	-1.36* (0.01)	-0.52* (0.25)	-0.63 (0.41)	-0.90* (0.02)	-0.71* (0.11)	-1.37* (0.04)
Month 12 * intervention	-1.27* (0.01)	-0.02 (0.04)	-0.34* (0.11)	-0.94* (0.04)	-1.30* (0.02)	-1.37* (0.01)	-0.53* (0.25)	-0.63 (0.41)	-0.87* (0.02)	-0.67* (0.11)	-1.34* (0.04)
Age	0.02* (<0.01)	0.01* (<0.01)	0.02* (<0.01)	0.02* (<0.01)	0.02* (<0.01)	0.01* (<0.01)	0.03* (<0.01)	0.02* (<0.01)	0.02* (<0.01)	0.02* (<0.01)	0.02* (<0.01)
Gender [male, reference]											
Female	0.43* (0.01)	0.39* (0.03)	0.30* (0.07)	0.29* (0.02)	0.21* (0.01)	0.37* (0.01)	0.17* (0.02)	0.15* (0.03)	0.32* (0.02)	0.33* (0.03)	0.40* (0.03)
Race/ethnicity [White, reference]											
Black	0.10* (0.01)	-	-	-0.12* (0.03)	0.08* (0.01)	0.12* (0.01)	0.20* (0.02)	0.25* (0.04)	0.01 (0.02)	-0.03 (0.03)	-0.03 (0.08)
Hispanic	-0.13* (0.06)	-	-	-0.11 (0.08)	-0.16* (0.03)	-0.28* (0.04)	-0.09* (0.03)	-0.16* (0.05)	-0.07 (0.04)	-0.28* (0.12)	-0.04 (0.16)

Characteristic	AL	CO: Group 1	CO: Group 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
Other	-0.04 (0.03)	- -	- -	-0.09 (0.07)	0.06* (0.02)	-0.16* (0.07)	-0.03 (0.03)	-0.05 (0.05)	-0.19* (0.04)	-0.04 (0.15)	-0.15 (0.16)
Education level [less than high school, reference]											
High school	- -	- -	- -	- -	-0.10* (0.01)	-0.10* (0.01)	- -	- -	<0.01 (0.02)	- -	-0.13* (0.03)
Some college/associate's degree	- -	- -	- -	- -	-0.26* (0.02)	-0.26* (0.02)	- -	- -	-0.23* (0.04)	- -	-0.42* (0.05)
College graduate or above	- -	- -	- -	- -	-0.22* (0.03)	-0.22* (0.03)	- -	- -	-0.02 (0.03)	- -	-0.18* (0.05)
Single person household [multi-person household, reference]	0.14* (0.01)	-0.08* (0.04)	-0.22* (0.08)	-0.03 (0.03)	-0.01 (0.02)	0.03* (0.01)	0.07* (0.03)	-0.03 (0.04)	0.05* (0.02)	0.03 (0.04)	0.04 (0.04)
Proportion of prior 9 months on SNAP ¹	0.64* (0.02)	1.00* (0.04)	0.75* (0.10)	0.72* (0.03)	0.68* (0.02)	0.63* (0.02)	1.15* (0.02)	1.03* (0.04)	0.99* (0.02)	0.67* (0.05)	0.71* (0.04)
Proportion of prior 3 quarters employed ¹	- -	-0.41* (0.04)	-0.39* (0.09)	- -	- -	-0.33* (0.01)	- -	- -	-0.12* (0.02)	- -	- -
Unemployment rate	0.13* (0.01)	0.09* (0.03)	0.35* (0.07)	0.38* (0.05)	0.03* (0.01)	>-0.01 (0.01)	0.06 (0.39)	-0.03 (0.64)	0.09* (0.02)	0.56* (0.14)	0.05 (0.03)
Poverty rate	>-0.01* (<0.01)	0.01 (0.01)	0.04* (0.01)	-0.19* (0.02)	0.01* (<0.01)	0.01* (<0.01)	-0.01 (0.01)	0.01 (0.02)	0.02* (<0.01)	-0.06* (0.01)	<0.01 (0.01)
Rural area [nonrural area, reference]	0.15* (0.01)	-0.03 (0.06)	-0.04 (0.10)	- -	-0.06* (0.01)	0.05* (0.02)	- -	- -	-0.06* (0.02)	0.30* (0.09)	- -
Border county [nonborder county, reference]	-0.01 (0.01)	0.03 (0.05)	-0.10 (0.10)	0.17* (0.05)	0.01 (0.02)	-0.06* (0.02)	- -	- -	-0.12* (0.02)	0.06 (0.04)	-0.08* (0.04)
Intercept	-0.72* (0.05)	-0.83* (0.11)	-1.42* (0.28)	0.23 (0.13)	-0.47* (0.06)	0.52* (0.04)	-0.61 (1.74)	-0.21 (2.83)	0.03 (0.10)	-1.61* (0.56)	0.36* (0.13)
Observations	1,375,308	131,640	26,988	273,612	974,364	1,195,272	531,300	210,720	489,288	156,348	169,776

Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: Standard errors in parentheses and are clustered by individuals. The sample for each State is the number of eligible participants potentially subject to the time limit (referred to as ABAWDs). The models are estimated for each month over the 12 months following the cohort selection calendar quarter, thus there are multiple observations per individual per cohort. In the model results, “intervention” refers to the time limit cohort, which is subject to ABAWD time limit reinstatement (and in some States a change in E&T policy) in its 12 month observation window, whereas the comparison cohort is not subject to ABAWD time limit reinstatement during its 12 month observation window. The interaction terms between month of observation and cohort provide logistic coefficient estimates of the time limit cohort participation rate less the comparison cohort participation rate at the same point in time following cohort selection. Colorado (CO): Group 1 are counties in which mandatory E&T requirements were in effect prior to the ABAWD time limit reinstatement. Colorado (CO): Group 2 are counties in which mandatory E&T and the ABAWD time limit were introduced simultaneously. Oregon (OR): Broad Group includes OR ABAWDs who may be exempt from work requirements (and thus unaffected by the time limit) but cannot be identified with certainty. Oregon (OR): Narrow Group excludes OR ABAWDs who were classified as having an “other barrier” to participation in mandatory E&T. The variable “Proportion of prior 3 quarters employed” is unavailable for AL, MD, MN, OR, TN, and VT as those States did not provide UI wage data. Other cells with a “-” indicate the variable was excluded from the model because it either was not available, perfectly predicts the dependent variable, or is perfectly collinear with another variable.

* p<0.05

¹ Due to differences in data and time limit reinstatements, the prior 12 months/4 quarters are used for PA for the proportion of prior quarters on SNAP and employed variables in the model. In Maryland, data for January 2014 was unavailable. Therefore, for the cohort in the waiver period, this variable captures only the proportion of the eight months prior to the observation window on SNAP for Maryland.

TABLE 2

Full results of OLS regression model of ABAWD annual SNAP benefits (\$) for the time limit and waiver cohorts in the observation window, by State

Characteristic	AL	CO: Group 1	CO: Group 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
Intervention indicator [comparison cohort, reference]											
Intervention	-549.56* (4.19)	-70.28* (14.06)	-202.50* (31.74)	-357.62* (17.96)	-488.20* (6.15)	-595.76* (4.65)	-236.31 (121.87)	-305.46 (202.95)	-371.07* (8.11)	-287.58* (48.58)	-657.14* (13.32)
Age	9.90* (0.24)	6.85* (0.77)	8.09* (1.62)	7.23* (0.60)	12.10* (0.32)	7.64* (0.26)	14.36* (0.50)	11.63* (0.80)	8.20* (0.50)	10.04* (0.76)	8.80* (0.73)
Gender [male, reference]											
Female	137.77* (4.29)	150.18* (13.81)	132.31* (29.30)	60.22* (10.68)	6.79 (5.53)	128.75* (4.67)	55.16* (8.45)	47.70* (13.10)	154.89* (8.95)	116.50* (13.53)	115.15* (12.90)
Race/ethnicity [White, reference]											
Black	28.59* (4.59)	-	-	-76.69* (12.20)	49.08* (6.48)	52.67* (5.75)	109.97* (11.40)	138.06* (17.89)	-1.15 (10.29)	-15.37 (15.78)	-42.85 (36.65)
Hispanic	-63.71* (24.31)	-	-	-61.85 (35.62)	-54.61* (13.13)	-99.84* (18.89)	-47.83* (15.94)	-86.86* (23.18)	-11.28 (21.10)	-115.50* (51.43)	-13.70 (68.17)
Other	-24.37 (13.24)	-	-	-101.95* (34.43)	37.05* (9.77)	-55.55 (28.92)	-19.84 (16.96)	-22.66 (25.12)	-83.74* (21.41)	-35.10 (65.45)	-124.75 (73.15)

Characteristic	AL	CO: Group 1	CO: Group 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
Education level [less than high school, reference]											
High school	-	-	-	-	-70.28*	-44.23*	-	-	4.02	-	-74.96*
	(4.63)	(15.92)	(31.75)	(13.48)	(5.98)	(4.93)	(13.70)	(20.18)	(11.65)	(15.68)	(14.51)
Some college/associate's degree	-	-	-	-	-150.70*	-105.09*	-	-	-114.84*	-	-211.88*
	(4.63)	(15.92)	(31.75)	(13.48)	(10.40)	(7.84)	(13.70)	(20.18)	(17.86)	(15.68)	(22.98)
College graduate or above	-	-	-	-	-118.57*	-77.77*	-	-	-16.66	-	-93.13*
	(4.63)	(15.92)	(31.75)	(13.48)	(12.07)	(11.84)	(13.70)	(20.18)	(14.79)	(15.68)	(23.52)
Single person household [multi-person household, reference]	288.09*	92.14*	37.87	247.78*	250.75*	256.22*	263.01*	212.39*	439.89*	249.02*	275.69*
	(4.63)	(15.92)	(31.75)	(13.48)	(6.83)	(5.43)	(13.70)	(20.18)	(9.76)	(15.68)	(15.18)
Proportion of prior 9 months on SNAP ¹	268.36*	435.89*	290.38*	308.87*	285.86*	243.65*	577.11*	530.77*	452.72*	285.80*	328.10*
	(6.45)	(19.98)	(42.01)	(15.32)	(7.37)	(6.89)	(12.12)	(18.34)	(11.98)	(20.56)	(18.77)
Proportion of prior 3 quarters employed ¹	-	-200.60*	-165.53*	-	-	-202.29*	-	-	-116.64*	-	-
	(4.63)	(16.28)	(33.18)	(13.48)	(6.00)	(6.00)	(13.70)	(20.18)	(11.18)	(15.68)	(15.18)
Unemployment rate	48.34*	55.48*	141.29*	187.81*	7.51	-6.39*	104.43	48.03	51.04*	328.34*	13.00
	(3.78)	(14.47)	(28.83)	(23.78)	(4.33)	(3.22)	(190.93)	(316.83)	(10.94)	(63.99)	(14.33)
Poverty rate	0.51	-3.09	16.25*	-72.54*	5.95*	3.92*	-4.39	2.34	4.64	-30.31*	6.84
	(0.76)	(4.84)	(4.53)	(11.34)	(0.89)	(0.56)	(5.91)	(9.65)	(2.50)	(5.75)	(6.00)
Rural area [nonrural area, reference]	37.42*	-8.74	37.91	-	-65.88*	4.10	-	-	-30.68*	142.85*	-
	(6.22)	(26.36)	(38.69)	(20.81)	(6.76)	(6.77)	(13.70)	(20.18)	(11.76)	(40.46)	(17.32)
Border county [nonborder county, reference]	5.71	3.14	-46.88	43.82*	4.36	-21.96*	-	-	-60.86*	7.40	-50.07*
	(4.97)	(22.88)	(40.22)	(20.81)	(7.15)	(6.77)	(13.70)	(20.18)	(11.71)	(17.73)	(17.32)
Intercept	168.42*	80.38	-265.96*	362.06*	425.30*	773.92*	-215.88	65.87	80.57	-651.84*	665.91*
	(20.65)	(48.05)	(112.32)	(61.11)	(25.06)	(17.52)	(847.28)	(1,407.77)	(48.26)	(258.50)	(54.67)
Observations	114,609	10,970	2,249	22,801	81,197	99,606	44,275	17,560	40,774	13,029	14,148

Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: Standard errors in parentheses and are clustered by individuals. The sample for each State is the number of eligible participants potentially subject to the time limit (referred to as ABAWDs). The models are estimated for the annual SNAP benefits of the 12 months following the cohort selection calendar quarter, thus there is one observation per individual per cohort. In the model results, "intervention" refers to the time limit cohort, which is subject to ABAWD time limit reinstatement (and in some States a change in E&T policy) in its 12 month observation window, whereas the comparison cohort is not subject to ABAWD time limit reinstatement during its 12 month observation window. The intervention indicator provides estimates of the difference in annual SNAP benefits between the time limit and comparison cohorts. Colorado (CO): Group 1 are counties in which mandatory E&T requirements were in effect prior to ABAWD time limit reinstatement. Colorado (CO): Group 2 are counties in which mandatory E&T and the ABAWD time limit were introduced simultaneously. Oregon (OR): Broad Group includes OR ABAWDs who may be exempt from work requirements (and thus unaffected by the time limit) but cannot be identified with certainty. Oregon (OR): Narrow Group excludes OR ABAWDs who were classified as having an "other barrier" to participation in mandatory E&T. The variable "Proportion of prior 3

quarters employed" is unavailable for AL, MD, MN, OR, TN, and VT as those States did not provide UI wage data. Other cells with a "-" indicate the variable was excluded from the model because it either was not available, perfectly predicts the dependent variable, or is perfectly collinear with another variable.

* $p < 0.05$

¹ Due to differences in data and time limit reinstatements, the prior 12 months/4 quarters are used for PA for the proportion of prior quarters on SNAP and employed variables in the model. In Maryland, data for January 2014 was unavailable. Therefore, for the cohort in the waiver period, this variable captures only the proportion of the eight months prior to the observation window on SNAP for Maryland.

Impact of ABAWD Time Limit Reinstatement on Employment Outcomes

TABLE 3

Full results of logit regression model of the probability of ABAWD employment for time limit and waiver cohorts each quarter in the observation window, by State

Characteristic	CO: Group 1	CO: Group 2	MO	PA
Quarters from baseline [baseline quarter, reference]				
Quarter 1	-0.25* (0.03)	-0.27* (0.07)	-0.01 (0.01)	0.19* (0.02)
Quarter 2	-0.20* (0.03)	-0.30* (0.08)	0.20* (0.01)	0.18* (0.02)
Quarter 3	-0.25* (0.04)	-0.38* (0.09)	0.26* (0.01)	0.23* (0.02)
Quarter 4	-0.33* (0.04)	-0.35* (0.09)	0.27* (0.01)	0.09* (0.02)
Quarters from baseline interacted with intervention indicator [baseline quarter & comparison cohort, reference]				
Quarter 0 * intervention	-0.25* (0.05)	-0.22* (0.11)	0.04* (0.01)	-0.03 (0.02)
Quarter 1 * intervention	-0.20* (0.05)	-0.25* (0.12)	0.01 (0.01)	-0.09* (0.02)
Quarter 2 * intervention	-0.19* (0.05)	-0.17 (0.12)	-0.01 (0.01)	-0.01 (0.02)
Quarter 3 * intervention	-0.17* (0.05)	-0.21 (0.13)	-0.05* (0.01)	-0.05* (0.02)
Quarter 4 * intervention	-0.20* (0.05)	-0.32* (0.12)	-0.09* (0.01)	-0.08* (0.02)
Age	-0.02* (<0.01)	-0.02* (0.01)	-0.02* (<0.01)	-0.02* (<0.01)
Gender [male, reference]				
Female	0.04 (0.04)	-0.01 (0.09)	0.12* (0.01)	0.12* (0.02)
Race/ethnicity [White, reference]				
Black	-	-	0.30* (0.01)	0.22* (0.02)
Hispanic	-	-	0.09* (0.05)	0.10* (0.04)
Other	-	-	0.03 (0.07)	0.01 (0.05)
Education level [less than high school, reference]				
High school	-	-	0.19* (0.01)	0.07* (0.02)
Some college/associate's degree	-	-	0.30* (0.02)	0.25* (0.04)
College graduate or above	-	-	0.09* (0.03)	0.06 (0.03)
Single person household [multi-person household, reference]	-0.06 (0.05)	-0.14 (0.10)	0.05* (0.01)	0.01 (0.02)
Proportion of prior 9 months on SNAP ¹	-0.19* (0.05)	-0.27* (0.13)	-0.07* (0.02)	-0.19* (0.03)
Proportion of prior 3 quarters employed ¹	3.01* (0.05)	3.31* (0.11)	2.30* (0.02)	2.53* (0.02)
Unemployment rate	-0.09*	0.10	-0.05*	-0.09*

Characteristic	CO: Group 1	CO: Group 2	MO	PA
	(0.04)	(0.09)	(0.01)	(0.02)
Poverty rate	0.04*	-0.02	>-0.01*	0.02*
	(0.01)	(0.01)	(<0.01)	(0.01)
Rural area [nonrural area, reference]	-0.32*	-0.01	-0.07*	0.04
	(0.07)	(0.12)	(0.02)	(0.02)
Border county [nonborder county, reference]	0.06	0.09	-0.05*	0.02
	(0.06)	(0.12)	(0.02)	(0.03)
Intercept	-0.82*	-1.10*	-0.56*	-0.84*
	(0.13)	(0.35)	(0.04)	(0.10)
Observations	54,850	11,245	498,030	203,870

Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: Standard errors in parentheses and are clustered by individuals. The sample for each State is the number of eligible participants potentially subject to the time limit (referred to as ABAWDs). The models are estimated for each calendar quarter over the five quarters during and following cohort selection, thus there are multiple observations per individual per cohort. In the model results, "intervention" refers to the time limit cohort, which is subject to ABAWD time limit reinstatement (and in some States a change in E&T policy) in its five quarter observation window, whereas the comparison cohort is not subject to ABAWD time limit reinstatement during its five quarter observation window. The interaction terms between quarter of observation and cohort provide logistic coefficient estimates of the time limit cohort employment rate less the comparison cohort employment rate at the same point in time during or following cohort selection. Colorado (CO): Group 1 are counties in which mandatory E&T requirements were in effect prior to ABAWD time limit reinstatement. Colorado (CO): Group 2 are counties in which mandatory E&T and the ABAWD time limit were introduced simultaneously. Cells with a "-" indicate the variable was excluded from the model because it either was not available, perfectly predicts the dependent variable, or is perfectly collinear with another variable.

* $p \leq 0.05$

¹ Due to differences in data and time limit reinstatements, the prior 12 months/4 quarters are used for PA for the proportion of prior quarters on SNAP and employed variables in the model.

TABLE 4

Full results of OLS regression model on ABAWD annual earnings (\$) for the time limit and waiver cohorts in the observation window, by State

Characteristic	CO: Group 1	CO: Group 2	MO	PA
Intervention indicator [comparison cohort, reference]				
Intervention	-737.32* (160.89)	-1,229.65* (391.05)	-70.51 (46.48)	-246.46* (85.47)
Age	5.76 (8.56)	4.11 (20.18)	17.05* (2.83)	28.69* (5.34)
Gender [male, reference]				
Female	-641.41* (152.89)	-255.53 (343.19)	-97.48* (49.46)	-284.71* (90.55)
Race/ethnicity [White, reference]				
Black	-	-	794.82* (63.82)	431.62* (109.77)
Hispanic	-	-	898.89* (220.58)	376.15 (213.68)
Other	-	-	772.23* (326.31)	469.45 (256.88)
Education level [less than high school, reference]				
High school	-	-	1,113.36* (48.22)	370.87* (108.45)
Some college/associate's degree	-	-	2,567.16* (95.77)	3,260.83* (226.42)
College graduate or above	-	-	591.13* (118.02)	488.83* (147.32)
Single person household [multi-person household, reference]				
Single person household	-475.11* (180.09)	-416.46 (373.44)	-259.58* (58.17)	-293.22* (102.08)
Proportion of prior 9 months on SNAP¹				
Proportion of prior 9 months on SNAP	-1,186.22* (206.96)	-1,418.65* (499.58)	-1,047.34* (76.62)	-2,049.75* (130.85)
Proportion of prior 3 quarters employed¹				
Proportion of prior 3 quarters employed	9,653.07* (201.87)	10,397.97* (447.19)	7,675.39* (71.51)	8,645.85* (123.57)
Unemployment rate				
Unemployment rate	-524.25* (144.77)	-379.98 (318.85)	-112.52* (31.12)	-624.96* (109.88)
Poverty rate				
Poverty rate	117.67* (52.99)	-145.93* (41.83)	-30.85* (6.05)	-0.32 (25.82)
Rural area [nonrural area, reference]				
Rural area	-1,398.38* (278.97)	175.38 (481.58)	-456.86* (69.39)	-44.82 (124.26)
Border county [nonborder county, reference]				
Border county	260.67 (241.05)	722.63 (433.78)	-90.21 (66.92)	67.37 (130.58)
Intercept				
Intercept	4,557.12* (496.72)	5,555.00* (1,257.76)	3,306.70* (172.86)	5,787.55* (522.75)
Observations				
Observations	10,970	2,249	99,606	40,774

Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: Standard errors in parentheses and are clustered by individuals. The sample for each State is the number of eligible participants potentially subject to the time limit (referred to as ABAWDs). The models are estimated for the annual earnings of the 12 months following the cohort selection calendar quarter, thus there is one observation per individual per cohort. In the model results, "intervention" refers to the time limit cohort, which is subject to ABAWD time limit reinstatement (and in some States a change in E&T policy) in its 12 month observation window, whereas the comparison cohort is not subject to ABAWD time limit reinstatement during its 12 month observation window. The intervention indicator provides estimates of the difference in annual earnings between the time limit and comparison cohorts. Colorado (CO): Group 1 are counties in which mandatory E&T requirements were in effect prior to ABAWD time limit reinstatement. Colorado (CO): Group 2 are counties in which mandatory E&T and the ABAWD time limit were introduced simultaneously. Cells with a "-" indicate the variable was excluded from the model because it either was not available, perfectly predicts the dependent variable, or is perfectly collinear with another variable.

* p<0.05

¹ Due to differences in data and time limit reinstatements, the prior 12 months/4 quarters are used for PA for the proportion of prior quarters on SNAP and employed variables in the model.

Impact of ABAWD Time Limit Reinstatement on Combined Employment and SNAP Participation and Combined Earnings and SNAP Benefits

TABLE 5

Full results of multinomial logit regression model of the probability of SNAP participation and employment for time limit and waiver cohorts each quarter in the observation window, by State

Variable	CO: Group 1	CO: Group 2	MO	PA
Panel A: employed, not on SNAP¹				
Quarters from baseline [baseline quarter, reference]				
Quarter 1	0.85* (0.05)	1.17* (0.12)	0.96* (0.02)	0.94* (0.03)
Quarter 2	1.23* (0.05)	1.48* (0.13)	1.38* (0.02)	1.37* (0.03)
Quarter 3	1.49* (0.06)	1.68* (0.14)	1.68* (0.02)	1.61* (0.03)
Quarter 4	1.62* (0.06)	1.94* (0.14)	1.71* (0.02)	1.65* (0.03)
Quarters from baseline interacted with intervention indicator [baseline quarter & comparison cohort, reference]				
Quarter 0 * intervention	-0.05 (0.07)	-0.02 (0.17)	-0.27* (0.03)	-0.08 (0.04)
Quarter 1 * intervention	-0.07 (0.07)	0.22 (0.16)	0.15* (0.02)	0.90* (0.03)
Quarter 2 * intervention	0.01 (0.07)	0.51* (0.16)	1.60* (0.02)	0.93* (0.03)
Quarter 3 * intervention	-0.02 (0.07)	0.36* (0.17)	1.34* (0.02)	0.88* (0.03)
Quarter 4 * intervention	-0.18* (0.07)	0.09 (0.17)	1.22* (0.02)	0.72* (0.03)
Age	-0.03* (<0.01)	-0.03* (0.01)	-0.03* (<0.01)	-0.03* (<0.01)
Gender [male, reference]				
Female	-0.33* (0.05)	-0.28* (0.11)	-0.22* (0.02)	-0.19* (0.03)
Race/ethnicity [White, reference]				
Black	-	-	0.16* (0.02)	0.20* (0.03)
Hispanic	-	-	0.32* (0.06)	0.15* (0.06)
Other	-	-	0.18 (0.09)	0.17* (0.06)
Education level [less than high school, reference]				
High school	-	-	0.29* (0.02)	0.05 (0.03)
Some college/associate's degree	-	-	0.54* (0.03)	0.46* (0.05)
College graduate or above	-	-	0.28* (0.04)	0.06 (0.04)
Single person household [multi-person household, reference]	-0.02 (0.06)	0.06 (0.13)	>-0.01 (0.02)	-0.07* (0.03)
Proportion of prior 9 months on SNAP ²	-1.09*	-0.90*	-0.59*	-1.13*

Variable	CO: Group 1	CO: Group 2	MO	PA
	(0.07)	(0.17)	(0.02)	(0.04)
Proportion of prior 3 quarters employed ²	3.48*	3.73*	2.49*	2.54*
	(0.06)	(0.16)	(0.02)	(0.03)
Unemployment rate	-0.20*	-0.23*	-0.04*	-0.18*
	(0.05)	(0.11)	(0.01)	(0.03)
Poverty rate	0.04*	-0.07*	-0.01*	>-0.01
	(0.02)	(0.02)	(<0.01)	(0.01)
Rural area [nonrural area, reference]	-0.28*	0.04	-0.12*	0.09*
	(0.09)	(0.16)	(0.02)	(0.03)
Border county [nonborder county, reference]	0.02	0.16	-0.01	0.14*
	(0.08)	(0.15)	(0.02)	(0.03)
Intercept	-0.43*	-0.28	-1.46*	-0.62*
	(0.17)	(0.45)	(0.06)	(0.14)
Observations	54,850	11,245	498,030	203,870
Panel B: Not employed, not on SNAP¹				
Quarters from baseline [baseline quarter, reference]				
Quarter 1	1.12*	1.44*	0.95*	0.88*
	(0.04)	(0.11)	(0.02)	(0.03)
Quarter 2	1.47*	1.77*	1.27*	1.34*
	(0.05)	(0.12)	(0.02)	(0.03)
Quarter 3	1.78*	2.03*	1.54*	1.57*
	(0.05)	(0.12)	(0.02)	(0.03)
Quarter 4	1.99*	2.25*	1.62*	1.75*
	(0.05)	(0.13)	(0.02)	(0.03)
Quarters from baseline interacted with intervention indicator [baseline quarter & comparison cohort, reference]				
Quarter 0 * intervention	0.24*	0.11	-0.30*	0.09*
	(0.06)	(0.15)	(0.03)	(0.04)
Quarter 1 * intervention	0.18*	0.48*	0.24*	1.29*
	(0.05)	(0.12)	(0.02)	(0.03)
Quarter 2 * intervention	0.20*	0.70*	1.94*	1.23*
	(0.05)	(0.13)	(0.02)	(0.03)
Quarter 3 * intervention	0.17*	0.63*	1.67*	1.16*
	(0.05)	(0.13)	(0.02)	(0.03)
Quarter 4 * intervention	0.04	0.52*	1.53*	1.01*
	(0.05)	(0.13)	(0.02)	(0.03)
Age	-0.02*	-0.01*	-0.02*	-0.02*
	(<0.01)	(<0.01)	(<0.01)	(<0.01)
Gender [male, reference]				
Female	-0.37*	-0.29*	-0.36*	-0.29*
	(0.04)	(0.08)	(0.01)	(0.02)
Race/ethnicity [White, reference]				
Black	-	-	-0.12*	0.06*
			(0.02)	(0.03)
Hispanic	-	-	0.41*	0.09
			(0.06)	(0.05)
Other	-	-	0.13	0.25*
			(0.08)	(0.05)
Education level [less than high school, reference]				
High school	-	-	0.06*	0.02
			(0.01)	(0.03)
Some college/associate's degree	-	-	0.18*	0.13*
			(0.02)	(0.04)
College graduate or above	-	-	0.23*	0.03
			(0.03)	(0.04)
Single person household [multi-person household, reference]	0.16*	0.28*	0.02	-0.02
	(0.04)	(0.09)	(0.02)	(0.02)
Proportion of prior 9 months on SNAP ²	-1.12*	-0.79*	-0.72*	-1.04*

Variable	CO: Group 1	CO: Group 2	MO	PA
	(0.05)	(0.12)	(0.02)	(0.03)
Proportion of prior 3 quarters employed ²	0.71*	0.67*	0.37*	0.33*
	(0.06)	(0.14)	(0.02)	(0.03)
Unemployment rate	-0.05	-0.36*	>-0.01	-0.09*
	(0.04)	(0.09)	(0.01)	(0.03)
Poverty rate	-0.02	-0.04*	-0.01*	-0.02*
	(0.01)	(0.01)	(<0.01)	(0.01)
Rural area [nonrural area, reference]	0.10	0.05	0.02	0.07*
	(0.07)	(0.12)	(0.02)	(0.03)
Border county [nonborder county, reference]	>-0.01	0.14	0.11*	0.14*
	(0.06)	(0.11)	(0.02)	(0.03)
Intercept	0.30*	0.66	-1.10*	-0.22
	(0.13)	(0.34)	(0.05)	(0.12)
Observations	54,850	11,245	498,030	203,870
Panel C: employed, on SNAP¹				
Quarters from baseline [baseline quarter, reference]				
Quarter 1	-0.24*	-0.28*	-0.11*	0.17*
	(0.04)	(0.10)	(0.01)	(0.02)
Quarter 2	-0.15*	-0.30*	0.10*	0.10*
	(0.05)	(0.12)	(0.01)	(0.02)
Quarter 3	-0.20*	-0.44*	0.14*	0.15*
	(0.06)	(0.13)	(0.02)	(0.03)
Quarter 4	-0.26*	-0.47*	0.18*	-0.04
	(0.06)	(0.14)	(0.02)	(0.03)
Quarters from baseline interacted with intervention indicator [baseline quarter & comparison cohort, reference]				
Quarter 0 * intervention	-0.22*	-0.32*	0.05*	-0.01
	(0.06)	(0.13)	(0.02)	(0.03)
Quarter 1 * intervention	-0.13	-0.23	0.02	0.09*
	(0.07)	(0.17)	(0.02)	(0.03)
Quarter 2 * intervention	-0.19*	-0.05	0.20*	0.25*
	(0.07)	(0.19)	(0.02)	(0.03)
Quarter 3 * intervention	-0.12	0.04	0.15*	0.19*
	(0.08)	(0.20)	(0.02)	(0.03)
Quarter 4 * intervention	-0.15	0.14	0.05*	0.16*
	(0.08)	(0.20)	(0.02)	(0.03)
Age	-0.02*	-0.01*	-0.03*	-0.02*
	(<0.01)	(0.01)	(<0.01)	(<0.01)
Gender [male, reference]				
Female	0.03	-0.06	0.15*	0.15*
	(0.05)	(0.11)	(0.01)	(0.02)
Race/ethnicity [White, reference]				
Black	-	-	0.34*	0.28*
			(0.02)	(0.03)
Hispanic	-	-	0.24*	0.13*
			(0.06)	(0.05)
Other	-	-	>-0.01	0.10
			(0.08)	(0.06)
Education level [less than high school, reference]				
High school	-	-	0.16*	0.11*
			(0.01)	(0.03)
Some college/associate's degree	-	-	0.22*	0.16*
			(0.02)	(0.05)
College graduate or above	-	-	0.10*	0.09*
			(0.04)	(0.04)
Single person household [multi-person household, reference]	0.12*	-0.02	0.11*	0.07*
	(0.06)	(0.12)	(0.02)	(0.03)
Proportion of prior 9 months on SNAP ²	-0.50*	-0.51*	-0.18*	-0.22*

Variable	CO: Group 1	CO: Group 2	MO	PA
	(0.07)	(0.16)	(0.02)	(0.03)
Proportion of prior 3 quarters employed ²	3.39*	3.71*	2.41*	2.81*
	(0.06)	(0.15)	(0.02)	(0.03)
Unemployment rate	-0.01	0.04	-0.07*	-0.11*
	(0.05)	(0.12)	(0.01)	(0.03)
Poverty rate	0.01	-0.01	>-0.01	0.02*
	(0.02)	(0.02)	(<0.01)	(0.01)
Rural area [nonrural area, reference]	-0.26*	0.07	-0.01	0.04
	(0.10)	(0.15)	(0.02)	(0.03)
Border county [nonborder county, reference]	0.12	0.17	<0.01	0.03
	(0.08)	(0.16)	(0.02)	(0.03)
Intercept	-0.87*	-1.22*	-0.56*	-1.05*
	(0.17)	(0.45)	(0.05)	(0.13)
Observations	54,850	11,245	498,030	203,870

Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: Standard errors in parentheses and are clustered by individuals. The sample for each State is the number of eligible participants potentially subject to the time limit (referred to as ABAWDs). The models are estimated for each calendar quarter over the five quarters during and following cohort selection, thus there are multiple observations per individual per cohort. In the model results, "intervention" refers to the time limit cohort, which is subject to ABAWD time limit reinstatement (and in some States a change in E&T policy) in its five quarter observation window, whereas the comparison cohort is not subject to ABAWD time limit reinstatement during its five quarter observation window. The interaction terms between quarter of observation and cohort provide logistic coefficient estimates of the time limit cohort SNAP participation and employment rate less the comparison cohort SNAP participation and employment rate at the same point in time during or following cohort selection relative to the other dependent variable categories (e.g., not employed, not on SNAP). Colorado (CO): Group 1 are counties in which mandatory E&T requirements were in effect prior to ABAWD time limit reinstatement. Colorado (CO): Group 2 are counties in which mandatory E&T and the ABAWD time limit were introduced simultaneously. Cells with a "-" indicate the variable was excluded from the model because it either was not available, perfectly predicts the dependent variable, or is perfectly collinear with another variable.

* p<0.05

¹ A multinomial logit is used with four categories of the dependent variable: (1) off SNAP and not employed; (2) off SNAP and employed; (3) on SNAP and not employed; and (4) on SNAP and employed. There are three coefficients for each variable, each one describing the effect of the variable on the relative probabilities of each dependent variable category relative to the reference dependent variable category (on SNAP and not employed). In order to produce the regression adjusted means for all four groups, the multinomial logit was run again with the excluded category no longer the reference category.

² Due to differences in data and time limit reinstatements, the prior 12 months/4 quarters are used for PA for the proportion of prior quarters on SNAP and employed variables in the model.

TABLE 6

Full results of OLS regression model on ABAWD combined annual SNAP benefits and annual earnings (\$) for the time limit and waiver cohorts in the observation window, by State

Characteristic	CO: Group 1	CO: Group 2	MO	PA
Intervention indicator [comparison cohort, reference]				
Intervention	-807.60* (159.71)	-1,432.16* (388.16)	-666.27* (45.58)	-617.54* (83.94)
Age	12.62 (8.48)	12.20 (20.01)	24.69* (2.78)	36.89* (5.25)
Gender [male, reference]				
Female	-491.23* (151.58)	-123.22 (340.62)	31.28 (48.52)	-129.82 (88.93)
Race/ethnicity [White, reference]				
Black	-	-	847.49* (62.68)	430.47* (107.84)
Hispanic	-	-	799.05* (218.08)	364.87 (210.67)
Other	-	-	716.68* (321.02)	385.71 (253.86)
Education level [less than high school, reference]				
High school	-	-	1,069.13* (47.36)	374.89* (106.82)
Some college/associate's degree	-	-	2,462.07* (93.99)	3,145.99* (222.31)
College graduate or above	-	-	513.36* (116.42)	472.17* (145.15)
Single person household [multi-person household, reference]	-382.96* (178.57)	-378.59 (370.32)	-3.36 (57.35)	146.67 (100.68)
Proportion of prior 9 months on SNAP ¹	-750.33* (204.92)	-1,128.26* (493.80)	-803.69* (75.32)	-1,597.03* (128.71)
Proportion of prior 3 quarters employed ¹	9,452.48* (199.93)	10,232.44* (442.70)	7,473.10* (70.15)	8,529.21* (121.43)
Unemployment rate	-468.78* (143.81)	-238.69 (317.06)	-118.91* (30.63)	-573.91* (108.06)
Poverty rate	114.58* (52.50)	-129.68* (41.65)	-26.93* (5.95)	4.31 (25.40)
Rural area [nonrural area, reference]	-1,407.11* (276.61)	213.30 (478.80)	-452.76* (68.29)	-75.49 (122.25)
Border county [nonborder county, reference]	263.81 (239.36)	675.75 (430.80)	-112.16 (65.86)	6.51 (128.64)
Intercept	4,637.50* (493.28)	5,289.04* (1,247.22)	4,080.61* (169.96)	5,868.13* (515.12)
Observations	10,970	2,249	99,606	40,774

Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: Standard errors in parentheses and are clustered by individuals. The sample for each State is the number of eligible participants potentially subject to the time limit (referred to as ABAWDs). The models are estimated for the combined annual SNAP benefits and earnings of the 12 months following the cohort selection calendar quarter, thus there is one observation per individual per cohort. In the model results, "intervention" refers to the time limit cohort, which is subject to ABAWD time limit reinstatement (and in some States a change in E&T policy) in its 12 month observation window, whereas the comparison cohort is not subject to ABAWD time limit reinstatement during its 12 month observation window. The intervention indicator provides estimates of the difference in combined annual SNAP benefits and earnings between the time limit and comparison cohorts. Colorado (CO): Group 1 are counties in which mandatory E&T requirements were in effect prior to ABAWD time limit reinstatement. Colorado (CO): Group 2 are counties in which mandatory E&T and the ABAWD time limit were introduced simultaneously. Cells with a "-" indicate the variable was excluded from the model because it either was not available, perfectly predicts the dependent variable, or is perfectly collinear with another variable.

* p<0.05

¹ Due to differences in data and time limit reinstatements, the prior 12 months/4 quarters are used for PA for the proportion of prior quarters on SNAP and employed variables in the model.

Sensitivity Analyses

TABLE 7

Full results of logit regression model of the probability of ABAWD SNAP participation for time limit and waiver cohorts each month in the observation window, by State

Characteristic	AL	CO: Group 1	CO: Grou p 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
Months from time limit reinstatement [month 1, reference]											
Month 2	-0.23* (0.02)	-0.29* (0.06)	-0.24 (0.13)	-0.35* (0.06)	-0.22* (0.03)	-0.24* (0.03)	-0.22* (0.04)	-0.22* (0.08)	-0.33* (0.04)	-0.15* (0.06)	-0.22* (0.09)
Month 3	-0.42* (0.03)	-0.41* (0.07)	- 0.53* (0.17)	-0.63* (0.07)	-0.38* (0.03)	-0.44* (0.03)	-0.44* (0.05)	-0.38* (0.09)	-0.62* (0.05)	-0.41* (0.08)	-0.54* (0.11)
Month 4	-0.60* (0.03)	-0.67* (0.08)	- 0.80* (0.20)	-0.83* (0.07)	-0.46* (0.04)	-0.62* (0.03)	-0.59* (0.06)	-0.65* (0.10)	-0.82* (0.06)	-0.58* (0.09)	-0.73* (0.12)
Month 5	-0.68* (0.03)	-0.77* (0.08)	- 0.87* (0.20)	-0.87* (0.08)	-0.51* (0.04)	-0.71* (0.04)	-0.67* (0.06)	-0.76* (0.11)	-1.04* (0.06)	-0.71* (0.09)	-0.85* (0.12)
Month 6	-0.75* (0.03)	-0.94* (0.09)	- 0.87* (0.22)	-0.97* (0.08)	-0.59* (0.04)	-0.82* (0.04)	-0.78* (0.06)	-0.76* (0.11)	-1.14* (0.06)	-0.82* (0.10)	-0.96* (0.13)
Month 7	-0.88* (0.04)	-1.16* (0.09)	- 0.99* (0.22)	-1.03* (0.08)	-0.66* (0.04)	-0.90* (0.04)	-0.85* (0.07)	-0.85* (0.12)	-1.23* (0.06)	-0.94* (0.10)	-1.04* (0.13)
Month 8	-0.97* (0.04)	-1.22* (0.09)	- 1.21* (0.22)	-1.11* (0.08)	-0.72* (0.04)	-0.96* (0.04)	-0.99* (0.07)	-1.07* (0.12)	-1.29* (0.06)	-1.05* (0.10)	-1.07* (0.13)
Month 9	-1.07* (0.04)	-1.33* (0.09)	- 1.37* (0.22)	-1.16* (0.08)	-0.80* (0.04)	-1.06* (0.04)	-1.05* (0.07)	-1.14* (0.12)	-1.33* (0.06)	-1.15* (0.10)	-1.15* (0.13)
Month 10	-1.16* (0.04)	-1.43* (0.09)	- 1.43* (0.23)	-1.23* (0.09)	-0.84* (0.04)	-1.12* (0.04)	-1.11* (0.07)	-1.20* (0.12)	-1.40* (0.07)	-1.31* (0.11)	-1.12* (0.13)
Month 11	-1.19* (0.04)	-1.41* (0.09)	- 1.40* (0.23)	-1.32* (0.09)	-0.91* (0.04)	-1.15* (0.04)	-1.15* (0.07)	-1.25* (0.12)	-1.47* (0.07)	-1.33* (0.11)	-1.20* (0.13)
Month 12	-1.25* (0.04)	-1.40* (0.09)	- 1.43* (0.24)	-1.38* (0.09)	-0.96* (0.04)	-1.12* (0.04)	-1.19* (0.07)	-1.26* (0.13)	-1.52* (0.07)	-1.41* (0.11)	-1.26* (0.13)
Post-waiver period [pre-waiver, reference]											
Post-waiver	0.02 (0.05)	-0.13 (0.12)	-0.25 (0.30)	-0.21 (0.13)	-0.15* (0.06)	0.06 (0.06)	0.12 (0.70)	1.38 (1.26)	-0.04 (0.09)	-0.37 (0.27)	-0.02 (0.18)
Months from time limit reinstatement interacted with age 45 to 47 cohort indicator [month 1 & age											

Characteristic	AL	CO: Group 1	CO: Grou p 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
50 to 52 cohort, reference]											
Month 1 * age 45 to 47 cohort	<0.01 (0.09)	-0.26 (0.22)	0.57 (0.55)	-0.49* (0.19)	-0.26* (0.11)	0.10 (0.09)	0.07 (0.17)	0.14 (0.29)	-0.29 (0.15)	0.09 (0.26)	-0.41 (0.29)
Month 2 * age 45 to 47 cohort	-0.04 (0.08)	-0.19 (0.22)	0.52 (0.55)	-0.47* (0.18)	-0.26* (0.11)	0.07 (0.09)	0.04 (0.16)	0.13 (0.28)	-0.34* (0.14)	-0.18 (0.25)	-0.47 (0.28)
Month 3 * age 45 to 47 cohort	-0.10 (0.08)	-0.29 (0.22)	0.46 (0.53)	-0.36* (0.18)	-0.19 (0.11)	0.09 (0.09)	0.08 (0.16)	0.11 (0.28)	-0.34* (0.14)	-0.15 (0.25)	-0.33 (0.27)
Month 4 * age 45 to 47 cohort	-0.11 (0.08)	-0.31 (0.22)	0.77 (0.52)	-0.41* (0.17)	-0.18 (0.11)	0.12 (0.09)	0.10 (0.16)	0.16 (0.27)	-0.44* (0.13)	-0.10 (0.24)	-0.28 (0.27)
Month 5 * age 45 to 47 cohort	-0.15 (0.08)	-0.26 (0.22)	0.63 (0.53)	-0.44* (0.17)	-0.18 (0.11)	0.13 (0.09)	0.08 (0.15)	0.17 (0.27)	-0.40* (0.13)	-0.07 (0.24)	-0.28 (0.27)
Month 6 * age 45 to 47 cohort	-0.17* (0.08)	-0.17 (0.22)	0.47 (0.53)	-0.43* (0.17)	-0.18 (0.11)	0.15 (0.09)	0.10 (0.15)	0.11 (0.27)	-0.41* (0.13)	>-0.01 (0.24)	-0.20 (0.26)
Month 7 * age 45 to 47 cohort	-0.18* (0.08)	-0.12 (0.22)	0.29 (0.52)	-0.43* (0.17)	-0.22* (0.11)	0.12 (0.09)	0.01 (0.15)	0.03 (0.27)	-0.44* (0.13)	0.01 (0.24)	-0.31 (0.26)
Month 8 * age 45 to 47 cohort	-0.17* (0.08)	-0.26 (0.22)	0.51 (0.52)	-0.38* (0.17)	-0.23* (0.11)	0.11 (0.09)	0.05 (0.15)	0.25 (0.27)	-0.44* (0.13)	0.02 (0.24)	-0.44 (0.26)
Month 9 * age 45 to 47 cohort	-0.16* (0.08)	-0.15 (0.22)	0.43 (0.52)	-0.45* (0.17)	-0.24* (0.11)	0.12 (0.09)	0.01 (0.15)	0.19 (0.27)	-0.48* (0.13)	0.01 (0.23)	-0.46 (0.26)
Month 10 * age 45 to 47 cohort	-0.14 (0.08)	-0.20 (0.22)	0.34 (0.53)	-0.45* (0.17)	-0.23* (0.10)	0.13 (0.09)	-0.01 (0.15)	0.23 (0.26)	-0.47* (0.13)	0.07 (0.23)	-0.48 (0.26)
Month 11 * age 45 to 47 cohort	-0.12 (0.08)	-0.27 (0.22)	0.46 (0.53)	-0.42* (0.17)	-0.21* (0.10)	0.14 (0.09)	0.01 (0.15)	0.22 (0.26)	-0.45* (0.13)	0.04 (0.23)	-0.50* (0.25)
Month 12 * age 45 to 47 cohort	-0.09 (0.08)	-0.38 (0.22)	0.18 (0.53)	-0.38* (0.17)	-0.23* (0.10)	0.14 (0.09)	0.08 (0.15)	0.23 (0.26)	-0.46* (0.13)	0.06 (0.23)	-0.46 (0.25)
Months from time limit reinstatement interacted with post-waiver indicator [month 1 & pre-waiver period, reference]											
Month 2 * post-waiver	-0.03 (0.03)	0.07 (0.08)	-0.22 (0.19)	0.10 (0.07)	0.04 (0.04)	0.03 (0.04)	-0.03 (0.06)	-0.09 (0.12)	-0.05 (0.06)	-0.01 (0.08)	-0.23* (0.12)
Month 3 * post-waiver	-0.03 (0.04)	-0.14 (0.10)	-0.12 (0.25)	0.13 (0.09)	0.02 (0.05)	-0.01 (0.04)	0.02 (0.08)	-0.18 (0.15)	-0.01 (0.07)	0.01 (0.11)	-0.05 (0.14)
Month 4 * post-waiver	-0.10* (0.04)	-0.08 (0.11)	-0.12 (0.29)	0.09 (0.10)	<0.01 (0.05)	-0.05 (0.05)	0.01 (0.09)	-0.08 (0.16)	-0.02 (0.08)	0.04 (0.12)	-0.08 (0.16)
Month 5 * post-waiver	-0.12* (0.05)	-0.07 (0.12)	-0.02 (0.29)	0.05 (0.10)	-0.04 (0.05)	-0.05 (0.05)	0.02 (0.09)	-0.05 (0.17)	0.02 (0.08)	0.08 (0.13)	-0.17 (0.17)
Month 6 * post-waiver	-0.17* (0.05)	-0.04 (0.12)	-0.30 (0.31)	0.08 (0.10)	-0.05 (0.06)	-0.06 (0.05)	0.08 (0.09)	-0.03 (0.17)	-0.01 (0.08)	0.10 (0.13)	-0.17 (0.17)
Month 7 * post-waiver	-0.15* (0.05)	0.12 (0.13)	-0.35 (0.32)	0.07 (0.11)	-0.03 (0.06)	-0.14* (0.05)	0.01 (0.09)	-0.09 (0.18)	<0.01 (0.09)	0.10 (0.14)	-0.17 (0.17)
Month 8 * post-waiver	-0.12* (0.05)	0.12 (0.13)	-0.10 (0.32)	0.05 (0.11)	-0.08 (0.06)	-0.17* (0.06)	0.12 (0.10)	0.11 (0.18)	-0.03 (0.09)	0.11 (0.14)	-0.26 (0.18)
Month 9 * post-waiver	-0.12* (0.05)	0.15 (0.13)	-0.10 (0.32)	0.04 (0.11)	-0.07 (0.06)	-0.19* (0.06)	0.09 (0.10)	0.12 (0.18)	-0.04 (0.09)	0.13 (0.14)	-0.22 (0.18)
Month 10 * post-waiver	-0.10* (0.05)	0.18 (0.13)	-0.17 (0.33)	0.01 (0.11)	-0.10 (0.06)	-0.19* (0.06)	0.08 (0.10)	0.10 (0.18)	-0.03 (0.09)	0.28 (0.14)	-0.35 (0.18)
Month 11 * post-waiver	-0.10 (0.05)	0.12 (0.14)	-0.27 (0.35)	0.03 (0.11)	-0.06 (0.06)	-0.18* (0.06)	0.06 (0.10)	0.12 (0.19)	-0.01 (0.09)	0.24 (0.15)	-0.28 (0.18)
	-0.08	0.09	-0.04	0.03	-0.07	-0.24*	0.09	0.09	>-0.01	0.25	-0.27

Characteristic	AL	CO: Group 1	CO: Group 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
Month 12 * post-waiver	(0.05)	(0.14)	(0.34)	(0.12)	(0.06)	(0.06)	(0.10)	(0.19)	(0.09)	(0.15)	(0.19)
Months from time limit reinstatement interacted with age 45 to 47 cohort indicator & post-waiver indicator [month 1, age 50 to 52 cohort, & pre- waiver period, reference]											
Month 1 * age 45 to 47 cohort * post-waiver	0.01 (0.08)	-0.13 (0.18)	-0.06 (0.44)	0.15 (0.16)	0.02 (0.09)	-0.12 (0.08)	-0.20 (0.14)	-0.05 (0.24)	0.16 (0.14)	0.33 (0.21)	-0.12 (0.25)
Month 2 * age 45 to 47 cohort * post-waiver	-0.04 (0.07)	-0.34* (0.17)	-0.26 (0.41)	0.10 (0.14)	-0.03 (0.08)	-0.14 (0.07)	-0.17 (0.13)	0.02 (0.22)	0.08 (0.12)	0.47* (0.19)	0.03 (0.22)
Month 3 * age 45 to 47 cohort * post-waiver	-0.49* (0.06)	-0.07 (0.16)	-0.42 (0.40)	-0.07 (0.13)	-0.07 (0.08)	-0.27* (0.07)	-0.39* (0.12)	-0.16 (0.21)	-0.03 (0.11)	0.42* (0.18)	-0.24 (0.21)
Month 4 * age 45 to 47 cohort * post-waiver	-1.85* (0.06)	-0.10 (0.16)	-0.58 (0.38)	-0.87* (0.12)	-0.97* (0.08)	-1.87* (0.06)	-0.52* (0.11)	-0.48* (0.19)	-1.02* (0.10)	-0.38* (0.17)	-1.80* (0.19)
Month 5 * age 45 to 47 cohort * post-waiver	-1.78* (0.06)	-0.16 (0.16)	0.81* (0.38)	-0.89* (0.12)	-1.18* (0.08)	-1.92* (0.06)	-0.51* (0.11)	-0.51* (0.19)	-1.11* (0.09)	-0.87* (0.17)	-1.60* (0.19)
Month 6 * age 45 to 47 cohort * post-waiver	-1.65* (0.06)	-0.13 (0.16)	-0.51 (0.39)	-0.90* (0.12)	-1.21* (0.08)	-1.83* (0.06)	-0.55* (0.11)	-0.51* (0.19)	-1.01* (0.09)	-0.93* (0.17)	-1.56* (0.18)
Month 7 * age 45 to 47 cohort * post-waiver	-1.53* (0.05)	-0.23 (0.16)	-0.34 (0.38)	-1.01* (0.12)	-1.28* (0.07)	-1.67* (0.06)	-0.38* (0.11)	-0.37* (0.18)	-0.97* (0.09)	-0.85* (0.16)	-1.36* (0.18)
Month 8 * age 45 to 47 cohort * post-waiver	-1.43* (0.05)	-0.18 (0.16)	-0.59 (0.38)	-1.02* (0.12)	-1.25* (0.07)	-1.55* (0.06)	-0.43* (0.10)	-0.60* (0.18)	-0.93* (0.09)	-0.75* (0.16)	-1.12* (0.17)
Month 9 * age 45 to 47 cohort * post-waiver	-1.34* (0.05)	-0.29 (0.16)	-0.41 (0.39)	-0.94* (0.11)	-1.22* (0.07)	-1.46* (0.06)	-0.35* (0.10)	-0.47* (0.18)	-0.89* (0.09)	-0.69* (0.16)	-1.18* (0.17)
Month 10 * age 45 to 47 cohort * post- waiver	-1.33* (0.05)	-0.26 (0.16)	-0.24 (0.39)	-0.90* (0.11)	-1.20* (0.07)	-1.41* (0.06)	-0.30* (0.10)	-0.48* (0.18)	-0.88* (0.09)	-0.75* (0.16)	-1.09* (0.17)
Month 11 * age 45 to 47 cohort * post- waiver	-1.31* (0.05)	-0.08 (0.16)	-0.45 (0.40)	-0.88* (0.11)	-1.24* (0.07)	-1.35* (0.06)	-0.27* (0.10)	-0.37* (0.18)	-0.90* (0.09)	-0.75* (0.15)	-1.08* (0.17)
Month 12 * age 45 to 47 cohort * post- waiver	-1.31* (0.05)	<0.01 (0.16)	-0.59 (0.39)	-0.90* (0.11)	-1.17* (0.07)	-1.32* (0.06)	-0.37* (0.10)	-0.39* (0.18)	-0.87* (0.09)	-0.76* (0.15)	-1.17* (0.17)
Age	0.03* (0.01)	-0.01 (0.04)	0.09 (0.09)	-0.04 (0.03)	>-0.01 (0.02)	0.03* (0.02)	0.03 (0.03)	0.06 (0.05)	-0.01 (0.02)	0.07 (0.04)	-0.05 (0.05)
Gender [male, reference]											
Female	0.20* (0.02)	0.25* (0.06)	0.37* (0.15)	0.26* (0.05)	0.18* (0.03)	0.17* (0.03)	0.16* (0.05)	>-0.01 (0.08)	0.33* (0.04)	0.13 (0.07)	0.17* (0.08)

Characteristic	AL	CO: Group 1	CO: Grou p 2	MD	MN	MO	OR: Broad Group	OR: Narrow Group	PA	TN	VT
Race/ethnicity [White, reference]											
Black	0.16* (0.02)	- -	- -	-0.21* (0.06)	-0.05 (0.04)	0.17* (0.03)	-0.13 (0.07)	-0.21 (0.11)	-0.03 (0.05)	-0.14 (0.09)	-0.33 (0.20)
Hispanic	-0.11 (0.14)	- -	- -	-0.43* (0.17)	-0.46* (0.08)	-0.25* (0.10)	-0.24* (0.10)	-0.44* (0.16)	0.02 (0.10)	-0.17 (0.26)	-0.34 (0.57)
Other	0.05 (0.07)	- -	- -	-0.25 (0.15)	0.06 (0.07)	-0.07 (0.16)	-0.17 (0.10)	-0.08 (0.16)	-0.18 (0.09)	0.07 (0.39)	-0.20 (0.33)
Education level [less than high school, reference]											
High school	- -	- -	- -	- -	-0.13* (0.04)	-0.17* (0.03)	- -	- -	-0.02 (0.06)	- -	-0.15 (0.10)
Some college/ associate's degree	- -	- -	- -	- -	-0.28* (0.05)	-0.32* (0.04)	- -	- -	-0.35* (0.08)	- -	-0.26* (0.13)
College graduate or above	- -	- -	- -	- -	-0.21* (0.08)	-0.30* (0.06)	- -	- -	0.06 (0.08)	- -	-0.20 (0.14)
Single person household [multi-person household, reference]	0.13* (0.03)	0.04 (0.07)	-0.17 (0.16)	0.12* (0.06)	0.16* (0.04)	0.13* (0.03)	0.22* (0.07)	0.02 (0.12)	0.15* (0.04)	0.26* (0.08)	0.08 (0.08)
Proportion of prior 3 quarters on SNAP ¹	1.09* (0.04)	1.34* (0.09)	1.24* (0.20)	1.18* (0.08)	1.22* (0.05)	0.87* (0.04)	1.55* (0.07)	1.36* (0.12)	1.19* (0.05)	1.17* (0.11)	1.05* (0.11)
Proportion of prior 3 quarters employed ¹	- -	-0.52* (0.07)	- 0.70* (0.19)	- -	- -	-0.73* (0.03)	- -	- -	-0.42* (0.05)	- -	- -
Unemployment rate	0.10* (0.02)	-0.04 (0.06)	0.25 (0.17)	0.10 (0.11)	-0.02 (0.02)	0.04* (0.02)	0.39 (1.09)	2.39 (1.95)	0.08 (0.05)	0.19 (0.32)	-0.03 (0.08)
Poverty rate	0.01 (<0.01)	0.03 (0.02)	0.05* (0.02)	-0.06 (0.05)	0.02* (0.01)	0.01* (<0.01)	<0.01 (0.03)	-0.07 (0.06)	0.03* (0.01)	-0.02 (0.03)	0.01 (0.03)
Rural area [nonrural area, reference]	0.07* (0.03)	-0.22 (0.12)	-0.27 (0.19)	- -	-0.02 (0.04)	-0.03 (0.04)	- -	- -	-0.17* (0.05)	0.28 (0.20)	- -
Border county [nonborder county, reference]	-0.04 (0.03)	0.17 (0.11)	-0.37 (0.20)	0.05 (0.09)	0.06 (0.04)	-0.10* (0.04)	- -	- -	-0.10* (0.05)	0.15 (0.09)	-0.03 (0.10)
Intercept	-1.52* (0.71)	0.67 (1.91)	-4.84 (4.74)	3.35* (1.51)	0.54 (0.96)	-0.51 (0.78)	-2.86 (4.96)	-13.02 (8.87)	1.28 (1.18)	-3.52 (2.41)	4.02 (2.34)
Observations	346,788	34,104	6,192	74,460	167,124	268,764	96,120	27,456	128,868	35,172	32,232

Source: SNAP administrative data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: Standard errors in parentheses and are clustered by individuals. The sample for each State is the number of eligible participants potentially subject to the time limit (referred to as ABAWDs), ages 45 to 47 and 50 to 52. The models are estimated for each month over the 12 months following the cohort selection calendar quarter, thus there are multiple observations per individual per cohort. In the model results, the age 45 to 47 cohort is subject to ABAWD time limit reinstatement (and in some States a change in E&T policy) in its 12 month observation window, whereas the age 50 to 52 cohort is not subject to ABAWD time limit reinstatement during its 12 month observation window. The post-waiver indicator is equal to one after ABAWD time limit reinstatement. The interaction terms between month of observation, cohort, and post-waiver provide logistic coefficient estimates of the age 45 to 47 cohort participation rate less the age 50 to 52 cohort participation rate at the same point in time following cohort selection and less the trend effects of participation. Colorado (CO): Group 1 are counties in which mandatory E&T requirements were in effect prior to ABAWD time limit reinstatement.

Colorado (CO): Group 2 are counties in which mandatory E&T and the ABAWD time limit were introduced simultaneously. Oregon (OR): Broad Group includes OR ABAWDs who may be exempt from work requirements (and thus unaffected by the time limit) but cannot be identified with certainty. Oregon (OR): Narrow Group excludes OR ABAWDs who were classified as having an “other barrier” to participation in mandatory E&T. The variable “Proportion of prior 3 quarters employed” is unavailable for AL, MD, MN, OR, TN, and VT as those States did not provide UI wage data. Other cells with a “-” indicate the variable was excluded from the model because it either was not available, perfectly predicts the dependent variable, or is perfectly collinear with another variable.

* p≤0.05

¹ Due to differences in data and time limit reinstatements, the prior 12 months/4 quarters are used for PA for the proportion of prior quarters on SNAP and employed variables in the model. In Maryland, data for January 2014 was unavailable. Therefore, for both age group cohorts in the waiver period, this variable captures only the proportion of the eight months prior to the observation window on SNAP for Maryland.

TABLE 8
Full results of logit regression model of the probability of ABAWD employment for time limit and waiver cohorts each quarter in the observation window, by State

Characteristic	CO: Group 1	CO: Group 2	MO	PA
Quarters from baseline [baseline quarter, reference]				
Quarter 1	-0.25* (0.08)	0.13 (0.23)	0.02 (0.03)	0.13* (0.04)
Quarter 2	-0.19* (0.09)	-0.07 (0.28)	0.19* (0.03)	0.09 (0.05)
Quarter 3	-0.20* (0.10)	0.20 (0.23)	0.23* (0.04)	0.17* (0.05)
Quarter 4	-0.14 (0.10)	-0.07 (0.28)	0.26* (0.04)	0.05 (0.06)
Post-waiver period [pre-waiver, reference]				
Post-waiver	-0.45* (0.12)	0.59 (0.35)	-0.04 (0.05)	-0.06 (0.06)
Quarters from baseline interacted with age 45 to 47 cohort indicator [baseline quarter & age 50 to 52 cohort, reference]				
Quarter 0 * age 45 to 47 cohort	-0.27 (0.30)	1.07 (0.69)	-0.18 (0.10)	0.34* (0.14)
Quarter 1 * age 45 to 47 cohort	-0.36 (0.30)	0.82 (0.73)	-0.19* (0.10)	0.40* (0.14)
Quarter 2 * age 45 to 47 cohort	-0.33 (0.30)	1.14 (0.73)	-0.22* (0.10)	0.41* (0.14)
Quarter 3 * age 45 to 47 cohort	-0.29 (0.30)	1.00 (0.72)	-0.21* (0.10)	0.35* (0.14)
Quarter 4 * age 45 to 47 cohort	-0.56 (0.31)	1.20 (0.74)	-0.20* (0.10)	0.45* (0.15)
Quarters from baseline interacted with post-waiver indicator [baseline quarter & pre-waiver period, reference]				
Quarter 1 * post-waiver	0.19 (0.11)	-0.61 (0.32)	-0.03 (0.04)	>-0.01 (0.06)
Quarter 2 * post-waiver	0.16 (0.13)	-0.35 (0.38)	-0.07 (0.05)	0.04 (0.07)
Quarter 3 * post-waiver	0.18 (0.15)	-0.49 (0.36)	-0.11* (0.05)	0.10 (0.08)
Quarter 4 * post-waiver	0.12 (0.15)	-0.23 (0.42)	-0.14* (0.06)	-0.01 (0.08)
Quarters from baseline interacted with age 45 to 47 cohort indicator &				

Characteristic	CO: Group 1	CO: Group 2	MO	PA
post-waiver indicator [baseline quarter, age 50 to 52 cohort, & pre-waiver period, reference]				
Quarter 0 * age 45 to 47 cohort * post-waiver	0.01 (0.19)	-0.34 (0.48)	0.04 (0.07)	0.09 (0.10)
Quarter 1 * age 45 to 47 cohort * post-waiver	-0.03 (0.22)	-0.14 (0.53)	0.13 (0.07)	0.13 (0.10)
Quarter 2 * age 45 to 47 cohort * post-waiver	0.03 (0.22)	-0.25 (0.52)	0.17* (0.07)	0.12 (0.11)
Quarter 3 * age 45 to 47 cohort * post-waiver	-0.02 (0.22)	-0.51 (0.52)	0.15* (0.07)	0.15 (0.11)
Quarter 4 * age 45 to 47 cohort * post-waiver	0.28 (0.22)	-1.17* (0.53)	0.16* (0.07)	0.03 (0.11)
Age	-0.06 (0.05)	0.09 (0.13)	-0.05* (0.02)	0.04 (0.02)
Gender [male, reference]				
Female	0.17* (0.09)	-0.23 (0.21)	0.21* (0.03)	0.11* (0.04)
Race/ethnicity [White, reference]				
Black	- (0.03)	- (0.03)	0.42* (0.03)	0.20* (0.05)
Hispanic	- (0.11)	- (0.11)	0.07 (0.11)	-0.03 (0.11)
Other	- (0.18)	- (0.18)	0.42* (0.18)	0.01 (0.11)
Education level [less than high school, reference]				
High school	- (0.03)	- (0.03)	0.21* (0.03)	0.14* (0.07)
Some college/associate's degree	- (0.04)	- (0.04)	0.39* (0.04)	0.29* (0.09)
College graduate or above	- (0.07)	- (0.07)	0.03 (0.07)	0.12 (0.08)
Single person household [multi-person household, reference]	0.09 (0.10)	-0.34 (0.23)	0.08* (0.04)	0.14* (0.05)
Proportion of prior 3 quarters on SNAP ¹	-0.43* (0.12)	-0.36 (0.30)	-0.07 (0.05)	-0.29* (0.06)
Proportion of prior 3 quarters employed ¹	3.51* (0.10)	3.73* (0.26)	3.02* (0.04)	3.31* (0.05)
Unemployment rate	-0.22* (0.09)	0.14 (0.22)	-0.04* (0.02)	-0.06 (0.05)
Poverty rate	0.07* (0.03)	<0.01 (0.03)	-0.01* (<0.01)	0.01 (0.01)
Rural area [nonrural area, reference]	-0.53* (0.16)	-0.05 (0.30)	-0.01 (0.04)	0.04 (0.06)
Border county [nonborder county, reference]	0.26 (0.15)	0.28 (0.27)	-0.01 (0.04)	0.05 (0.06)
Intercept	1.61 (2.65)	-7.08 (6.40)	0.62 (0.86)	-3.96* (1.27)
Observations	14,210	2,580	111,985	53,695

Source: SNAP administrative data and UI wage records from Colorado, Missouri, and Pennsylvania.

Notes: Standard errors in parentheses and are clustered by individuals. The sample for each State is the number of eligible participants potentially subject to the time limit (referred to as ABAWDs), ages 45 to 47 and 50 to 52. The models are estimated for each calendar quarter over the five quarters during and following cohort selection, thus there are multiple observations per individual per cohort. In the model results, the age 45 to 47 cohort is subject to ABAWD time limit reinstatement (and in some States a change in E&T policy) in its

12 month observation window, whereas the age 50 to 52 cohort is not subject to ABAWD time limit reinstatement during its 12 month observation window. The post-waiver indicator is equal to one after ABAWD time limit reinstatement. The interaction terms between quarter of observation, cohort, and post-waiver provide logistic coefficient estimates of the age 45 to 47 cohort employment rate less the age 50 to 52 cohort employment rate at the same point in time following cohort selection and less the trend effects of employment. Colorado (CO): Group 1 are counties in which mandatory E&T requirements were in effect prior to ABAWD time limit reinstatement. Colorado (CO): Group 2 are counties in which mandatory E&T and the ABAWD time limit were introduced simultaneously. Cells with a "-" indicate the variable was excluded from the model because it either was not available, perfectly predicts the dependent variable, or is perfectly collinear with another variable.

* $p \leq 0.05$

¹ Due to differences in data and time limit reinstatements, the prior 12 months/4 quarters are used for PA for the proportion of prior quarters on SNAP and employed variables in the model.

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