The Effect of Food Assistance Work Requirements on Labor Market Outcomes

by

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CES 24-54 **September 2024**

Abstract

The Supplemental Nutrition Assistance Program (SNAP), formerly named the Food Stamp Program, has long been an integral part of the US social safety net. During US welfare reforms in the mid-1990s, SNAP eligibility became more restrictive with legislation citing a need to improve self-sufficiency of participating households. As a result, legislatures created two of these eligibility requirements: the General Work Requirement (GWR), which forces an adult to work to receive benefits, and the Able-Bodied Adult Without Dependents (ABAWD) work requirement, which requires certain adults to work a certain number of hours to receive benefits. Using restricted-access SNAP microdata from nine states, we exploit age cutoffs of the ABAWD work requirement and General Work Requirement (GWR) to estimate the effect of these policies on labor outcomes. We find that at the ABAWD age cutoff, there is no statistically significant evidence of a discontinuity across static and dynamic employment outcomes. At the GWR age cutoff, unemployed SNAP users and SNAP-eligible adults are on average more likely to leave the labor force than to continue to search for work.

Keyword: SNAP, nutrition assistance, work requirements

JEL Classification: R10, I38, L26

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1 Introduction

Work requirements for welfare programs are a controversial policy measure. Some policymakers argue that work requirements restrict government spending and caseload resources to those who "deserve" it by displaying self-sufficiency. Others assert that all that need assistance are deserving of it, and that the strict requirements keep those who do not qualify in poor conditions. Even others argue that the requirements are useless at improving labor market participation, adding a nonbinding constraint to consumers that is costly both to them and to program implementation. As a result of these clashing beliefs, welfare programs are constantly reformed, eliminated, or kept intact through the practice of logrolling.

One of the welfare programs in the United States that has survived an onslaught of said policy changes is the Supplemental Nutrition Assistance Program (SNAP), formerly known as the Food Stamp Program (FSP). SNAP is a federally funded program aimed at relieving food insecurity and promoting healthy diets for low-income individuals. Since the passing of the Personal Responsibility and Work Opportunity Reconciliation Act of 1996, eligible individuals are subject to two work requirements: a general work requirement (GWR) for all participants age 16-59, and a more restrictive set of requirements for able-bodied adults without dependents (ABAWD) age 18-49 (Wheaton et al., 2021). Despite limited evidence on work requirement efficacy (Gray et al., 2023), efforts to strengthen these requirements continue to gain traction in the U.S. legislative environment: Congress extended the ABAWD requirements to 52 years of age in 2023 (Qiu, 2023). These changes highlight the importance of evaluating the effect of SNAP work requirements.

In this article, we evaluate whether the ABAWD requirements, as well as SNAP's General Work Requirement (GWR), lead to changes in labor market outcomes for SNAP individuals. While static economic theory suggests that these requirements may reduce caseloads and keep a larger share of SNAP recipients employed, we also test whether SNAP benefits affect more dynamic labor market outcomes, such as income and length of job search while unemployed. We use regression discontinuity designs on microdata from nine US states to capture these effects.

Whether SNAP benefits incite agents to reduce their allocation of labor, as static economic theory suggests, is already an active area of study. Using the staggered introduction of FSP across counties in the 1960s and 1970s, Hoynes and Schanzenbach (2012) found households reduced employment and work hours once they received access. East (2018) finds similar evidence in a more contemporary setting among immigrants who were phased out of FSP due to the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 and were once again reinstated. There is also research activity using the ABAWD work requirement in particular. Some studies find that work requirements do improve probability of employment (Cuffey et al., 2022; Harris, 2021), while others do not (Gray et al., 2023; Han, 2020; Stacy et al., 2018). While much of this work had to indirectly measure SNAP use and associated outcomes due to data limitations, more recently, Gray et al. (2023) use microdata from Virginia and find no statistical evidence that work requirements affect employment but suggestive evidence that it increases income. Much of the variation in the results between studies likely arise from differences in data access and methodological choices, ranging from using different sources of exogenous variation to different strategies of sample construction.

We contribute to this line of research in four separate ways. First, we estimate the effect of the work requirements across nine states – a large sample over a long analysis period with a fine level of granularity compared to previous work requirement research. Previous studies that test for an effect of the ABAWD work requirement needed to make tradeoffs between the quality of the data used and the external validity of the results. For example, several studies use public-use cross-sectional

data on the entire United States to determine who receives SNAP and their subsequent outcomes, limiting data precision and the internal validity of their results (Han, 2020; Harris, 2021; Ritter, 2018). Others are able to use administrative or restricted-use data for their analysis, but only for a small subset of states, acknowledging that some of the differences in results may arise from between-state heterogeneity in the impacts of work requirements (Gray et al., 2023; Stacy et al., 2018; Wheaton et al., 2021). To our knowledge, this study is the first of its kind to use state SNAP administrative panel data for nine US states over this long of an analysis period, and the first to link to such a breadth of federal administrative data. Additionally, the subset of states included in this analysis is disjoint from the subsets used in other studies using administrative data. In particular, this analysis includes states with large rural populations which often use SNAP benefits differently than their urban counterparts (Harnack et al., 2019). Therefore, this study extends the external validity of previous studies and finds potential heterogeneity in the effect of the work requirements across different US regions.

Our second contribution is using multiple RDD cutoffs, which extends the inference to different age groups. The first cutoff we use is the age cutoff at 50, the cutoff most used in the literature. Given RDD estimates are local to cutoffs, previous work has been limited insofar as estimates were local to individuals at age 50. Given labor market outcomes, such as participation, employment, and income vary substantially across age, external validity to other ages remains in question. We help address this previous limitation by also testing the GWR cutoff at age 60, which has not been tested in prior works. These cutoffs guarantee strict compliance, allowing for a sharp regression discontinuity design (RDD) estimation strategy and strong internal validity, and now by testing multiple age cutoffs, we enhance the external validity of this work.

The third contribution of this article is the ability to test dynamic or long-term labor market effects of the work requirements. Static economic theory predicts that without work requirements, SNAP participants near the cutoff will choose optimal allocations of labor, characterized by working less hours, choosing unemployment, or exiting the labor market. However, this approach fails to acknowledge that unemployment is an active role in the labor market if it is coupled with a job search (Mortensen, 1986). Those who face less liquidity constraints during their search could search longer with a higher reservation wage. This may lead to better labor market outcomes for those who are not subject to work requirements, providing evidence antithetical to static theory.

Finally, our fourth contribution is estimating heterogeneous effects of work requirements across gender. Men and women in the United States face different constraints, leading to different labor market decisions throughout their lives. This is paired with a gender wage gap, where women earn less than men (Goldin, 2014). In the context of SNAP, East (2018) finds that access to SNAP reduces labor market participation among women. One study about the ABAWD work requirement finds that women are more likely to adhere to work requirements than men (Wheaton et al., 2021), while another finds no heterogeneous effects across gender, albeit suffering from data quality issues (Ritter, 2018). This study is the first to test the heterogeneity across both the ABAWD and GWR work requirements and the first to test a broader set of labor market outcomes on gender subsamples. We find that the GWR is especially binding to women, leading to a statistically significant labor market exit once they are no longer subject to the requirement.

This article proceeds as follows: Section 2.1 provides background on SNAP and the current state of the economic literature on its effectiveness in improving the outcomes of its recipients. Section 2.2 provides background on the work requirements in SNAP and the literature around the work requirements. Section 3 provides the testable hypotheses generated from both static and dynamic optimization models. Section 4 presents the sharp regression discontinuity design we use to estimate the causal effect of work requirements on labor market outcomes. Section 5 describes

the longitudinal state and federal administrative data used in this analysis and offers additional evidence that supports the validity of the empirical strategy. Section 6 presents results both on the effect of the requirement on the whole sample and for subsamples divided by gender. Section 7 concludes and offers policy implications unique to each work requirement.

2 Background

2.1 Labor Market and Health Effects of SNAP

In its current form, SNAP has two primary goals: to reduce food insecurity and improve the diets of low-income individuals. Through the program, households that reach the eligibility conditions obtain financial support to purchase food (USDA, n.d.). In 2021, more than 41 million low-income people received SNAP benefits, two thirds of whom belong to households with children (Policy Basics, 2021). With expenditures of almost $111 billion in 2021 (Policy Basics, 2021), SNAP is the third largest welfare program in the US and is an integral branch of the federal welfare safety net (Nestle, 2019).

Because of the large size and costs of the program, many studies have attempted to estimate the effect of the program on its primary goals. Due to estimation issues such as selection bias (Mabli et al., 2013) and data quality (Caputo & Just, 2022), empirical results vary on whether SNAP contributes to food insecurity alleviation and improvements in diet quality for its participants (Schanzenbach, 2019). However, several quasi-experimental studies have found statistical evidence that supports the claim that SNAP lowers the incidence of food insecurity for low-income families. For example, by leveraging policy changes that excluded immigrants from receiving FSP benefits in 1996, Borjas (2004) found that reducing FSP eligibility increases food insecurity. Specifically, results indicate that on average, a 10 percentage point decrease in the number of people that received food stamps results in a 5 percentage point increase in the fraction of food-insecure households. In a more recent study, Mabli et al. (2013) compare new entrants cross sectionally (against SNAP households already six months into the program) and longitudinally (against the new entrants after six months) to find that SNAP reduces food insecurity by around 8% in the short run. In terms of improving diet quality, studies show that the effects are small or not statistically significant (Fan, 2010; Gregory et al., 2013).

While evidence on SNAP's ability to adequately address its stated goals remains contentious, there is evidence that it does affect the economic behavior of its participants. In terms of intertemporal household consumption, access to food stamps is an effective insurance against permanent income shocks (Blundell & Pistaferri, 2003). However, estimates of the effects of SNAP benefits on budget shares for low-income individuals change depending on the timing of policy changes. During the early stages of FSP adoption in the 1960s and 1970s, researchers found that the benefits reduced out-of-pocket food spending, increased food spending, and the marginal propensity to consume out of cash income and food stamp income were similar (Hoynes & Schanzenbach, 2009). Studies using data during and after the Great Recession find that program recipients are much more likely to consume out of their SNAP income relative to their other incomes, challenging classical economic theory (Beatty & Tuttle, 2015; Hastings & Shapiro, 2018). Evidence on the relationship between SNAP benefits and labor market outcomes seem more robust to changes in time and more consistent with classical economic theory. At both the introduction of the FSP (Hoynes & Schanzenbach, 2012) and the policy change in 1996 that disproportionally affected immigrants (East, 2018), access to SNAP benefits reduced hours of work and employment rates, especially for single women.

As food insecurity is associated with poor health (Gundersen & Ziliak, 2015), some studies have attempted to estimate the role of SNAP on health outcomes. Economic stability during childhood is an important determinant for childhood and adult health (Case et al., 2002) along with educational outcomes and ability (Case & Paxson, 2008). Therefore, safety net participation for low-income families with children may improve future health and labor outcomes. Empirical evidence supports these notions in relation to SNAP. One additional year of FSP eligibility for immigrants who lost access to the federal program in 1996 improved the health of children under five well into their teenage years (East, 2020). Using the exogenous variation at the beginning of the policy implementation in the 1960s, researchers have also found that access to food stamps as a child reduced the chance of suffering from metabolic syndrome as an adult (Hoynes et al., 2016) and increased the accumulation of human capital (Bailey et al., 2023). Additionally, FSP access improved fertility (Currie & Moretti, 2008), and reduced neonatal mortality (Almond et al., 2011). The estimated effects of SNAP benefits on health outcomes are overwhelmingly positive, providing evidence that SNAP reduces food insecurity and improved the lives of low-income individuals in a substantial way.

2.2 SNAP Work Requirements

Participants in SNAP are subject to three work-related policies: the general work requirement (GWR), the ABAWD work requirement (and time limit), and SNAP Employment and Training Programs (SNAP E&T). All three of these policies are interrelated, and a SNAP participant may be subject to a combination of them at any given time. While the primary goal of this section is to provide a brief overview of these policies and how they interact with one another, we conclude it with a discussion of possible employment actions a SNAP participant may make under this patchwork of policies while still maintaining SNAP benefits. This discussion informs the economic theory in the next section.

Of the two work requirements, the GWR affects the larger population of SNAP participants. To adhere to the GWR, a SNAP participant must (1) register for work; (2) participate in SNAP E&T if assigned; or (3) accept a job offer. Participants are exempt from this requirement for reasons that may affect their ability to work, including whether they are living with a disability, enrolled in school half-time or more, living with a child under six years of age, or in a drug or alcohol rehabilitation program. Participants are also exempt from the GWR for reasons related to their current employment and income. In particular, participants who would otherwise be subject to the GWR are exempt if they work at least 30 hours a week (or earn the equivalent of thirty hours times the current federal minimum wage); are currently receiving unemployment compensation; or already complying with work requirements for Social Security Insurance. SNAP applicants that do not meet the GWR lose SNAP benefits immediately for at least a month. The GWR applies to unexempt individuals ages 16-59.

A strict subset of those subject to the GWR are also subject to the ABAWD requirement. Specifically, the ABAWD requirement affects SNAP participants aged 18-49 who are not otherwise waived from the GWR, do not live with a child under 18, are not pregnant, and are not unfit for unemployment due to disability. Those subject to the requirement are called ABAWDs. ABAWDs face more stringent obligations under the requirement. Specifically, an ABAWD must meet the GWR and work or attend work programs (which include SNAP E&Ts) at least 80 hours a month to receive SNAP benefits. If an ABAWD does not fulfill this requirement, they may only receive SNAP benefits for three months in a 36-month period or until they meet the requirement again.

Because ABAWDs are subject to stricter work requirements, there are avenues through which states may waive the work requirement or exempt ABAWDs. States can administer monthly discretionary exemptions to ABAWDs who are not meeting the work requirements, meaning they can receive more than three months of SNAP benefits in a 36-month period. Additionally, states can choose to waive substate areas based on local area unemployment or other conditions that may limit an ABAWD's ability to remain employed. These substates areas must have (1) unemployment levels over 10%; (2) an unemployment rate 20% above the national unemployment rate in a given year; or (3) be deemed to have poor economic conditions through some other measures, such as employment to population ratios.

The work requirements leave little scope for voluntary unemployment decisions for a SNAP participant. While those subject only to the GWR can work up to 30 hours a week, they cannot reduce their hours or work effort without good cause and still receive SNAP benefits. Any ABAWD must work between 20 and 30 hours a week on average, but because they are subject to the GWR, they cannot voluntarily reduce their hours if they become exempt from the time limit due to age, geography, etc.

As mentioned in Section 1, the current research on work requirements focuses solely on the ABAWD work requirement. At the time of writing, we are aware of eight studies on the topic. Studies use a variety of different methodological choices to estimate the effect. Four studies use the staggered reestablishment of the ABAWD work requirement following the Great Recession to identify causal effects (Hall, 2022; Han, 2020; Harris, 2021; Wheaton et al., 2021), while the others rely on the age cutoff at 50 (Cuffey et al., 2022; Gray et al., 2023; Ritter, 2018; Stacy et al., 2018). Four studies use public-use microdata to estimate the effect for the entire United States (Cuffey et al., 2022; Han, 2020; Harris, 2021; Ritter, 2018), while the others use administrative data from a select number of states. Specifically, Gray et al. (2023) uses data from Virginia; Hall (2022) uses data from Maryland; Stacy et al. (2018) uses data from Florida, Illinois, Indiana, Maryland, Michigan, New Jersey, New York, Tennessee, and Virginia; and Wheaton et al. (2021) uses data from Alabama, Colorado, Maryland, Minnesota, Missouri, Oregon, Pennsylvania, Tennessee, and Vermont. As states implement SNAP and the work requirements differently (USDA Program Development Division, 2018), there is the potential for heterogeneous effects of the work requirements by state.

These studies yield similar results. With the exception of two (Cuffey et al., 2022; Ritter, 2018), most studies find a reduction in caseloads due to the ABAWD work requirement. Similarly, most studies find no effect of the requirements on labor market outcomes, again with two as exceptions (Cuffey et al., 2022; Harris, 2021). However, these studies fail to acknowledge the intermingling of the ABAWD work requirement with the GWR, the full extent of potential heterogeneity due to age and gender, and possible effects on dynamic labor market outcomes. We attempt to fill these gaps.

3 Conceptual Model

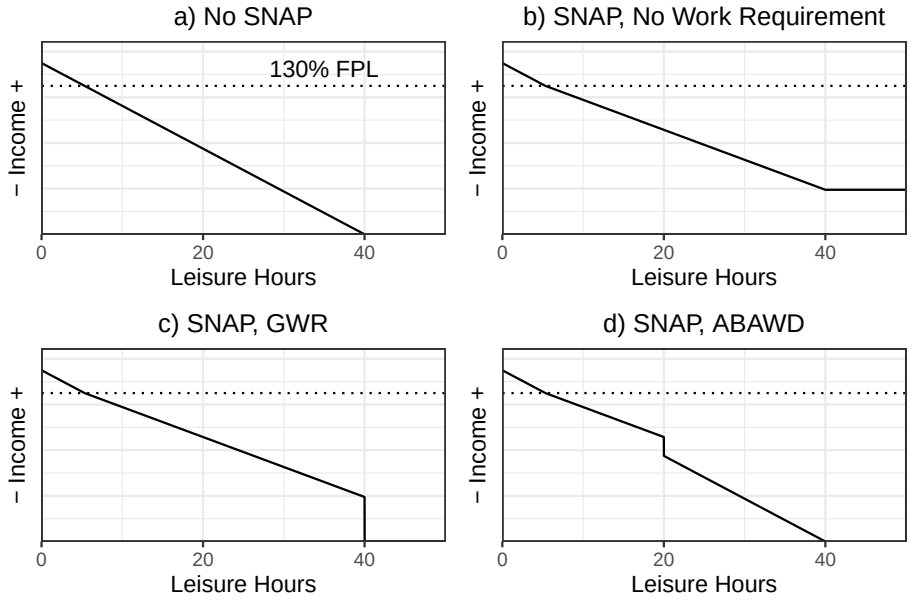
In this section, we present two different economic models that provide testable hypotheses for the behavior of SNAP-eligible adults subject to the work requirements. The first is a static optimization model, which is the more prevalent model in the literature. We then introduce hypotheses from dynamic optimization models, which offer more nuanced predictions in terms of job search and unemployment spells. Due to the different structures of the work requirements, SNAP-eligible adults face different constraints in their actions. As a result, these models will yield different

predictions for each requirement. The section closes with features not captured in the models that may affect the empirical results.

3.1 Static Hypotheses

In much of the literature on the effect of welfare programs on labor market outcomes, an agent's decision-making is modelled using a stylized static budget constraint (Bitler et al., 2006; Gray et al., 2023). Agents maximize their utility by choosing allocations of two goods: income and leisure hours. Agents who do not participate in SNAP face an "unkinked" budget constraint, where the tradeoff between the two goods is the agent's hourly wage. This is displayed in Panel A of Figure 1. Agents that can take up SNAP face a kinked budget constraint: they begin receiving SNAP benefits at a gross income equal to 130% of the federal poverty line (FPL). Additionally, SNAP benefits face a benefit-reduction rate (or implicit tax rate) on net income of 0.3. As a result, an agent who receives SNAP has a discounted hourly wage tradeoff of 0.7, and their income flattens to the maximum SNAP benefit as their labor hours reach zero. Panel B of Figure 1 shows this budget constraint.

Figure 1: Stylized Static Budget Constraints for SNAP Participants



Note: Adapted from Gray et al. (2023) and Bitler et al. (2006). Income eligibility for SNAP is 130% the federal poverty line (FPL).

However, agents subject to the work requirements face additional restrictions on their budget. As Section 2.2 explains, those subject to the GWR cannot receive SNAP benefits if they are not actively working, searching for work, or participating in a work program. As a result, there is a discontinuous jump at an allocation of full leisure hours compared to an agent not subject to the work requirement (see Panel C). Agents whose optimal allocation falls at the discontinuous jump (that is, their optimal income-leisure bundle is collecting the maximum SNAP benefit as income and not participating in the labor market) must choose a second-best allocation. Depending on their marginal rate of substitution between the two goods, an agent bound by the GWR picks from

two actions: (1) Move to a lower allocation of leisure to retain benefits; or (2) opt to maintain the leisure allocation and drop out of SNAP.

The ABAWD work requirement has an analogous explanation (see Panel D). As ABAWDs are also subject to the GWR, they face the same constraint when choosing to engage in the labor market. However, an ABAWD must also satisfy the hourly work requirement to receive SNAP benefits. If the work requirement is binding, an ABAWD must choose between a second-best allocation of income and leisure. Compared to agents only subject to the GWR, they may choose an allocation where they are still working to some extent. In summary, the ABAWD must either (1) retain SNAP benefits by choosing to work above the labor hours threshold or (2) drop out of SNAP and choose a leisure allocation under the work requirement.

Empirically, one should see two different effects of the work requirements. If SNAP-eligible adults subject to a requirement are less likely to participate in SNAP, this suggests that the requirement is binding, and those along the cutoff prefer to forgo the benefit than to work more. Conversely, if those subject to a requirement engage in the labor market more intensely, either through working (GWR) or working more hours (ABAWD), the work requirement incentivizes work among those bound by it.

3.2 Dynamic Hypotheses

While the static model is a powerful tool to predict economic behavior, it fails to account for conditions present in actual labor markets. The most glaring absence is that of search frictions: an agent's job search is riddled with joblessness spells. As both the GWR and ABAWD work requirement can limit SNAP benefits for those experiencing spells, they can also affect more dynamic labor market outcomes. Dynamic job search is an active area of study, with a variety of economic models highlighting different aspects of search (Maibom et al., 2023; Mortensen, 1986; Mortensen & Pissarides, 1999).

There are several results derived from these models that are pertinent to SNAP's work requirements. The first is the presence of an aging effect among those nearing retirement. As optimal control results change between finite and infinite horizon abstractions, so should the behaviors of rational agents searching for work. Therefore, there may be a difference in the behavior of SNAP eligible adults based on their age. Specifically, as people near retirement, their return to search falls, encouraging them to quit their search early (Mortensen, 1986).[1] Because the GWR and ABAWD age cutoffs occur at different ages, heterogeneity in results could be driven by age rather than the structures of the requirements.

The other result deals more closely with the work requirements. During a job search, unemployed workers face liquidity constraints. Those with more funds benefit from an increase in the value of leisure which in turn increases their reservation wage. Additionally, if liquidity is finite and decreases as search tenure increases, those with more liquidity can search for longer at reservation wages well above their value of leisure (Mortensen, 1986).

SNAP benefits can act as liquidity for an unemployed worker not subject to work requirements. As a result, they may accept higher wage offers and endure longer joblessness spells compared to those under the work requirements. ABAWDs that cannot maintain their hourly requirement only retain their benefits for three months, limiting their joblessness spells tremendously. SNAP users subject to the GWR face a similar issue but are not monitored as closely as ABAWDs. If these

[1]This finite horizon result only exists for people very close to retirement as joblessness spells are often short (Mortensen, 1986).

hypotheses are correct, work requirements may prevent inframarginal workers from accepting jobs with higher wages.

3.3 Other Considerations

Individuals who are designated as ABAWDs may face other more binding constraints from their employers in regards to leisure time. Employers may offer work hours discretely. For example, an employer may be looking for a worker that can provide exactly 20 hours of work. As a result, the agents described in model presented in Figure 1 may already be at their second-best allocations and the work requirement is then not a binding constraint. This could lead to null results.

4 Empirical Strategy and Identification

To estimate the effect of the work requirements on static and dynamic labor market outcomes, we use sharp RDDs at different age cutoffs created by SNAP policy. As mentioned in Section 2, SNAP users are subject to the GWR if they are between the ages of 16 and 59. Analogously, SNAP users subject to the GWR are also subject to the ABAWD work requirement if they are between the ages of 18 and 49. After removing waived individuals from the sample, we estimate the effect of the work requirements, τ_{GWR} and τ_{ABAWD}, using the upper bound cutoffs. Expressed in terms of potential outcomes, we estimate

$$\tau_{GWR} = \mathbb{E}[Y_i(1) - Y_i(0)|Age_i = 60] \tag{1}$$

for the GWR and

$$\tau_{ABAWD} = \mathbb{E}[Y_i(1) - Y_i(0)|Age_i = 50] \tag{2}$$

for the ABAWD work requirement. Y_i is a labor outcome for individual i, and the number in parenthesis denotes whether (=1) or not (=0) the person is subject to the work requirement. We estimate these local average treatment effects (LATE) using the following:

$$\tau = lim_{x\downarrow c}\,\mathbb{E}[Y_i|X_i = x] - lim_{x\uparrow c}\,\mathbb{E}[Y_i|X_i = x] \tag{3}$$

As is standard, we use local linear point estimation using Mean Squared Error (MSE) optimal bandwidths to estimate this effect, and heteroskedasticity-robust nearest neighbor standard errors for valid inference (Calonico et al., 2014; Cattaneo & Titiunik, 2022).

There are benefits to the sharp RDD approach using age cutoffs. The first is the inability for SNAP-eligible adults to sort across the age cutoff: one cannot control their age, no matter how hard they try. Other forms of noncompliance around the cutoffs can only occur through the use of discretionary exemptions or geographic waivers from the ABAWD work requirement. We control these exemptions and waivers using data from the USDA Food and Nutrition Services. As a result, these estimates (especially for the GWR) can be considered credible for a treatment effect rather than an intention-to-treat (ITT) effect.

While the properties of RDDs based on age cutoffs benefit from strong internal validity, there is a drawback: estimates of treatment effects using RDDs are "local" to people around the age cutoffs. As Section 3.2 suggests, liquidity constraints and aging effects may affect the labor market decisions of people at different ages. Nonetheless, by including an RDD at age 60 for the GWR, we reduce the concern of previous work that only examines age 50 for the ABAWD, and thereby expand the external validity of work requirement research to other ages. Further, with the microdata used in

this study, we are able to estimate the effect of the work requirements across nine states over an extended time period – a large sample across a long time period (with this level of granularity) compared to previous work requirement research – which further expands external validity in terms of states and time.

5 Data

In this section, we describe the data we use to estimate the effects of the work requirements and then provide evidence of the validity of the estimation strategy. We use monthly client-level SNAP administrative data from nine states to identify SNAP users. Then, we merge this data longitudinally to annual American Community Survey (ACS) microdata. Using responses from the ACS and data from ABAWD work requirement waiver requests, we create subsamples of SNAP-eligible and SNAP-participating ACS respondents that are subject to the GWR and the ABAWD work requirement. We close this section with placebo and predetermined outcome tests using the samples. Estimates from these exercises show a lack of statistically significant discontinuities at the age cutoffs (i.e., covariate smoothness), validating the empirical design.

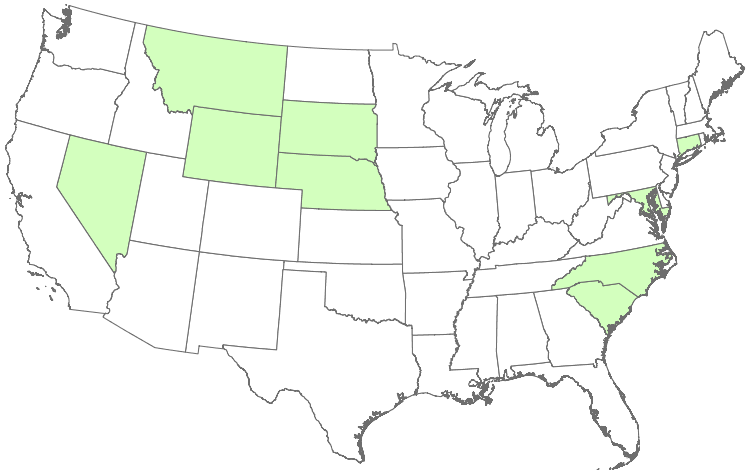
5.1 Construction of the Samples of Interest

At the time of writing, the Census Bureau has active SNAP administrative data sharing agreements with 10 states: Connecticut (2004-2017), Illinois (2017-2020), Maryland (2017-2019), Montana (2012-2022), Nebraska (2018-2020), Nevada (2017-2021), North Carolina (2014-2020), South Carolina (2004-2021), South Dakota (2015-2021), and Wyoming (2004-2017). For this study, we use longitudinal data from all states apart from Illinois, which (1) suffers from data quality issues, and (2) waived ABAWD requirements for most of the years available. Figure 2 presents a map of the states in this analysis. According to the 2010 Decennial Census, five of these states have at least 30% of their population living in rural areas. Two of them (Montana and South Dakota) are among the top 10 states with the highest share of their population living in rural areas. Unlike previous studies that focus on more urban states, such as Virginia and Maryland, this analysis contains many urban and rural respondents.

For the purposes of merging the SNAP administrative data to the American Community Survey microdata, we summarize the monthly datasets into annual measures. Specifically, a client is considered a SNAP user if their case receives a benefit amount greater than zero in any month of the corresponding year. The annual client-level SNAP administrative data for the nine states are then merged longitudinally to survey respondents from the American Community Survey (ACS) for years 2005-2021. The ACS has a wealth of data for each respondent, including information about employment, education, and other demographic characteristics. This powerful microdata also facilitates the construction of a granular measure of age (age in days) for each respondent by taking the difference of the ACS interview date and birthdate of each respondent, which minimizes mass points in the running variable for the RDD. We then use several variables to construct the samples of interest, which are based on the national eligibility criteria for SNAP (having a household income at most 130% above the poverty line) and exemption rules outside of the age limits for the GWR and ABAWD mentioned in Section 2.2.[2] The ABAWD work requirement can also be waived

[2]It is important to acknowledge that assignment into these subsamples is not perfect due to data constraints. For example, the ACS does not ask whether a respondent is pregnant. Therefore, we cannot remove pregnant individuals from the samples that attempt to estimate the effects of the ABAWD work require-

Figure 2: States in Analysis



Note: States highlighted in green have active SNAP data sharing agreements with the U.S. Census Bureau with the exception of Illinois. Illinois has an active data sharing agreement, but suffers from data quality issues that would jeopardize the analysis if included.

through geographic waivers, so we compiled data from state geographic waiver requests (USDA FNS, 2024a), and ABAWDs that reside in areas that were waived at the time of their interview were removed from the samples.[3]

Table 1 presents summary statistics of the four main samples used in this analysis. All samples are restricted to individuals aged 18-80. Columns 1 and 2 display statistics for potential ABAWDs (outside of the age limits) that are either SNAP-eligible based on the national eligibility cutoff (Column 1) or receiving SNAP based on the administrative data (Column 2). Analogously, Columns 3 and 4 display those that are SNAP-eligible or receiving SNAP that are potentially subject to the GWR outside of the age limits. Approximately 20% of eligible ABAWDs in the sample take up SNAP, and around 26% of those likely subject to the GWR receive SNAP.[4]

ment. Nonetheless, the ACS does contain detailed information on the majority of characteristics listed in Section 2.2 that would exempt worker from the requirements, such as work hours, school enrollment, age of children in the household, and disability status.

[3]These data contain the geographic areas in the nine states that were waived along with their cited unemployment rates and requested waiver duration. Throughout the analysis period, the most waived geographies were at the state level (during the Great Recession, its recovery, and the COVID-19 pandemic) and at the county level. Other waived geographies include cities, which Connecticut exclusively waived, and American Indian Reservations. Counties were merged to the ACS at the month-county level. Other geographies were overlaid onto census tract shapefiles and then merged to the ACS on the month-tract level.

[4]As the statistics displayed in Table 1 are of individuals both above and below the age limits, it is difficult to see an effect of the work requirements from the descriptive statistics. However, there are several interesting aspects to note in these samples. The first are the average ages of the samples. For the ABAWD samples,

Table 1: Summary Statistics

	(1)	(2)	(3)	(4)
	ABAWD Samples		GWR Samples	
	SNAP Eligible	SNAP Users	SNAP Eligible	SNAP Users
Age (Days/365.25)	53.71	56.09	48.81	47.38
	(19.41)	(16.65)	(19.06)	(17.98)
Receive SNAP	0.19		0.26	
	(0.39)		(0.44)	
Months Receiving SNAP	1.86	9.42	2.57	9.35
	(4.14)	(3.77)	(4.66)	(3.74)
Employed	0.19	0.12	0.19	0.16
	(0.39)	(0.33)	(0.40)	(0.36)
Unemployed	0.07	0.10	0.11	0.17
	(0.26)	(0.29)	(0.32)	(0.38)
Not in Labor Force	0.74	0.78	0.69	0.67
	(0.44)	(0.41)	(0.46)	(0.47)
ln(Hours Worked)	2.62	2.68	2.65	2.73
	(0.64)	(0.63)	(0.64)	(0.60)
Hours Worked	16.04	16.86	16.48	17.44
	(7.06)	(7.09)	(7.11)	(6.92)
Worked in the	0.26	0.18	0.27	0.23
past 12 months	(0.44)	(0.38)	(0.44)	(0.42)
Last worked 1-5	0.24	0.22	0.25	0.26
years ago	(0.43)	(0.41)	(0.43)	(0.44)
Last worked	0.51	0.60	0.48	0.51
5+ years ago	(0.50)	(0.49)	(0.50)	(0.50)
Annual Wages	989.20	699.60	1034.00	914.30
	(2392)	(2097)	(2449)	(2343)
ln(Annual Wages)	7.97	7.97	7.97	7.98
	(1.10)	(1.16)	(1.13)	(1.14)
Female	0.60	0.63	0.63	0.66
	(0.49)	(0.48)	(0.48)	(0.48)
Married	0.23	0.15	0.26	0.21
	(0.42)	(0.36)	(0.44)	(0.41)
Poverty Index	59.82	128.50	58.73	118.70
	(43.72)	(129.60)	(43.25)	(124.30)
Earned Associate's	0.23	0.13	0.21	0.12
or Bachelor's	(0.42)	(0.34)	(0.41)	(0.32)
No Child under 18			0.72	0.63
in Household			(0.45)	(0.48)
Geographic Waiver			0.29	0.32
			(0.46)	(0.47)
ABAWD waived			0.76	0.83
			(0.43)	(0.38)
N	27,500	7,700	117,000	44,500

Note: Standard deviations are presented in parentheses under means. Contains respondents age 18-80. Each column represents a sample created by criteria that determines whether a person is waived of a requirement outside of the age restriction. Columns (1) and (2) include everyone likely subject to the ABAWD work requirement. Columns (3) and (4) include everyone likely subject to the GWR. Columns (1) and (3) contain SNAP-Eligible individuals under the income requirement (130% FPL or lower). Columns (2) and (4) include all individuals participating in SNAP. Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961)

In terms of the labor market outcomes of interest, there are several interesting features. In all samples, the majority of respondents are not in the labor force. Those that are employed work on average 16-17 hours a week, which is below the ABAWD hourly requirement. People in the sample also earn around $1,000 annually on average. Finally, there is a striking difference in poverty levels between the SNAP-eligible samples (Columns 1 and 3) and the SNAP user samples (Columns 2 and 4). For example, the average poverty level for SNAP-eligible ABAWDs (Column 1) is around 60% of the poverty line. ABAWDs that receive SNAP on average have a poverty level of 129%, much closer to the national eligibility cutoff of 130%. However, these means reflect a common empirical result following the restructuring of welfare programs in the mid-1990s. From 1984 to 2004, transfers from means-tested programs to those with incomes under 50% of the poverty declined by 37%, while those with incomes between 100% and 150% of the poverty line experiences a 93% increase in transfers (Moffitt, 2016).

To check the internal validity of these summary statistics and the degree the sample is representative, analogous summary statistics for the entire ACS sample and all SNAP users in the ACS are presented in Table A1. About 8% of the total sample receives SNAP, which is similar to the percentage that receives SNAP based on state annual participation rates throughout the analysis periods (USDA FNS, n.d.). On average, SNAP participants are younger, less likely to be employed, more likely to be out of the labor force, earning less, and closer to the poverty line compared to the entire sample, which is expected as SNAP is a means-tested program. In terms of SNAP participation for those subject to the work requirements, the USDA notes that only 15-20% of the SNAP population is subject to the GWR, and only 5%-10% are subject to both requirements (USDA FNS, 2024b). Around 23% of the sample is subject to the GWR, and 4% are subject to ABAWD (not considering age). Additionally, around 27% of the total sample and 33% of the sample receiving SNAP resided in waived areas at the times in which they were waived. Overall, the samples seem representative to the populations of interest.

5.2 Tests for Validation of the RDD

There are multiple tests to demonstrate the validity of a RDD. The first is to show that the discontinuity only exists at the cutoff for the outcomes of interest, i.e., covariate smoothness. If a discontinuity exists for predetermined variables or independent (placebo) outcomes, identification is threatened because the observations are not as-good-as random around the cutoff (Cattaneo et al., 2019). Table 2 show these tests at the ABAWD age cutoff at 50 and the GWR cutoff at 60. Specifically, Columns 1 and 2 test the ABAWD age cutoff for the SNAP-receiving and SNAP-eligible ABAWD samples, and Columns 3 and 4 test the GWR age cutoff for the analogous GWR samples. Across the predetermined and placebo outcomes of sex, marriage status, and college education, there are no statistically significant discontinuities, providing strong evidence in validation of the RDD in the samples of interest.

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the average age is between 53 (Column 1) and 56 (Column 2), well above the age cutoff at 50. In contrast, the average age of those subject to the GWR hover around 47-48 years old, which is below the age limits for both requirements. This could be driven by the more lenient exemptions for the ABAWD work requirement. Around 76% of the SNAP-eligible individuals and 83% of the SNAP users in the GWR samples are exempt from the ABAWD work requirement for conditions outside of age. This seems to be driven in particular by the geographic waivers and the children-under-18 in the household exemption. Around 30% of both GWR samples have respondents living in geographically waived areas. Around 37% of those in the SNAP users (Column 4) sample have children under 18 in their homes. As many women give birth to children in their late 20s and in their 30s, this could be an exemption that drives the average ABAWD sample age up.

Table 2: Placebo and Predetermined Outcomes across the Age Cutoffs

	(1)	(2)	(3)	(4)
	ABAWD Cutoff at 50		GWR cutoff at 60	
	Receiving	Eligible	Receiving	Eligible
Woman=1	0.091	0.038	-0.034	0.004
	(0.057)	(0.036)	(0.021)	(0.013)
Married=1	0.025	0.022	0.006	0.016
	(0.043)	(0.028)	(0.017)	(0.011)
Earned Associate's	0.034	-0.023	0.013	-0.004
or Bachelor's	(0.028)	(0.029)	(0.015)	(0.013)
Observations	7,700	27,500	44,500	117,000

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title and the columns indicate which work requirement and whether the sample is those receiving SNAP or those who are eligible for SNAP. Bandwidths were selected using the Mean Squared Error (MSE) optimal bandwidth selection method outlined by Cattaneo et al. (2019). Heteroskedasticity-robust nearest neighbor standard errors are displayed in parentheses under the point estimates (Calonico et al., 2014). Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

One can also show the validity of the RDD by estimating placebo and predetermined RDDs on samples that are not directly affected by the policy. Table A2 present these estimates for the full ACS sample, the All SNAP users sample, and the sample that is nationally eligible for SNAP based on the poverty level requirement. These columns serve to see whether the discontinuities in demographic outcomes presented in Table 2 exist for the entire sample (Panel 1). Additionally, these larger samples allow for testing whether covariates that affect whether a person is subject to the work requirements are discontinuous at the cutoffs (Panel 2).

For the larger, more inclusive samples, there are a couple statistically significant discontinuities at the age cutoffs. For the ABAWD cutoff at 50, respondents of the ACS in general (Column 1) and are nationally eligible for SNAP (Column 3) are less likely to have at least an associate's or bachelor's degree at the cutoff. However, this difference is not statistically significant once the sample is cut down to ABAWDs. Panel 2 of Table 2 shows whether predetermined variables that affect assignment into ABAWD status are discontinuous at the age cutoff. SNAP applicants (Column 2) and SNAP eligible individuals (Column 3) are more likely to have children under 18 in their households at the cutoff. This means that more people are exempt from the ABAWD requirement at the cutoff, holding all else equal. The GWR age cutoff tests in Columns 4 through 6 have less instances of statistically significant differences of the predetermined variables at the cutoff in general. While these results are important to consider, Table 2 shows that once exempt individuals are removed from the samples, there are no statistically significant discontinuities at the age cutoffs in the predetermined variables that could propagate bias in the estimates. Based on this information, the age cutoffs are valid for a RDD.

6 Results

Throughout this section, we present estimates of discontinuities on SNAP takeup and labor market outcomes at both the ABAWD work requirement cutoff at 50 and the GWR age cutoff at 60. Each estimate is from its own set of regressions. As a result, the data-driven MSE-optimal bandwidths change with each discontinuity estimate (Calonico et al., 2014; Cattaneo et al., 2019). This section follows a similar structure to Section 3. As both requirements aim to reduce SNAP caseloads, we present estimates on SNAP uptake first. Then, we present results on static and dynamic labor market outcomes. The section closes with estimates on heterogeneous effects of the work requirements due to gender.

6.1 SNAP Uptake

If work requirements prevent those who find it too costly to work at the required intensity, there should exist a discontinuity between those subject to the requirements and those that are not. In other words, individuals who are not subject to the requirements should takeup SNAP at a higher rate than those subject to the requirements. Table 3 provides estimates on whether take-up of SNAP changes discontinuously at the age cutoffs using the entire SNAP eligible sample (Columns 1 and 3), and the subsample that is both SNAP eligible and subject to the work requirements outside of age (Columns 2 and 4). For both the ABAWD work requirement and the GWR, there are no statistically significant discontinuities. In sum, there is no statistical evidence to support the claim that individuals drop out of SNAP because they find it too costly to work more (in the case of the ABAWD work requirement) or work at all (in the case of the GWR). In other words, there is no statistical evidence that work requirements reduce caseloads.

Table 3: Take Up of SNAP at the Work Requirement Age Cutoffs

	(1)	(2)	(3)	(4)
	ABAWD Cutoff at 50		GWR Cutoff at 60	
	All Eligible	Eligible ABAWDs	All Eligible	Eligible GWRs
Receive SNAP	0.004	-0.011	0.001	0.004
	(0.008)	(0.027)	(0.008)	(0.013)
Observations	358,000	27,500	358,000	117,000

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title and the columns indicate the which work requirement and whether the sample is all eligible individuals or those only eligible under the ABAWD or General work requirements. Bandwidths were selected using the Mean Squared Error (MSE) optimal bandwidth selection method outlined by Cattaneo et al. (2019). Heteroskedasticity-robust nearest neighbor standard errors are displayed in parentheses under the point estimates (Calonico et al., 2014). Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

Many previous studies that estimate the effect of the ABAWD work requirement find that the requirements do reduce caseloads (Cuffey et al., 2022; Gray et al., 2023; Harris, 2021; Stacy et al.,

2018). While there may be many reasons why this analysis yields different results, it could be due to how we define the samples. To be in samples of SNAP-eligible individuals, a respondent must have a poverty index lower than 130. The ACS does not record measures of poverty for people living in group quarters, such as hospitals and homeless shelters (nor unhoused individuals not present in shelters), effectively removing representation of those potential SNAP users from our samples. This article's findings are thus consistent with previous studies that suggest these sub-populations are the groups affected by work requirements (Gray et al., 2023).[5]

6.2 Static Labor Market Outcomes

If the work requirements are binding, analytical results from the static stylized budget curves in Section 3.1 suggest that adults subject to them should change their work habits to retain benefits. Specifically, the ABAWD work requirement should change the number of hours ABAWDs work, while the GWR should force those subject to the GWR to work any number of hours. As the previous section found no evidence to support the alternative action of dropping out of SNAP and losing benefits, the results of this section should find some changes in work behavior around the cutoffs if the work requirements are binding.

Figure 3 presents the graphical representation of the discontinuity for the binary outcome of being unemployed for the SNAP Eligible individuals and SNAP users that are likely ABAWDs. The overall trend of unemployment for these samples around the cutoff is decreasing – the local linear fit suggests that on average, 20%-25% of 40 year old ABAWDs are unemployed, and that by the time they are around 60, the unemployment rate is closer or below 10%. This discontinuity is not statistically significant at the cutoff for both samples, providing no evidence that supports ABAWDs change their labor market status around the cutoff. This is expected based on the features of the work requirement: individuals on both sides of the cutoff are still subject to the GWR, meaning they still must work to retain their benefits.

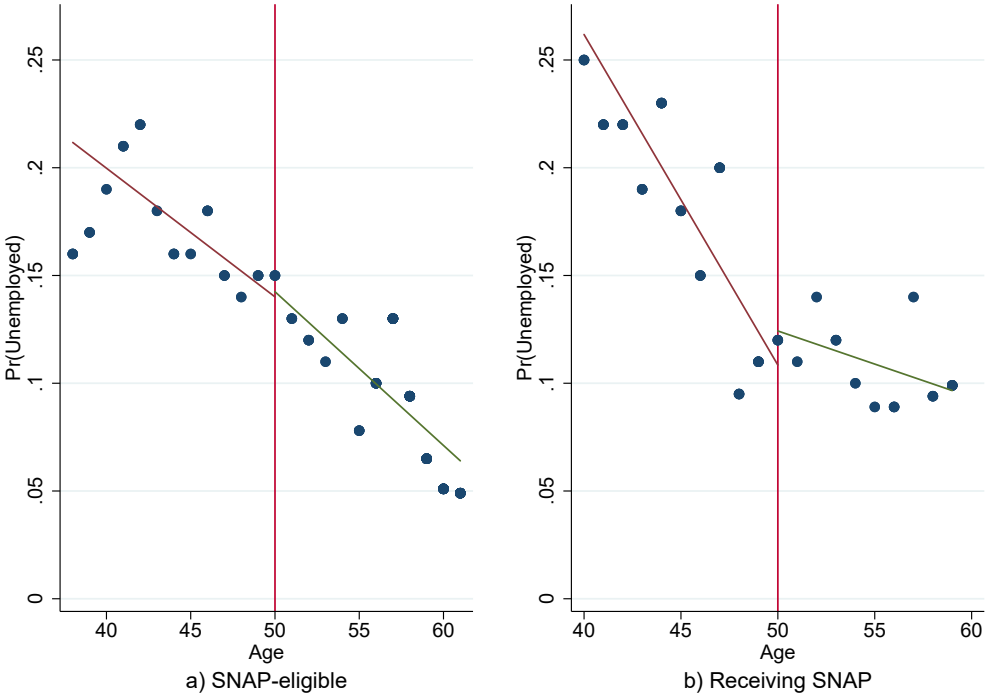
Table 4 presents the associated parameter estimates for Figure 3 along with all other labor market outcomes. At the ABAWD cutoff (Columns 1 and 2), there are no statistically significant discontinuities for both a change in employment status or changes in hours worked. Across both the SNAP user sample (Column 1) and the SNAP-eligible sample (Column 2), there is no statistically significant evidence of a negative discontinuity in hours worked around the cutoff. Hence, there is no statistically significant evidence to support the hypothesis that ABAWDs choose a second-best allocation when subject to the ABAWD work requirement closest to the optimal allocation that they would choose in the absence of the work requirement.[6] There are several possible explanations for this finding. Around the age cutoff, ABAWDs may face other constraints on their ability or their marginal utility to substitute labor for leisure. For example, employers may not offer jobs on an hourly gradient that would allow ABAWDs to optimize perfectly around the cutoff, providing a different constraint to workers eligible or using SNAP. This may mean the ABAWD work requirement is not binding, and thus individuals do not respond to it.

In contrast to the ABAWD work requirement, there are statistically significant discontinuities for some labor market outcomes along the cutoff at age 60 for those who would be subject to the

[5]Table A3 presents the estimates at the age cutoffs using the entire ACS samples. If we do not remove individuals that are not eligible for SNAP under the national income criteria, there is a small in magnitude, but statistically significant positive discontinuity at the ABAWD cutoff. The probability of receiving SNAP is 0.4 percentage points higher for those at 50 years of age. While this is a result that supports past studies, it is difficult to justify that it is driven by people who are in fact ABAWDs outside of the age limit. There is no statistically significant discontinuity at the GWR cutoff using the same sample.

[6]This finding is further shown in tests using the larger, more inclusive samples in Table A4.

Figure 3: ABAWD Age Cutoff



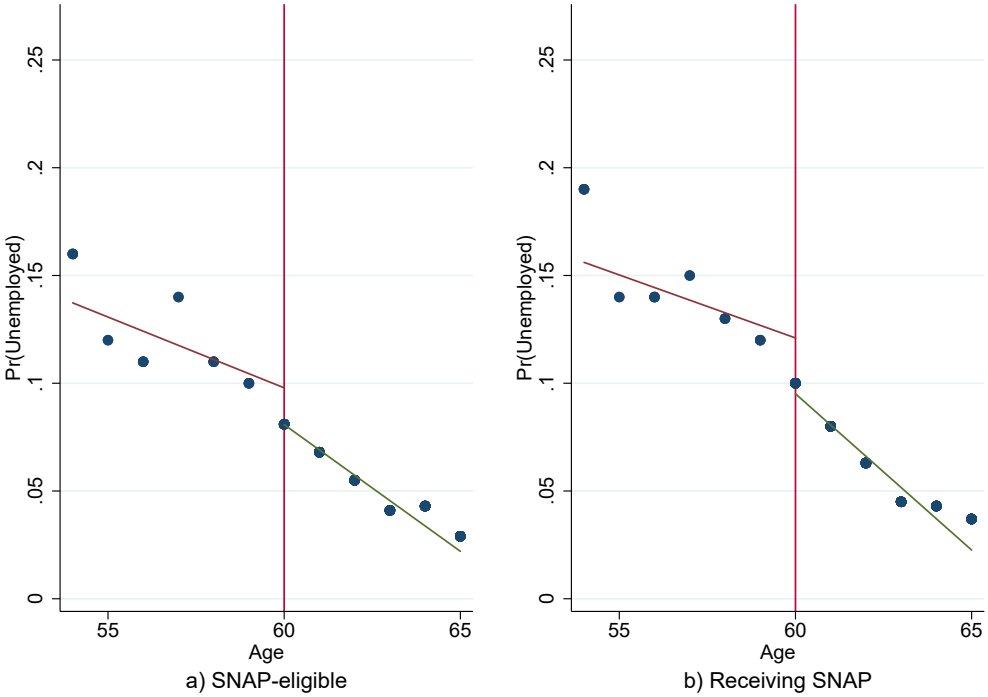
Note: The figure plots the local linear estimation of the regression discontinuity design at age 50. Each point represents an evenly spaced bin between the bandwidth and the cutoff. The score is age in days divided by 365.25. The outcome variable is the binary outcome of whether or not a person is unemployed during the interview. Panel A includes all respondents to the ACS that are nationally eligible for SNAP (report an income level less than or equal to 130% of the federal poverty line (FPL). Panel B includes all respondents that received at least one monthly SNAP benefit during the year they were interviewed. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961).

Table 4: Employment Outcomes at the Work Requirement Age Cutoffs

	(1)	(2)	(3)	(4)
	ABAWD Cutoff at 50		GWR Cutoff at 60	
	SNAP Users	SNAP Eligible	SNAP Users	SNAP Eligible
Panel 1: Static Labor Market Outcomes				
Months Receiving SNAP	0.480	-0.453	-0.183	-0.060
	(0.403)	(0.354)	(0.165)	(0.141)
Employed=1	-0.012	-0.023	0.000	-0.003
	(0.040)	(0.025)	(0.015)	(0.009)
Unemployed=1	0.017	0.005	-0.026*	-0.021***
	(0.034)	(0.019)	(0.014)	(0.008)
Not in Force=1	-0.015	0.019	0.023	0.023*
	(0.051)	(0.029)	(0.020)	(0.012)
ln(Hours Worked)	-0.039	-0.069	0.027	0.003
	(0.154)	(0.076)	(0.076)	(0.042)
Hours Worked	-0.495	-1.009	0.553	0.191
	(1.793)	(0.817)	(0.847)	(0.435)
Panel 2: Dynamic Labor Market Outcomes				
Worked in the past 12 months	0.004	-0.025	0.014	-0.001
	(0.044)	(0.027)	(0.017)	(0.010)
Last worked 1-5 years ago	-0.004	0.005	-0.011	0.000
	(0.056)	(0.035)	(0.023)	(0.015)
Last worked 5+ years ago	0.000	-0.001	-0.001	0.006
	(0.054)	(0.035)	(0.025)	(0.017)
Annual Wages	-355.50	-238.20	46.01	26.27
	(271.90)	(174.40)	(92.21)	(54.39)
ln(Annual Wages)	-0.463	-0.165	-0.073	0.001
	(0.290)	(0.160)	(0.156)	(0.074)
Observations	7,700	27,500	44,500	117,000

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title, and the columns indicate which work requirement cutoff and whether the sample includes SNAP users or SNAP eligible individuals. Bandwidths were selected using the Mean Squared Error (MSE) optimal bandwidth selection method (Cattaneo et al., 2019). Heteroskedasticity-robust nearest neighbor standard errors are displayed in parentheses (Calonico et al., 2014). Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

Figure 4: GWR Age Cutoff



Note: The figure plots the local linear estimation of the regression discontinuity design at age 60. Each point represents an evenly spaced bin between the bandwidth and the cutoff. The score is age in days divided by 365.25. The outcome variable is the binary outcome of whether or not a person is unemployed during the interview. Panel A includes all respondents to the ACS that are nationally eligible for SNAP (report an income level less than or equal to 130% of the poverty threshold. Panel B includes all respondents that received at least one monthly SNAP benefit during the year they were interviewed. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961).

GWR. Figure 4 presents a graphical representation of the binary outcomes of unemployment for each SNAP-Eligible (Panel A) and SNAP user (Panel B) around the GWR age cutoff. There is a statistically significant discontinuity with a point estimate of around 2 to 2.5 percentage points (-13% to -14%) around the cutoff. This means that once a person is no longer subject to the GWR, they are *less* likely to be unemployed.

This discontinuity is driven not by an increase in individuals becoming employed, but by an increase in SNAP-eligible and SNAP users leaving the workforce. Column 3 and Column 4 in Table 4 presents estimates of the discontinuity for all labor market outcomes around the GWR cutoff. Employment for SNAP users (Column 3) and SNAP-eligible respondents (Column 4) is essentially zero and is not statistically significant. However, the point estimates for not being in the labor force are 2.3 percentage points (3.4%), nearly the identical magnitude as the estimates for unemployment, but opposite signs. We can infer that potential and current SNAP users are leaving the workforce at age 60, which supports the hypothesis that the GWR is a binding constraint, at least for a small percent of individuals.

It is important to acknowledge, however, that there is a statistically significant discontinuity for employment and leaving the labor force in the entire ACS sample (Table A4) of 1.4 percentage points (4.2%), providing evidence that the age 60 discontinuity among SNAP users and SNAP eligible individuals is not entirely driven by the GWR. While the GWR discontinuity is about 1 percentage point larger and that difference could be driven by the GWR, there may be another discontinuity at the age 60 cutoff that affects labor market participation. For example, psychology around "turning 60" and encroaching retirement may reduce labor market participation for all individuals approaching the US minimum retirement age of 62.

6.3 Dynamic Labor Market Outcomes

Under the dynamic hypotheses, the work requirements limit the liquidity of SNAP users undergoing a job search. As a result, those subject to the requirements might have shorter search durations, leading to acceptances of lower wages compared to those not subject to them. Panel 2 of Table 4 presents the estimates for these dynamic labor outcomes at the ABAWD age cutoff (Columns 1 and 2), and the GWR cutoff (Columns 3 and 4). Across both cutoffs, there are no statistically significant discontinuities for both length of joblessness spells and annual wages. Thus, there is no evidence that workers that use SNAP or are eligible for it modify their search behaviors due to the work requirement.

One reason for the lack of changes in dynamic behavior in search may be due to the inherently transient nature of those subject to the work requirements. A person is waived of the GWR (and in turn, the ABAWD work requirement) if they work more than 30 hours a week or earn an equivalent of 30 hours multiplied by the federal minimum wage. Therefore, those subject to these requirements are not working full time and are earning low wages. The upward income mobility between job searches among these SNAP users may be limited, no matter the length of their search, and hence the ABAWD work requirement and GWR may not be binding for these populations on dynamic outcomes like length of job search.

6.4 Heterogeneity across Genders

Men and women face different societal pressures, which affects their labor market outcomes (Goldin, 2014). Therefore, the effect of the work requirement may affect SNAP-eligible adults and SNAP users differently depending on gender. Table 5 present the estimates of the labor market outcomes

at the ABAWD cutoff for men (Colums 1 and 2) and women (Columns 3 and 4). For both genders, SNAP-eligible respondents (Columns 2 and 4) and SNAP users (Column 1 and 3) that are likely subject to the ABAWD work requirement do not change their employment status at the age cutoff.

However, there are some gender-specific statistically significant results on hours worked and earnings. At the ABAWD cutoff, male SNAP users (Column 1) earn a 70% (-$834.60) lower wage. This result is evidence against a dynamic hypotheses, as ABAWDs actually earn less once they are no longer subject to the requirement. However, it is suggestive evidence of the static hypothesis: an ABAWD no longer subject to the requirement might move to an income-leisure allocation that reduces their income in favor of more leisure hours.

The results for hours worked for men at the ABAWD age cutoff do not provide statistically significant support of this claim. On average, men reduce their work hours by approximately 2 hours, but this estimate is not statistically significant. Women likely subject to the ABAWD work requirement and are eligible for SNAP (Column 4) show a statistically significant reduction in log hours at the age cutoff at the 10% level, but other estimates (including changes in annual wage) are not statistically significant.

Table 6 presents gender-specific estimates at the GWR age cutoff at age 60. These gendered results show that the labor market exit results in the pooled sample in Table 4 are driven by SNAP-eligible/SNAP-using women. The estimates on probability of being unemployed for men (Column 1 and 2) are small and statistically insignificant. In contrast, the estimates for women (Columns 3 and 4) are statistically significant and similar in magnitude to those in Table 4 for both probability of being unemployed and exiting the labor force.

In terms of dynamic labor market outcomes (Panel 2 in Table 6), there is some evidence among SNAP-using men (Column 1) that they engage in relatively short joblessness spells or none at all at the 10% significance level. There is also a positive discontinuity in annual wages at the 5% significance level of roughly $264 for men. We thus find some limited evidence of small, gendered effects of the GWR on dynamic labor market outcomes, though the effects run counter to our hypotheses because men are found to shorten jobless spells and increase wages when no longer subject to the GWR.[7]

7 Conclusion and Policy Implications

The existence and implementation of means-tested programs are often in flux due to different ideological views on their goals and necessity (Barr, 2020). SNAP is one of the largest welfare programs in the US and work requirements are at the forefront of US policy debates about means-tested programs, as evidenced by the 2023 increase in the ABAWD age cutoff to 52. Work requirement impose costs on program administrators and, if they keep individuals off SNAP, on would-be recipients in terms of food security. It is thus critical to improve our understanding of the efficacy of work requirements on labor market outcomes, including potentially gendered effects. This article enhances our understanding of the efficacy of the work requirements, which were created to limit SNAP benefits to those who work.

In this article, we develop hypotheses from static and dynamic labor market conceptual models. We then test these hypotheses by developing causal effect estimates of the work requirements using administrative SNAP microdata from nine states longitudinally linked to microdata from the American Community Survey. We use a RDD at the age 50 cutoff for ABAWDs and the age 60

[7]Gender-specific estimates for the larger, more inclusive samples can be found in Appendix A. Specifically, Table A5 present estimates for the GWR cutoff and Table A6 presents estimates for the ABAWD cutoff.

Table 5: Gender Employment Outcomes at the ABAWD Age cutoff

	(1)	(2)	(3)	(4)
	Men at ABAWD Cutoff		Women at ABAWD Cutoff	
	SNAP Users	SNAP Eligible	SNAP Users	SNAP Eligible
Panel 1: Static Labor Market Outcomes				
Months Receiving SNAP	-0.065	-0.170	0.845*	-0.263
	(0.589)	(0.394)	(0.471)	(0.446)
Employed=1	-0.072	-0.028	0.021	-0.032
	(0.046)	(0.034)	(0.057)	(0.034)
Unemployed=1	-0.023	-0.026	0.043	0.026
	(0.060)	(0.030)	(0.037)	(0.025)
Not in Labor Force=1	0.103	0.050	-0.097	0.001
	(0.073)	(0.043)	(0.067)	(0.038)
ln(Hours Worked)	0.215	-0.019	-0.153	-0.169*
	(0.300)	(0.128)	(0.202)	(0.094)
Hours Worked	2.039	-1.117	-1.471	-1.186
	(3.830)	(1.411)	(1.869)	(1.006)
Panel 2: Dynamic Labor Market Outcomes				
Worked in the past 12 months	-0.066	-0.060	0.044	-0.003
	(0.055)	(0.037)	(0.063)	(0.035)
Last worked 1-5 years ago	0.046	-0.020	-0.036	0.038
	(0.078)	(0.052)	(0.075)	(0.040)
Last worked 5+ years ago	0.010	0.052	-0.011	-0.042
	(0.069)	(0.052)	(0.073)	(0.046)
Annual Wages	-834.60**	-300.70	-190.50	-212.80
	(363.30)	(226.20)	(389.40)	(232.90)
ln(Annual Wages)	-1.187**	-0.183	-0.185	-0.176
	(0.523)	(0.275)	(0.266)	(0.171)
Observations	2,900	11,000	4,900	16,500

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title. Bandwidths were selected using the Mean Squared Error (MSE) optimal bandwidth selection method (Cattaneo et al., 2019). Heteroskedasticity-robust nearest neighbor standard errors are displayed in parentheses (Calonico et al., 2014). Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

Table 6: Gender Employment Outcomes at the GWR Age cutoff

	(1)	(2)	(3)	(4)
	Men at GWR Cutoff		Women at GWR Cutoff	
	SNAP Users	SNAP Eligible	SNAP Users	SNAP Eligible
Panel 1: Static Labor Market Outcomes				
Months Receiving SNAP	-0.076	0.177	-0.253	-0.236
	(0.268)	(0.202)	(0.192)	(0.182)
Employed=1	0.035	-0.010	-0.022	0.003
	(0.022)	(0.013)	(0.019)	(0.012)
Unemployed=1	-0.009	-0.004	-0.028*	-0.027***
	(0.029)	(0.015)	(0.015)	(0.009)
Not in Labor Force=1	-0.031	0.016	0.054**	0.026*
	(0.035)	(0.020)	(0.024)	(0.015)
ln(Hours Worked)	0.016	0.049	0.046	-0.022
	(0.123)	(0.078)	(0.092)	(0.050)
Hours Worked	0.315	0.757	0.943	-0.117
	(1.328)	(0.818)	(1.023)	(0.545)
Panel 2: Dynamic Labor Market Outcomes				
Worked in the past 12 months	0.055*	-0.010	-0.013	0.002
	(0.028)	(0.014)	(0.017)	(0.014)
Last worked 1-5 years ago	-0.030	0.011	-0.009	-0.009
	(0.033)	(0.023)	(0.030)	(0.019)
Last worked 5+ years ago	-0.012	-0.001	0.021	0.010
	(0.034)	(0.024)	(0.036)	(0.022)
Annual Wages	264.20**	54.60	-97.760	-4.33
	(127.20)	(79.89)	(111.40)	(83.14)
ln(Annual Wages)	0.085	0.095	-0.117	-0.033
	(0.256)	(0.150)	(0.179)	(0.087)
Observations	15,000	43,500	29,500	73,500

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title. Bandwidths were selected using the Mean Squared Error (MSE) optimal bandwidth selection method (Cattaneo et al., 2019). Heteroskedasticity-robust nearest neighbor standard errors are displayed in parentheses (Calonico et al., 2014). Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

cutoff for the GWR. For both cutoffs, there is no evidence to suggest SNAP participation changes. For the ABAWD cutoff, we find no statistically significant evidence to support the hypothesis that the ABAWD requirement changes the labor market behavior of SNAP-eligible adults and SNAP users. For the GWR, we find that SNAP participants and eligible adults likely subject to the requirement are more likely to leave the labor force at the cutoff, but so are all (including non-SNAP) individuals. When restricting the samples by gender, we find that women drive the labor market exit increase at age 60, and there is suggestive evidence of heterogeneous effects between genders on earnings and hours worked for both work requirements.

The null results for the ABAWD work requirement are similar to results in other works. While peer reviewed work with linked administrative microdata has been limited, this previous research also found no changes in labor market participation and earnings (Gray et al., 2023). However, our results differ with respect to caseloads: other studies often find a statistically significant reduction (Gray et al., 2023), while we find none. There are two likely reasons for this difference. The first is that the ABAWD work requirement is nonbinding for the underlying population of this study. Because of data limitation in the ACS, those living in group quarters (such as hospitals and homeless shelters) or unhoused individuals not living in shelters, are not included in our samples created based on SNAP eligibility. Studies have found that these populations drive caseload reductions resulting from the ABAWD requirement (Gray et al., 2023; Wheaton et al., 2021). Therefore, we cannot capture the effect of the work requirements on those who may have more difficulty meeting the requirements. However, our samples do capture about 90% of the population that these requirements are imposed upon (Gray et al., 2023).

The second reason for this null result may be that the GWR may be binding for most ABAWDs, thus limiting their ability to change their labor allocations. While the general work requirement does not demand a certain number of hours of work like the ABAWD requirement does, it does limit one's ability to reduce hours or willfully become unemployed. Indeed, the results show a statistically significant reduction in labor force participation at the GWR age cutoff, and this may indicate the GWR may be more binding than the ABAWD requirement for SNAP users at age 50. However, it is difficult to compare the estimates due to the local nature of a RDD. While this study is the first the we know of that expands external validity beyond the age 50 cutoff to the age 60 cutoff, future studies that can capture exogenous variation in both GWR and ABAWD work requirement implementation and adherence across age groups may continue to disentangle the effects of age and policy structure.

This article is also the first that we know of to examine heterogeneous effects of the age cutoff by gender with administrative microdata, and we do find some evidence of heterogeneous effects across gender. Specifically, women seem to be driving the labor force exit at the GWR cutoff at 60. While the mechanisms that motivate this effect should be a focus in future studies, our finding is consistent with the fact that the gender wage gap worsens as workers get older across all age cohorts (Goldin, 2014). Facing this prolonged gap in wages, women may find that leaving the labor force that close to retirement is less costly than continuing work. However, this wage gap was found for full-time workers, so more research on the gender wage gap for part-time work is needed.

The results of this study offer some policy suggestions. The null results for both SNAP uptake and labor market outcomes for the ABAWD requirement suggest that the work requirement is not binding. Given the non-zero administrative burden and costs of reporting and implementing the work requirement, policymakers should consider eliminating it (at least for ABAWDs around the age of 50). This suggestion goes against recent legislation that increased eligibility to age 52 (Qiu, 2023). This change has a non-zero effect on administrative burden of SNAP, but we find no

find evidence that increasing the ABAWD age cutoff will increase labor market participation nor decrease SNAP caseloads (among the housed population).

For the GWR, the results suggest that the marginal rate of substitution between income and leisure of the underlying population leans heavily towards a preference for income. As a result, the GWR does not reduce caseloads, but causes women to exit the labor market later than they otherwise would at age 60. Policymakers should again consider the administrative costs of this requirement and the benefit it has at preventing SNAP users (nearing retirement) from exiting the labor force.

Additionally, future studies should estimate the effect of the work requirements on health outcomes. Investment in health is intrinsically tied to labor market decisions as well as participating in means-tested programs. Estimating the effects of restrictions on a food/nutrition security welfare program on labor market outcomes without considering the effects on health outcomes is inherently an incomplete analysis. Such future research may offer additional clarity on the mechanisms underlying labor market decisions as well as unintended consequences of the work requirement policies.

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A Additional Tables

Table A1: Summary Statistics for Other Samples

	(1)	(2)	(3)	(4)
	Entire Sample		SNAP	
	Mean	SD	Mean	SD
Age (Days/365.25)	49.41	(16.50)	44.84	(16.49)
Receive SNAP=1	0.08	(0.27)		
Months Receiving SNAP	0.68	(2.60)	8.82	(3.94)
Employed=1	0.63	(0.48)	0.38	(0.48)
Unemployed=1	0.04	(0.19)	0.13	(0.33)
Not in Labor Force=1	0.33	(0.47)	0.50	(0.50)
ln(Hours Worked)	3.58	(0.49)	3.43	(0.53)
Hours Worked	38.93	(12.84)	34.09	(12.45)
Worked in the past 12 months	0.70	(0.46)	0.48	(0.50)
Last worked 1-5 years ago	0.09	(0.29)	0.16	(0.36)
Last worked 5+ years ago	0.21	(0.41)	0.36	(0.48)
Annual Wages	33000	(60360)	8661	(22210)
ln(Annual Wages)	10.28	(1.21)	9.28	(1.24)
Disabled=1	0.14	(0.35)	0.32	(0.47)
No Child under 18 in Household = 1	0.67	(0.47)	0.55	(0.50)
Geographic Waiver	0.26	(0.44)	0.32	(0.47)
ABAWD waived	0.94	(0.24)	0.96	(0.19)
GWR waived	0.79	(0.41)	0.77	(0.42)
Living with Disabled = 1	0.27	(0.44)	0.49	(0.50)
Female=1	0.53	(0.50)	0.63	(0.48)
Married=1	0.59	(0.49)	0.25	(0.43)
Poverty Index	374	(234.60)	150.90	(138.10)
Earned Associate's or Bachelor's	0.38	(0.49)	0.12	(0.33)
Child under 6 in Household =1	0.07	(0.26)	0.11	(0.31)
N	2,537,000		197,000	

Note: Means are presented in odd columns, while corresponding standard deviations are presented in parentheses in the following even column. Contains respondents age 18-80. Columns (1) and (2) contain all individuals who responded to the ACS in the states and time periods administrative data are available (See Section 5). Columns (3) and (4) contain individuals in the sample that are receiving SNAP. Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961).

Table A2: Placebo Checks on Other Samples

	(1)	(2)	(3)	(4)	(5)	(6)
	ABAWD Cutoff at 50			GWR Cutoff at 60		
	ACS Sample	All Receiving SNAP	All SNAP Eligible	ACS Sample	All Receiving SNAP	All SNAP Eligible
Panel 1: Predetermined Variables						
Female=1	0.004	-0.003	0.003	-0.001	-0.024**	-0.008
	(0.002)	(0.010)	(0.008)	(0.003)	(0.009)	(0.008)
Married=1	-0.003	-0.001	-0.008	-0.004	-0.028**	0.003
	(0.003)	(0.009)	(0.008)	(0.003)	(0.013)	(0.008)
Earned Associate's	-0.009***	-0.006	-0.014**	0.002	0.007	-0.003
or Bachelor's	(0.003)	(0.006)	(0.007)	(0.003)	(0.007)	(0.007)
Panel 2: Predetermined Variables that affect Assignment						
GWR Waived	0.000	-0.003	-0.011	-0.002	-0.006	0.007
	(0.002)	(0.007)	(0.008)	(0.004)	(0.011)	(0.009)
ABAWD Waived	-0.001	0.003	0.004	-0.001	0.002	0.010**
	(0.001)	(0.004)	(0.003)	(0.002)	(0.006)	(0.005)
Geographic Waiver	0.002	0.001	0.004	0.005*	0.012	0.013**
	(0.002)	(0.009)	(0.007)	(0.003)	(0.011)	(0.007)
Disabled=1	0.006***	-0.001	-0.003	0.004*	0.005	-0.004
	(0.002)	(0.010)	(0.009)	(0.002)	(0.013)	(0.009)
Living with	0.007**	-0.010	-0.002	0.005*	0.010	-0.004
Disabled=1	(0.003)	(0.011)	(0.009)	(0.003)	(0.010)	(0.008)
No Child under 18	0.004	-0.042***	-0.018*	-0.001	-0.002	-0.011
in Household=1	(0.005)	(0.014)	(0.010)	(0.002)	(0.010)	(0.008)
Child under 6	0.000	0.002	0.002	-0.000	-0.006*	-0.002
in Household=1	(0.001)	(0.005)	(0.004)	(0.001)	(0.003)	(0.002)
Observations	2,537,000	197,000	358,000	2,537,000	197,000	358,000

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title. Bandwidths were selected using the Mean Squared Error (MSE) optimal bandwidth selection method (Cattaneo et al., 2019). Heteroskedasticity-robust nearest neighbor standard errors are displayed in parentheses. Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

Table A3: Take Up of SNAP at the Work Requirement Age Cutoffs, Entire ACS Sample

	(1) ABAWD Cutoff at 50	(2) GWR Cutoff at 60
Receive SNAP	0.004**	0.000
	(0.002)	(0.002)
Observations	2,537,000	2,537,000

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title. Bandwidths were selected using the Mean Squared Error (MSE) optimal bandwidth selection method (Cattaneo et al., 2019). Heteroskedasticity-robust nearest neighbor standard errors are displayed in parentheses. Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

Table A4: Employment Outcomes on Other Samples

	(1)	(2)	(3)	(4)	(5)	(6)
	ABAWD Cutoff at 50			GWR Cutoff at 60		
	All ACS Sample	All Receiving SNAP	All SNAP eligible	All ACS Sample	All Receiving SNAP	All SNAP eligible
Panel 1: Static Labor Market Outcomes						
Months Receiving SNAP	0.037**	0.051	0.017	0.002	0.022	-0.022
	(0.015)	(0.083)	(0.092)	(0.015)	(0.075)	(0.088)
Employed=1	0.001	0.015	0.009	-0.010**	-0.018**	0.007
	(0.003)	(0.010)	(0.008)	(0.005)	(0.009)	(0.007)
Unemployed=1	0.000	0.003	-0.004	-0.001	0.003	-0.004
	(0.001)	(0.006)	(0.005)	(0.001)	(0.006)	(0.004)
Not in Labor Force=1	-0.001	-0.016	-0.004	0.014***	0.018*	-0.003
	(0.003)	(0.010)	(0.009)	(0.005)	(0.010)	(0.008)
ln(Hours Worked)	-0.002	0.004	0.002	0.001	-0.021	0.016
	(0.003)	(0.018)	(0.017)	(0.005)	(0.032)	(0.024)
Hours Worked	-0.091	0.037	0.209	-0.016	-0.342	0.470
	(0.089)	(0.408)	(0.353)	(0.121)	(0.700)	(0.503)
Panel 2: Dynamic Labor Market Outcomes						
Worked in the past 12 months	-0.001	0.009	-0.005	-0.009*	-0.008	0.003
	(0.003)	(0.009)	(0.008)	(0.005)	(0.010)	(0.009)
Last worked 1-5 years ago	0.003*	0.010	0.014**	0.002	-0.005	-0.004
	(0.002)	(0.008)	(0.007)	(0.003)	(0.010)	(0.008)
Last worked 5+ years ago	-0.001	-0.024**	-0.007	0.006*	0.019	0.004
	(0.002)	(0.010)	(0.008)	(0.003)	(0.013)	(0.010)
Annual Wages	-771.90	517.20	27.25	-1140*	-543.40	223.50**
	(497.20)	(470.60)	(116.60)	(603.40)	(530.30)	(88.70)
ln(Annual Wages)	-0.005	0.105**	0.078**	-0.001	-0.037	0.036
	(0.008)	(0.047)	(0.036)	(0.011)	(0.060)	(0.044)
Observations	2,537,000	197,000	358,000	2,537,000	197,000	358,000

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title. Bandwidths were selected using the MSE optimal bandwidth selection method (Cattaneo et al., 2019). Heteroskedasticity-robust nearest neighbor standard errors in parentheses. Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

Table A5: GWR Gender Employment Outcomes on Other Samples

	(1)	(2)	(3)	(4)	(5)	(6)
	Men at GWR Cutoff			Women at GWR Cutoff		
	ACS Sample	All Receiving SNAP	All SNAP eligible	ACS Sample	All Receiving SNAP	All SNAP eligible
Panel 1: Static Labor Market Outcomes						
Months Receiving	0.037**	0.098	0.218*	-0.025	-0.023	-0.216**
SNAP	(0.019)	(0.141)	(0.133)	(0.022)	(0.102)	(0.103)
Employed=1	-0.011*	-0.005	0.006	-0.011*	-0.024**	0.007
	(0.006)	(0.013)	(0.011)	(0.006)	(0.012)	(0.009)
Unemployed=1	-0.000	-0.004	0.000	-0.001	0.003	-0.007
	(0.002)	(0.011)	(0.007)	(0.001)	(0.007)	(0.005)
Not in Labor Force=1	0.013**	0.014	-0.006	0.015**	0.022*	-0.001
	(0.006)	(0.015)	(0.012)	(0.007)	(0.012)	(0.010)
ln(Hours Worked)	-0.003	-0.093*	0.034	0.004	0.035	0.006
	(0.006)	(0.050)	(0.036)	(0.006)	(0.038)	(0.030)
Hours Worked	-0.150	-2.18**	0.565	0.079	1.085	0.368
	(0.171)	(1.108)	(0.785)	(0.150)	(0.782)	(0.593)
Panel 2: Dynamic Labor Market Outcomes						
Worked in the	-0.008	0.004	0.001	-0.010*	-0.015	0.009
past 12 months	(0.006)	(0.015)	(0.013)	(0.006)	(0.013)	(0.010)
Last worked 1-5	-0.001	-0.011	-0.003	0.004	-0.002	-0.005
years ago	(0.004)	(0.015)	(0.012)	(0.004)	(0.012)	(0.010)
Last worked	0.008**	0.012	0.004	0.003	0.019	-0.001
5+ years ago	(0.004)	(0.018)	(0.015)	(0.004)	(0.016)	(0.012)
Annual Wages	-2938***	-541.90	279.30**	248.40	-637.10	179.20
	(1113.00)	(782.10)	(131.80)	(457.10)	(681.00)	(115.00)
ln(Annual Wages)	-0.022	-0.093	0.120*	0.014	-0.016	-0.008
	(0.016)	(0.090)	(0.064)	(0.014)	(0.075)	(0.054)
Observations	1,206,000	72,000	145,000	1,331,000	124,000	213,000

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title. Bandwidths were selected using the MSE optimal bandwidth selection method (Cattaneo et al., 2019). Heteroskedasticity-robust nearest neighbor standard errors in parentheses. Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).

Table A6: ABAWD Gender Employment Outcomes on Other Samples

	(1)	(2)	(3)	(4)	(5)	(6)
	Men at ABAWD Cutoff			Women at ABAWD Ctuoff		
	ACS Sample	All Receiving SNAP	All SNAP eligible	ACS Sample	All Receiving SNAP	All SNAP eligible
Panel 1: Static Labor Market Outcomes						
Months Receiving SNAP	0.039*	0.009	0.073	0.033	0.051	-0.002
	(0.020)	(0.122)	(0.127)	(0.022)	(0.110)	(0.115)
Employed=1	0.002	0.016	-0.003	0.002	0.004	0.012
	(0.004)	(0.015)	(0.012)	(0.004)	(0.011)	(0.009)
Unemployed=1	-0.002	-0.021*	-0.009	0.002	0.013*	0.000
	(0.002)	(0.012)	(0.008)	(0.001)	(0.007)	(0.006)
Not in Labor Force=1	0.000	0.002	0.012	-0.004	-0.023*	-0.015
	(0.003)	(0.015)	(0.012)	(0.004)	(0.012)	(0.011)
ln(Hours Worked)	-0.004	0.060**	0.032	-0.000	-0.033	-0.018
	(0.004)	(0.030)	(0.025)	(0.004)	(0.022)	(0.021)
Hours Worked	-0.113	0.886	0.543	0.028	-0.471	0.070
	(0.121)	(0.680)	(0.549)	(0.114)	(0.493)	(0.419)
Panel 2: Dynamic Labor Market Outcomes						
Worked in the past 12 months	-0.003	0.004	-0.017	0.001	0.008	0.001
	(0.003)	(0.014)	(0.011)	(0.004)	(0.011)	(0.009)
Last worked 1-5 years ago	0.003	0.020	0.005	0.002	0.004	0.018**
	(0.002)	(0.013)	(0.011)	(0.002)	(0.010)	(0.008)
Last worked 5+ years ago	0.000	-0.021	0.014	-0.004	-0.020*	-0.023**
	(0.003)	(0.014)	(0.012)	(0.003)	(0.012)	(0.011)
Annual Wages	-519.50	-456.60	3.98	-583.00	1097.00*	35.13
	(896.10)	(738.20)	(196.70)	(395.80)	(575.50)	(137.10)
ln(Annual Wages)	-0.003	0.104	0.081	0.002	0.104*	0.072
	(0.010)	(0.072)	(0.051)	(0.011)	(0.056)	(0.045)
Observations	1,206,000	72,000	145,000	1,331,000	124,000	213,000

Note: Each cell reports a separate regression discontinuity estimate, where the outcome of interest is labeled with the row title. Bandwidths were selected using the MSE optimal bandwidth selection method (Cattaneo et al., 2019). Heteroskedasticity-robust nearest neighbor standard errors in parentheses. Sample sizes are rounded following FSRDC disclosure avoidance requirements. This research was performed at a Federal Statistical Research Data Center under FSRDC Project Number 2875. (CBDRB-FY24-P2875-R10961). Significance levels indicated by: *($p < .10$), **($p < .05$), ***($p < .01$).