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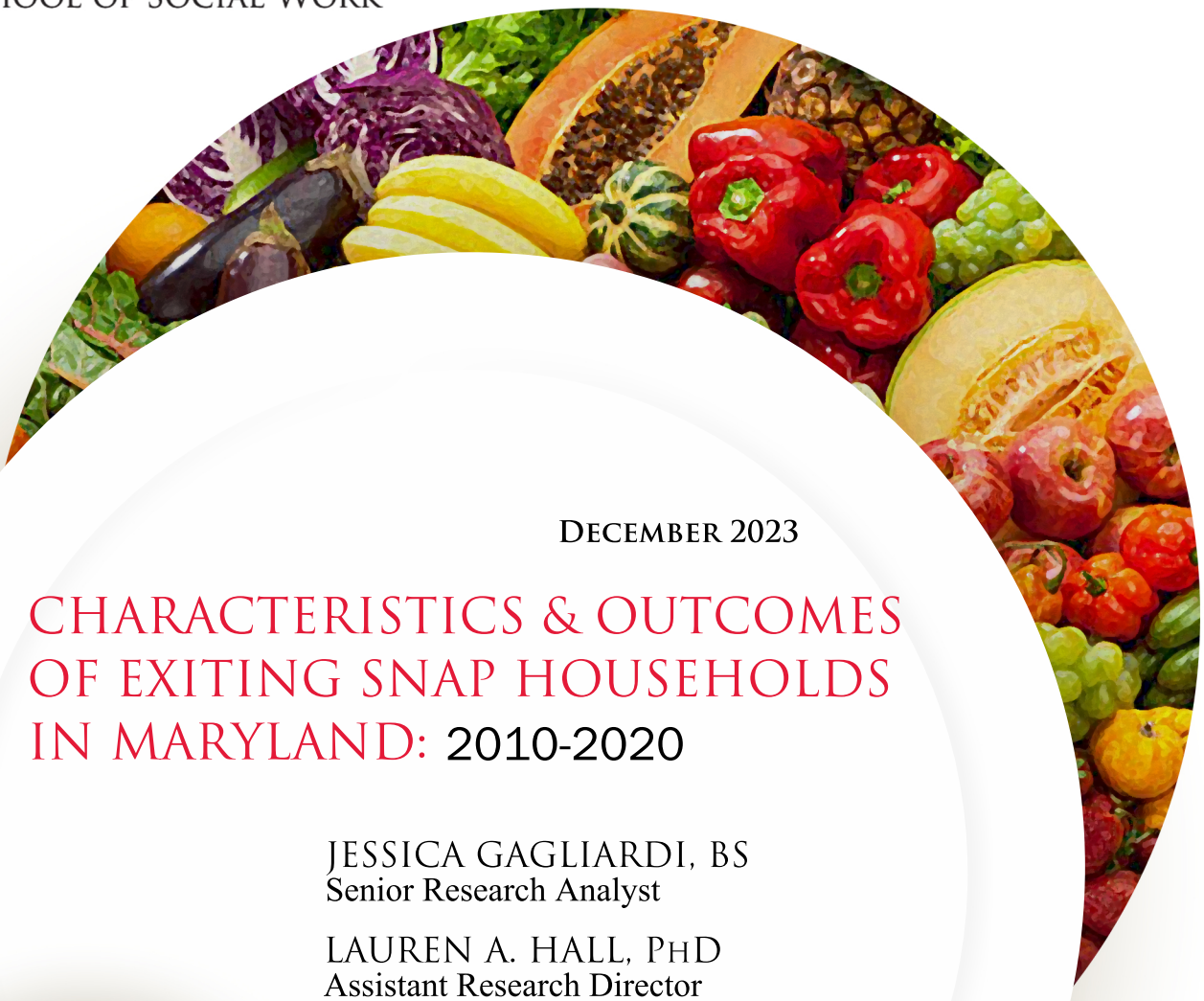

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CHARACTERISTICS & OUTCOMES OF EXITING SNAP HOUSEHOLDS IN MARYLAND: 2010-2020

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This document contains two deliverables. The first is a report on characteristics and outcomes of SNAP households in Maryland that left the program. The second is a research brief exploring the churn phenomenon among SNAP households in Maryland. This research brief is integrated into the main SNAP closures report as an addendum to provide additional context to the reader. When citing either the full report or research brief, we recommend using the following citation: Gagliardi, J., Hall, L., & Passarella, L.L. (2023). Characteristics & outcomes of exiting SNAP households in Maryland, 2010–2020. University of Maryland School of Social Work.

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EXECUTIVE SUMMARY

In recent years, state and federal stakeholders have had an increased interest in conducting Supplemental Nutrition Assistance Program (SNAP) research utilizing state-level administrative data (Food and Nutrition Service [FNS], n.d.-a, 2022). Typically, federal-level SNAP research relies on nationally representative survey data or quality control data files submitted by states (see Cronquist & Eiffes, 2022; Leftin et al., 2014, 2017; Mabli et al., 2014). Utilizing administrative data, however, has been shown to be a more accurate method of describing and counting participants in SNAP (FNS, 2022). While the body of research on SNAP participation dynamics utilizing survey and quality control samples is robust, research utilizing administrative data is rare. Furthermore, there is a substantial gap in knowledge about the characteristics of SNAP households that leave the program and their outcomes after leaving.

This report begins to fill this knowledge gap by utilizing administrative records to describe SNAP households in Maryland that left the program. It examines 844,925 Maryland SNAP households that stopped receiving benefits between state fiscal years (SFY) 2011 and 2020 (July 2010 through June 2020). This wide time frame includes the long recovery from the Great Recession, a period of economic stability, and ends with the first few months of the COVID-19 pandemic, providing the Maryland Department of Human Services (DHS) with details about exiting households and their outcomes in different economic contexts. This chapter provides a summary of key findings from the report including household and recipient characteristics, case closure reasons, employment and earnings after exit, and returns to SNAP after exit. Given that SNAP serves a diverse population, findings are often segmented by household or adult types, described on p. 9.

Household Types & Characteristics

Households that exited SNAP during the study period largely reflected the overall characteristics of active caseloads from recent SFYs.

- Some of Maryland's most populous jurisdictions had the highest shares of exiting SNAP households, including Baltimore City (25%), Prince George's County (17%), Baltimore County (13%), and Montgomery County (9%).
- Three in five (58%) recipients who exited were working age adults (18 to 59 years). Households with children (35%) and households with an ABAWD (32%) were the largest shares of exiting cases, consistent with the active caseload.
- A majority of exiting households had one (62%) or two (18%) recipients and typically had no children (65%).

Adult Recipient Demographics

The typical recipient in an exiting SNAP household was a 35 or older, Black (54%) or White (36%) adult who had never married (64%) and had completed high school (73%). However, the typical profile of an exiting adult recipient varied by adult type.

- ABAWDs, for example, were younger and a higher percentage (82%) had never married. Moreover, a smaller percentage (70%) had completed high school. On the other hand, a smaller percentage (59%) of adults with children had never married and a higher percentage (79%) had completed high school.
- A higher percentage of adults with a disability and older adults identified as White (40% and 39%, respectively). These two groups also had the lowest high school completion rates (64% and 66%, respectively). While a majority (68%) of adults with a disability had

never married, only 37% of older adults had never married.

Previous SNAP Receipt

The typical exiting household left SNAP after a short spell of receipt; however, most households had multiple spells of SNAP receipt over time.

- The typical exiting household received SNAP for a median of 7 consecutive months before exiting.
- However, for three in five (61%) households, this exit was not their 1st exit from SNAP. In fact, households had a median of 21 cumulative months of SNAP receipt in the 10 years prior to their exits.
- Households with an adult with a disability or an older adult had longer spell lengths before exit (11 months and 18 months, respectively) and higher total receipt in the 10 years prior to exit (35 months for both household types).

Case Closure Reasons

The most common reasons that SNAP cases closed were because the household did not reapply (60%), or they did not maintain eligibility (16%).

- There were some notable differences across household types. A higher percentage (25%) of households with an ABAWD experienced a closure due to not maintaining eligibility (e.g., submitting recertification documents). A higher percentage of households with an older adult (19%) experienced a case closure because the household became ineligible for benefits.
- Only 6% of households with an ABAWD closed due to noncompliance with the ABAWD work requirement.
- The expiration of the ABAWD time limit/work requirement waiver in 2016 coincides with changes in the usage of case closure reasons. These trends are explored in Figure 8 on p. 20.

Employment & Earnings[1] *before* SNAP Entry

Half (51%) of adult recipients were employed in the year before SNAP entry and earned a median of $15,500. However, employment and earnings prior to entry varied by adult type.

- Three in five adults with children (62%) and ABAWDs (61%) were employed in the year prior to SNAP entry. However, adults with children had median earnings that were nearly double that of ABAWDs ($20,600 vs. $12,100).
- One in five (20%) older adults and one in three (31%) adults with a disability were employed in the year before SNAP entry. Older adults earned a median of $15,400 in the year before entry. Adults with a disability had the lowest earnings ($8,400).
- Adult recipients experienced a 10% decline in quarterly earnings in the 2 years prior to the start of their SNAP spell. In the 8th quarter before entry, adults earned a median of $5,800; in the quarter before entry, they earned a median of $5,200.

Employment *after* SNAP Exit

Given that SNAP serves a diverse set of households, it is imperative to consider the type of adults within a household when examining employment after exit from the program.

- Overall, half (48%) of adults were employed in the year after exit. Adults with children (60%) and ABAWDs (62%) had the highest percentages of

[1] All earnings throughout this report are rounded to the nearest hundred.

employment in the year after exit, while adults with a disability (24%) and older adults (13%) had the lowest percentages of employment.

- The percentage of adults employed decreased each post-exit year, regardless of when they left the program. For example, nearly half (48%) of adults were employed the year after leaving SNAP, but by the 12th year after exit, only 31% were employed. Findings varied by adult type. Notably, only 3% of older adults were employed in the 12th year after exit, which illustrates the need to consider adult type when examining outcomes, as this percentage affects the overall employment percentage.
- Examining exiting adults in SFY cohorts shows that the percentage who were employed in the 1st year after exit increased over time. For example, only 45% of adults who exited in SFY 2011 were employed in the year after exit; by SFY 2018, this percentage increased to 52% of adults.[2]

Earnings *after* Exit

Households with an employed adult had median earnings of $21,600 in the 1st year after exit. Earnings increased by 55% over the 10 years after exit to a median of roughly $33,500.

- Adults with children had the highest median earnings in every post-exit follow-up year. In the 1st year after exit, they earned a median of $28,000.
- Older adults ($15,900) and adults with a disability ($12,200) had the lowest earnings in the year after exit. However, employed adults with a disability experienced a 57% increase over the 10 years after exit ($19,200), while older adults only experienced a 7% increase ($17,100).
- Examining exiting adults in SFY cohorts shows that the median earnings in the 1st year after exit among employed adults remained relatively stable, regardless of when in the study period someone exited. For example, adults who exited in SFY 2011 earned a median of $21,700 in the year after exit; similarly, adults who exited in SFY 2018 earned a median of $21,700. The exception lies with recipients who exited in SFY 2020 who typically earned less, likely due to the effects of the COVID-19 pandemic recession.

Industries of Employment

Many recipients are employed in lower-wage industries (i.e., median quarterly earnings below $7,000) after exit; however, many are also employed in higher-wage industries (median quarterly earnings above $7,000).

- The top lower-wage industries in which SNAP leavers worked include administrative and support services (13%), restaurants (11%), general retail (4%), food and beverage retail (4%), social assistance (3%), accommodation (2%), and personal services (2%). In total, two in five (39%) adults worked in one of these industries in the 1st quarter after exit.
- The top higher-wage industries in which SNAP leavers worked include outpatient healthcare (6%), residential care facilities (5%), education (5%), hospitals (4%), professional, scientific, and technical services (3%), trade contractors (3%), automotive retail (2%), and government (2%). In total, nearly one third (30%) of adults worked in one of these industries in the 1st quarter after exit.

[2] The pandemic affected the outcomes of adults who exited in SFY 2019 and SFY 2020, which is why this finding uses SFY 2018 as a comparison.

- Among the top industries, the four industries with the highest median quarterly earnings among SNAP leavers included professional, scientific, and technical services ($9,100), hospitals ($8,900), government ($8,900), and trade contractors ($8,700).

Returns to SNAP

Nearly three in five (57%) non-churn households did not return to SNAP in the 5 years after exit, while two in five (43%) did return.

- One third of households returned after a break in benefits lasting less than 1 year (24%) or after a break lasting between 1 and 2 years (8%).
- Returns after 5 years were extremely rare.
- Over the 10-year study period, approximately one quarter of households consistently returned in the 1st year after exit, regardless of exit year. A notable exception, however, are households that left SNAP in 2020: 38% of households that left SNAP in SFY 2020 returned within 1 year.

This research provides valuable insights to many stakeholders. Primarily, this research benefits DHS and affiliated community partners by providing a first look at the outcomes and characteristics of exiting SNAP households in Maryland. This information is potentially useful from both programmatic and policy perspectives. However, this research is also useful for FNS and other national-level stakeholders. To the best of our knowledge, this is one of the first reports to utilize administrative data to examine outcomes of SNAP households. It serves as a starting point from which Maryland and others can build upon to continue improving our collective understanding of the largest food assistance program in the United States.

INTRODUCTION

In the past 15 years, the United States has faced two economic recessions that hit low-income families the hardest. The Great Recession and the COVID-19 pandemic-induced recession both increased unemployment, hardship, and food insecurity (Andrews & Nord, 2009; Center on Budget and Policy Priorities [CBPP], 2022; Danzinger et al., 2012; Pilkauskas et al., 2012; U.S. Bureau of Labor Statistics [BLS], 2018, 2023c). As a result, participation in the Supplemental Nutrition Assistance Program (SNAP), the largest anti-hunger program in the U.S., also increased (Jones & Toossi, 2023 Rachidi, 2021). The federal government supported families during these economic crises by relaxing program rules and increasing access to SNAP. For example, the Able-Bodied Adult without Dependents (ABAWD) time limit was waived during both recessions, and many administrative procedures were relaxed during the pandemic to reduce the workload for case managers and to make it easier for recipients to secure and maintain benefits (Food and Nutrition Service [FNS], n.d.-b.; Gagliardi et al., 2023; Hall, 2022b; Keith-Jennings, 2016).

Any qualified individual is guaranteed SNAP benefits, so participation and federal spending expand when unemployment increases and wages are stagnant. During the Great Recession, the SNAP caseload increased dramatically, and it remained elevated for years after the official recession ended (Rosenbaum & Keith-Jennings, 2016). As shown in Figure 1, the unemployment rate was 7.8% in July 2010, and considerably fewer cases closed each month compared with the overall number of open cases. SNAP participation, and by association case closures, increased steadily through the early 2010s while the unemployment rate decreased. Monthly exits peaked in March 2016 once the ABAWD time limit waiver expired (Bolen et al., 2016; Keith-Jennings, 2016).

Economic circumstances continued to improve during the latter half of the decade, and both active cases and case closures began to decrease. Figure 1 shows that the unemployment rate continued to decline to a post-recession low of 3.2% in December 2019. Despite recovery from the Great Recession, SNAP participation nationally and in Maryland never returned to pre-recession levels, and the caseload grew precipitously at the start of the COVID-19 pandemic (Gagliardi et al., 2023; Hall, 2021, 2022a; Jones & Toossi, 2023; Rachidi, 2021). Exits from SNAP dropped dramatically beginning in March 2020 in response to soaring unemployment and relaxed application procedures such as extended certification periods, periodic report waivers, and adjusted interview requirements (Food and Nutrition Service [FNS], n.d.-b).

While many studies focus on SNAP participation changes over time, there are far fewer studies that focus on the characteristics of cases that close and the outcomes of recipients once they exit the program. FNS has funded many reports that use survey data to analyze case closures (Cody et al., 2005; Leftin et al., 2014, 2017; Mabli et al., 2011a, 2011b; Mills et al., 2001, 2014).[3] Fewer reports utilize administrative data, and the foci tend to be narrow such as the churn phenomena or employment after exit (Danielson & Thorman, 2022; Mills et al., 2014; Thorman & Danielson, 2022). Both survey responses and administrative records are equally useful sources of data; however, it is worth noting that administrative data tend to describe overall

[3] Surveys typically provide context that is not available in administrative systems, but these data also tend to underreport SNAP participation and may contain incorrect information (Giefer et al., 2022).

case and recipient characteristics more accurately and completely (Prell, 2016).

While research on SNAP exits is sparse, there are several valuable insights from available studies. For example, previous research has found that most case closures are associated with increased earnings (Danielson & Klerman, 2006; Danielson & Thorman, 2022; Gray 2019, Mills et al., 2001; Rangarajan & Gleason, 2001), and most case closures occur during households' recertification periods (Grobe, et al., 2019; Ribar et al., 2006; Staveley et al., 2002). Previous research also shows that characteristics of program leavers are similar to those of the active SNAP caseload (Leftin et al., 2014). Finally, welfare reform in the 1990's contributed to shorter spell lengths, but the Great Recession resulted in longer spells (Cody et al., 2005, Mabli et al., 2011b; Leftin et al., 2014).

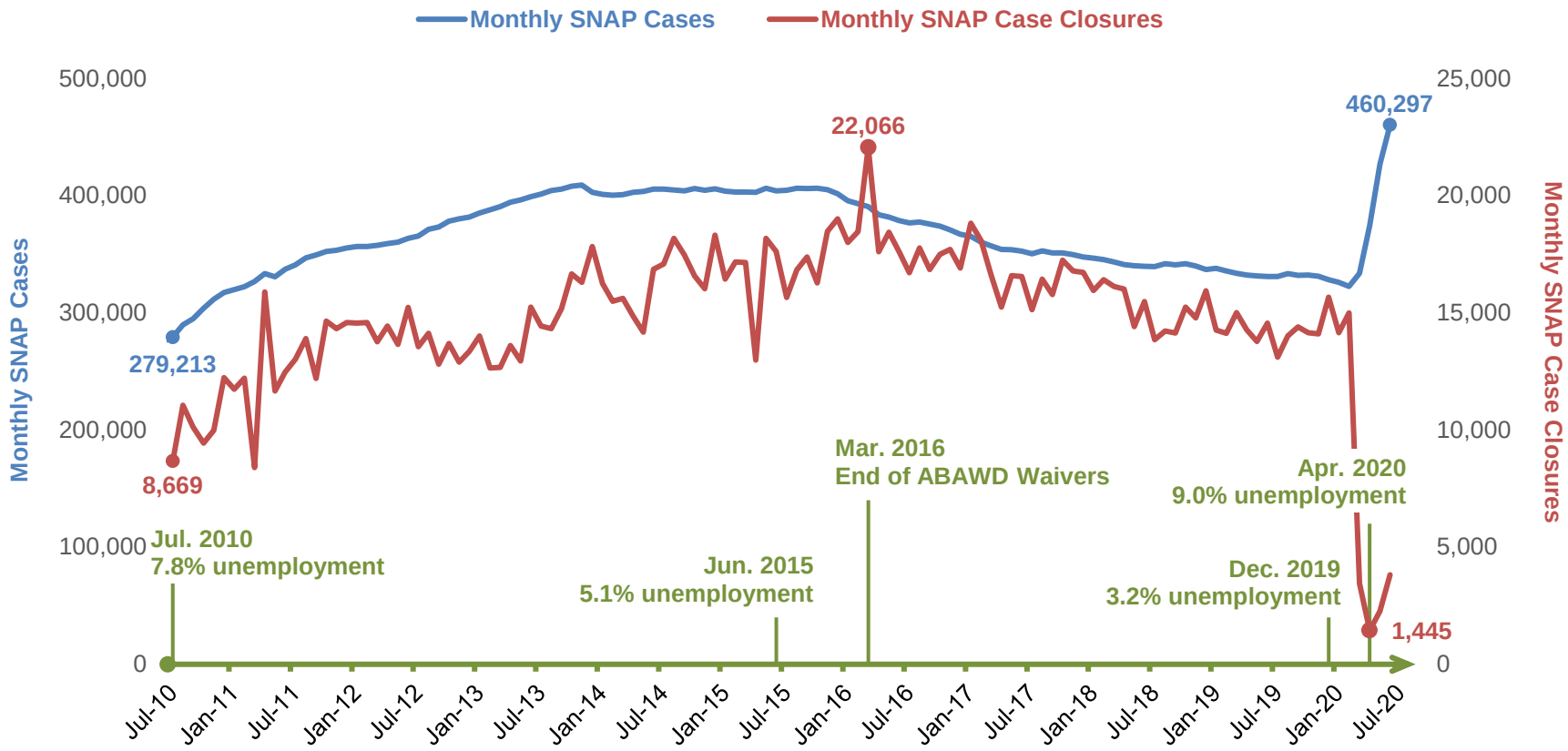
This report is one of the first to use administrative records to comprehensively describe SNAP case closures. Analyses provide novel insight into the characteristics of SNAP cases that close and recipient outcomes such as program participation, employment, and earnings after exit. The study examines 844,925 SNAP cases that closed and 911,447 adult recipients who left the program between state fiscal years (SFY) 2011 through 2020 (July 2010 and June 2020). This timeframe provides a picture of SNAP case closures across an array of economic situations, including recovery and stability periods after the Great Recession and the beginning of the COVID-19 pandemic.

This study will answer several core research questions, including:

1. What are the characteristics of SNAP cases that closed and participants who left?
2. What are the historical participation patterns among households that experienced a SNAP case closure?
3. What are the patterns of participation after these households leave the program?
4. What are the employment and earnings of adults who leave SNAP?

This research provides valuable insights to many stakeholders. First, this report provides brand new information on the outcomes of SNAP recipients in Maryland. This information can support the Maryland Department of Human Services (DHS) in making informed programmatic decisions. Second, FNS and the research arm of the U.S. Department of Agriculture (USDA) have affirmed an interest in research using state administrative records (FNS, 2022; Prell, 2016, Economic Research Service [ERS], n.d.), and very few reports on case closures utilize these data. Future researchers will benefit from the design and results of this study. Finally, community partners who provide outreach and assistive services may use the information in this report to better understand the characteristics and outcomes of recipients who exit the program.

Figure 1. Monthly Maryland SNAP Cases and Case Closures, July 2010 to June 2020



Note: Data on monthly *SNAP cases* were retrieved from statistical reports provided by the Maryland Department of Human Services: https://dhs.maryland.gov/business-center/documents/, while data on monthly SNAP *case closures* are based on the authors' calculations of administrative data. Unemployment data were obtained from the Bureau of Labor Statistics: https://www.bls.gov/.

METHODS

This chapter describes the methodology for this report including the population, data sources, and analytical methods.

Population

This inaugural examination of households[4] that exit SNAP in Maryland utilizes the population of cases that exited the program over a 10-year period. There were 1,768,808 SNAP case closures between state fiscal years (SFY) 2010 through 2020 (July 2011 through June 2020). However, this report excludes some of these case closures, as outlined below. Therefore, the primary analyses in this report examine a population of 844,925 case closures in Maryland.

Excluding Churners

Households sometimes cycle on and off SNAP while trying to establish financial self-sufficiency (Keith-Jennings & Chaudhry, 2018). This report focuses on households that left SNAP and had at least a full 2-month break in benefits. As a result, the study excludes churners. Churners—cases that close and reopen quickly—have unique characteristics as shown in the supplemental brief in Appendix A of this report. Moreover, many cases that close for administrative reasons, such as not submitting required paperwork at recertification, return after a short break in benefits. In practice, the case reopens once these issues are resolved, indicating that households still needed benefits and were not yet ready to make a permanent exit from SNAP.

Consequently, this study excludes 57,465 cases that reopened the month immediately after the closure (i.e., partial churners) and 203,360 cases that reopened within two months (i.e., had only a 1-month break in benefits before reopening), the definition of a churner for this study. The supplemental brief in Appendix A describes the methodology for defining the length of a churn spell and provides a visual representation of churn. These exclusions collectively accounted for 15% of case closures. Partial churners, specifically, did not have a break in SNAP benefits. Partial churners had a documented closure but quickly resolved the issue so that SNAP benefits were received both in the closure month[5] and the subsequent month.[6]

APPENDIX A EXPLORES CHURNERS (CASES THAT CLOSE AND RE-OPEN QUICKLY) AND PROVIDES A VISUAL REPRESENTATION OF WHICH CASES THIS REPORT EXCLUDES.

Excluding Multiple Closures

As previously mentioned, families may use SNAP several times during periods of financial instability. For many cases, then, there are multiple case closures in the study period. For this report, we selected a single closure at random if the case had multiple closures or if any adult experienced multiple

[4] Eligibility for SNAP is based on households: a household describes who in the residence is part of the group receiving SNAP (Family Investment Administration [FIA], 2023, sec. 100). A household may be one person or a group of people who live together and prepare food together (Food and Nutrition Act of 2008).

[5] The closure month is the last month in which benefits were received, and this is the date used in the report to represent the closure.

[6] We are able to identify the count of partial churners given that the population for this study is based on data from the older administrative data system. In 2021, the Maryland Department of Human Services migrated to a new administrative data system. Therefore, future SNAP closure reports that utilize the new administrative data system may not include an accurate estimate of partial churners because we are unable to identify partial churners in the new administrative data system (see additional information in the *Data Sources* section).

case closures.[7] Therefore, 662,567 duplicates were removed from the population of closures, accounting for 37% of all closures.

Excluding Cases with Missing Information

The final exclusions from the study population were related to issues in the administrative data system during the closure month (n=491 cases). This includes cases with incomplete information regarding case members or the head of household, as well as cases with duplicate eligibility information. Typically, data discrepancies are resolved within the data system. However, since the data could not be verified in the observation month, these case closures were excluded from the population.

Population Summary

There were **1,768,808** case closures between July 2010 and June 2020. This report excludes:

- 57,465 partial churners, which are cases that closed and reopened the next month without a benefit disruption
- 203,360 churners, which are cases that reopened within two months (i.e., had a 1-month break in benefits)
- 491 cases missing necessary information about the case or household members
- 662,567 observations of cases with multiple closures

Final Population: 844,925 unique case closures and 911,447 adult recipients

Household and Adult Types

This report presents some analyses by household and adult types, providing a richer picture of who participates in SNAP. These types are based on the household compositions identified in the Food and Nutrition Service's national report on SNAP households (Cronquist & Eiffes, 2022) and groups specified in the Food and Nutrition Act (2008). Table 1 shows household and adult types, and a description of each type can be found on p. 9. These types are not mutually exclusive. Household composition can change monthly, and this report captures a period of 10 SFYs. Therefore, some households and adult recipients may be represented in multiple types. Although some overlap of household and adult types may occur, separating analyses by type allows stakeholders to understand the nuances between distinct groups of recipients.

Table 1. Counts of Exiting Households and Adults, July 2010 to June 2020

Type	Households	Adult Recipients
Adults with Child(ren)	293,333	321,223
ABAWDs	272,395	281,394
Adults with a Disability	111,397	113,409
Older Adults	117,008	127,858
Other Adults	108,330	113,112
Unduplicated Total	**844,925**	**911,447**

Note: Household and adult recipient types are not mutually exclusive categories as recipients in households may meet criteria for more than one category. Therefore, values do not add up to the total. The totals represent unduplicated numbers of households and adult recipients. See the definitions of household types on p. 9.

[7] There are a handful of adult recipients who are represented in the population more than once. This can happen when an adult is a member on more than one case during the study period and both cases are randomly selected into the sample. This also can happen when an adult closes their case, and the case is reopened under a different case number. Data cleaning procedures capture most of these duplicates.

Data Sources

Study findings were based on analyses of administrative data retrieved from computerized management information systems maintained by the State of Maryland. Demographic and program participation data came from the now defunct Client Automated Resources and Eligibility System (CARES); some follow-up participation data were extracted from the new Eligibility and Enrollment (E&E) system. Employment and earnings data were obtained from BEACON and its predecessor, the Maryland Automated Benefits System (MABS).

CARES & E&E

CARES and E&E are the administrative data systems for safety net programs managed by the Maryland Department of Human Services (DHS). CARES was operational between March 1998 and November 2021. The migration to E&E occurred between April and November 2021.[8] Both CARES & E&E provide individual and case-level program participation data for Temporary Cash Assistance (TCA), SNAP, and other services, as well as demographic data on participants. Certain demographic data in this report reflect the limited nature of the administrative data systems (e.g., gender is a binary field). Race (e.g., Black, White) and ethnicity (i.e., Hispanic/Latinx) data represent individuals who self-identify or for whom case managers assign a race and ethnicity (Family Investment Administration [FIA], 2008). This report uses the combined non-gendered term Hispanic/Latin*x* in place of Hispanic or Latino to be inclusive.

BEACON & MABS

Data on quarterly employment and earnings as well as North American Industry Classification System (NAICS) codes (i.e., industries) came from the BEACON and MABS systems. BEACON became the fully modernized unemployment insurance system in September 2020. These data include all employers covered by the state's Unemployment Insurance (UI) law and the unemployment compensation for federal employees (UCFE) program. Together, these account for approximately 91% of all Maryland civilian employment. Adults engaged in alternative work arrangements, including independent contractors, gig-workers, commission-only salespeople, some farm workers, members of the military, most employees of religious organizations, and self-employed individuals are not covered by the law and, consequently, are not represented in the employment data. Additionally, informal jobs in which individuals and their employers do not report earnings to the government for income tax purposes (Nightingale & Wandner, 2011) are not covered. Despite limitations, empirical studies suggest that UI earnings are actually preferred to other types of data in understanding the economic well-being of safety net benefit recipients (Kornfeld & Bloom, 1999; Wallace & Haveman, 2007).

The BEACON and MABS systems only track employment in Maryland. The state shares borders with Delaware, Pennsylvania, Virginia, West Virginia, and the District of Columbia, so out-of-state employment is common. The percentage of out-of-state employment by Maryland residents (15%) is over four times greater than the national average (3.5%).[9] Therefore, we may underestimate employment participation at the jurisdictional level. Out-of-state employment is common in two populous jurisdictions, Prince George's County (37%) and Montgomery County (23%), which have the

[8] Given the transition to a new data system, there may be unknown data issues.

[9] Data were obtained from the U.S. Census Bureau website (https://data.census.gov/) using the 2017–2021 American Community Survey 5-Year Estimates for Commuting Characteristics by Sex (S0801).

second and fourth largest SNAP caseloads in the state (Gagliardi et al., 2023). It is also high in two less-populated jurisdictions, Charles County (31%) and Cecil County (30%). These four jurisdictions may be especially affected by the exclusion of out-of-state employment data. As a result of Maryland's high rates of out-of-state employment and the data limitations described, it is important to regard employment data as representing *minimum* levels of employment.

Since UI earnings data are reported on an aggregated, quarterly basis, we do not know, for any given quarter, how much of that time period the individual was employed (i.e., how many months, weeks, or hours). Thus, it is not possible to compute or infer hourly wages or weekly or monthly salaries from these data. It is also important to remember that the earnings figures reported do not necessarily equal total household income; we have no information on earnings of household members who are not members of the SNAP case, and we do not have data about all sources of income.

Data Analysis

In this report, we utilize descriptive statistics to describe the cases and experiences of the population of families who left SNAP within the study period. This report uses mean values, a descriptive analysis that represents the mathematical average of a set of numbers. In addition, this report uses median values which represents the middle point of a distribution organized from lowest to highest. Extreme values do not affect the median, which is why it is sometimes preferred over the mean. Inferential statistics are not needed for analyses of populations, so this report does not include significance testing.

Exclusions from Analyses

Throughout this report, cases and individuals are excluded from some analyses. This section outlines the most common reasons for exclusions. First, some information, such as a case closure reason or educational attainment information, may be missing from the administrative data. In these instances, valid percentages are used, which exclude missing data. Second, adult recipients missing identification information are excluded from employment analyses because it is not possible to obtain their employment data (n=3,077). Third, adult recipients younger than 16 in the year prior to their SNAP spells are excluded from pre-SNAP spell employment analyses (n=261). However, they are included in all other employment analyses. Lastly, the sample size decreases as we examine outcomes after exit due to the limited availability of follow-up data. The program participation and employment follow-up data in the main body of this report extend through December 2022.

CHARACTERISTICS OF EXITING HOUSEHOLDS

The Supplemental Nutrition Assistance Program (SNAP) is a means-tested entitlement program designed to supplement low-income families' access to nutritious foods, so individuals and families who apply and meet income and other eligibility criteria are automatically able to receive benefits. This feature makes SNAP a valuable resource for low-income households during periods of financial and macroeconomic instability. This chapter provides an overview of characteristics of households that exited the program between July 2010 and June 2020, during which the U.S. experienced both economic hardship and recovery. Analyses include residence of exiting households, household types, number and age of recipients in the household, and adult recipient demographics. Finally, this section explores households' histories of SNAP receipt and case closure reasons.

This chapter provides detailed profiles of households and adults who exit the SNAP program. As there is little research available on SNAP exits, these descriptive analyses fill a notable gap in the literature. Unless otherwise stated, analyses summarize findings over the entire study period, given that many findings did not vary substantially by year. Where applicable, this chapter includes trend analyses to demonstrate when case closure characteristics changed over time. General comparisons between findings in this report and recent Maryland caseload reports (Hall, 2021, 2022a; Gagliardi et al., 2023) are provided to contextualize the results of this study, but they should be interpreted with caution as these reports span different time periods and populations.

Residence of Exiting Households

Maryland is diverse across a spectrum of characteristics. The 24 jurisdictions in the state span urban, suburban, and rural areas, and two thirds share a border with one of four states or the District of Columbia. Each county has unique labor market and economic conditions, and these differences affect job opportunities, earnings, and access to resources such as affordable housing and transportation. These variations may impact SNAP utilization patterns in each Maryland county.

Table 2. Residence of Exiting Households

	All Households *(n=844,925)*
Baltimore City	25%
Prince George's County	17%
Baltimore County	13%
Montgomery County	9%
Metro MD Region Carroll, Harford, Howard, & Frederick Counties	9%
Anne Arundel County	6%
Western MD Region Garrett, Allegany, & Washington Counties	5%
Southern MD Region Calvert, Charles, & St. Mary's Counties	5%
Upper Shore Region Cecil, Kent, Queen Anne's, Caroline, Talbot, & Dorchester Counties	5%
Lower Shore Region Worcester, Wicomico, & Somerset Counties	4%
Total	100%

Note: Valid percentages are reported to account for missing data.

Table 2 shows the residence of families who exited SNAP over the study period. Approximately three fifths of the state's overall population and SNAP recipients reside in either Anne Arundel, Baltimore, Montgomery, and Prince George's counties or Baltimore City (Gagliardi et al, 2023; U.S. Census Bureau, 2023). As such, these counties are listed independently in the table, while the remaining 19 jurisdictions—which each account for 3% or less of the overall active SNAP caseload (Hall, 2021,

2022a; Gagliardi et al., 2023)—are grouped into regions.

Baltimore City had the highest share of exiting households during the study period, accounting for 25% of all exits. Prince George's County had the second highest concentration of case closures at 17%, followed by Baltimore County (13%) and Montgomery County (9%). The percentage of exiting households that resided in these jurisdictions is consistent with their respective shares of the overall caseload (Hall, 2021, 2022a; Gagliardi et al., 2023).[10] One in 10 (9%) cases that closed in Maryland were in the Metro Region, comprised of counties surrounding the Baltimore area. The percentage of statewide leavers among the remaining regions ranged from 6% in Anne Arundel County to 4% in the Lower Eastern Shore region.

Household Types and Number of Recipients

This section describes SNAP households' compositions, including household types. Some analyses in this report stratify findings by five household types that align with those referenced in federal reports,[11] including (a) households with children; (b) households with an Able-Bodied Adult Without Dependents (ABAWD); (c) households with an adult with a disability; (d) households with an older adult; and (e) other households that do not meet the definition of the previous four household types. A household may be included in multiple household types during the study period, so these categories are not mutually exclusive.

Households with Children: Households with at least one child recipient 17 years or younger in the month of exit. Although uncommon, this can include children aged 16 or 17 who are head-of-households.

Households with an Able-Bodied Adult without Dependents (ABAWD)*: Households with at least one adult recipient between 18 and 49 years who does not have a documented disability and is subject to federal work requirements during the month of exit.

Households with an Adult with a Disability: Households with at least one adult recipient between 18 and 59 years who has a temporary or permanent disability exemption in the month of exit.

Households with an Older Adult: Households with at least one adult recipient 60 years or older in the month of exit.

Other Households: Households with at least one adult recipient who does not fit criteria for any other household type in the month of exit.

*The Fiscal Responsibility Act changed the ABAWD definition in September 2023, *after* the period of examination in this study.

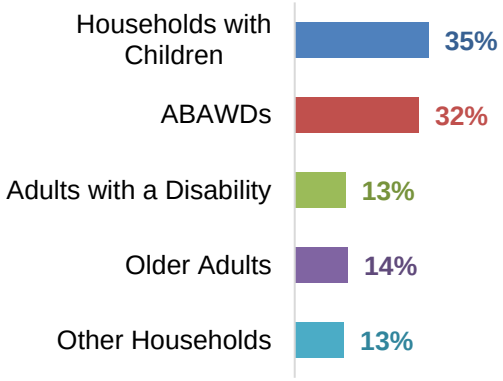
Figure 2 depicts the percentage of case closures by household type. Households with children (35%) and ABAWDs (32%) were the most common households to experience a case closure during the period. While the percentage of households with children that exited the program was comparable to the percentage in the active caseload, households with ABAWDs disproportionally experienced case closures. Previous research shows that households with ABAWDs make up around one quarter of Maryland SNAP cases (Hall,

[10] These four jurisdictions also had the highest caseloads for the Maryland Temporary Assistance for Needy Families (TANF) program, another income support program (Smith et al., 2022; Smith & Passarella, 2023).

[11] For example, see the most recent FNS report on characteristics of SNAP households: https://www.fns.usda.gov/sites/default/files/resource-files/Characteristics2020.pdf

2021, 2022a; Gagliardi et al., 2023); however, they represent one third of closures. Conversely, households with older adults represent around one quarter of the SNAP caseload, but only one in seven (14%) of these households' cases closed during the study period. The differences are likely related to work participation patterns and program requirements for these respective groups. ABAWDs are of working age and may be more likely to obtain gainful employment than older adults, potentially precipitating exits from SNAP. Additionally, these recipients are limited to only 3 months of benefits if they do not meet work requirements, which also may lead to a higher percentage of exits compared with older adults who are not subject to these requirements.[12]

Figure 2. Exiting Households, by Household Type

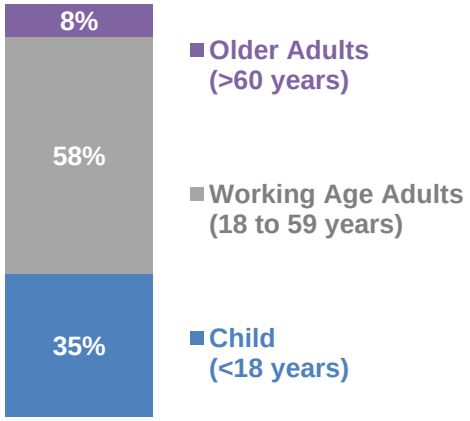


Note: Household types are not mutually exclusive categories as recipients in households may meet criteria for more than one category. Therefore, percentages do not add up to 100%.

Another way to conceptualize household composition is by the age of recipients in the household, shown in Figure 3. Nearly three fifths (58%) of recipients were working age adults between 18 and 59, one third (35%) were children under 18, and fewer than one in 10 (8%) were older adults, defined as age 60 or older. A higher percentage of working age adults left SNAP relative to the overall proportion of these recipients on the caseload (Hall, 2021, 2022a; Gagliardi et al., 2023). By contrast, a smaller percentage of children and older adults exited the program relative to the proportion of these households in the overall caseload.

Figure 3. Age of All Recipients

On Exiting Cases



Note: Valid percentages are reported to account for missing data.

The final household composition analysis focuses on the number of recipients in SNAP households. Table 3 shows that three fifths (62%) of households had one recipient, and two fifths (38%) had two or more recipients. This table also describes the number of child and adult recipients in households. Most (82%) households had one adult recipient, and one in eight (12%) had two adult recipients. Finally, two thirds (65%) of households had no children. Households with one child (18%) were more common than those with two (11%) or three or more (6%) children. The number of adults and children in exiting households were comparable to that of the overall SNAP caseload (Hall, 2021, 2022a; Gagliardi et al., 2023). Appendix B provides the number of recipients by household type.

[12] For more information on SNAP work requirements, please visit https://www.fns.usda.gov/snap/work-requirements.

APPENDIX B FEATURES THE NUMBER OF RECIPIENTS BY HOUSEHOLD TYPE

Table 3. Number of Recipients
On Exiting Cases

	All Households *(n=844,925)*
Total Recipients	
1 recipient	62%
2 recipients	18%
3 recipients	11%
4 or more recipients	9%
Adult Recipients	
No adults	4%
1 adult	82%
2 adults	12%
3 or more adults	2%
Child Recipients	
No children	65%
1 child	18%
2 children	11%
3 or more children	6%

Note: Valid percentages are reported to account for missing data.

Adult Recipient Demographics

Table 4 provides the demographic characteristics of adult recipients on exiting cases during the study period. Findings are separated by adult recipient types which mirror the household types described on p. 9, but at the individual level.[13] Some findings were consistent across types. For instance, the typical adult exiting SNAP identified as non-Hispanic/Latinx Black (54%) or White (36%), had never been married (64%), and had completed high school (73%).

Some demographic characteristics in the active caseload differ considerably by adult type (Gagliardi et al., 2023), and these variations also are observed for the exiting caseload in Table 4. For example, in the overall exiting population, more than half (56%) of adults were female; however, differences exist across adult types. Three fourths (75%) of adults with children and three fifths (59%) of older adults were female, while the slight majority of ABAWDs (56%), adults with disabilities (54%), and other adults (53%) were male. Similarly, all adult recipients were, on average, 42 years old, but adults with a disability (44 years) and adults in the *other* category (49 years) tended to be older, while adults with children (36 years) and ABAWDs (32 years) had a lower average age.[14] Marital status also varied by adult type. Overall, two thirds (64%) of adults had never been married; however, a larger majority (82%) of ABAWDs had never married, while three fifths (63%) of older adults either were married at the time of exit (22%) or had previously been married (41%). Finally, adults with a disability had less education than the average for all adult recipients, while adults with children tended to have more education. For example, four fifths (79%) of adults with children completed at least high school, which is 6 percentage points more than that of all adult recipients (73%) and 15 percentage points more than adults with a disability (64%).

Most demographics of adults exiting SNAP were similar to those of adults in the active SNAP caseload with a few notable exceptions. First, 2% of non-Latinx Native American recipients experienced a case closure, but previous research indicates these recipients make up less than 0.5% of SNAP recipients (Hall, 2021, 2022a;

[13] Adult types are similar to the definitions of household types; however, instead of coding if any recipient in the household meets the definition, adult types are coded based on whether an individual person meets the definition.

[14] The definition of some adult types includes an age range, so variation is expected. For example, the definition of ABAWD includes an upper age limit of 49 years. As a result, these recipients are, on average, younger than adults with a disability or other adults, who are up to 59 years of age. Conversely, older adults have an age minimum of 60 years, and so by definition, these recipients are older than the rest of the adult types.

Gagliardi et al., 2023). While this difference is relatively small and the time periods are not directly comparable, the discrepancy may indicate unique needs and barriers of Native communities.[15] Conversely, a smaller proportion (54%) of non-Hispanic/Latinx Black adult recipients exited the program than typically represented in the active caseload (Hall, 2021, 2022a; Gagliardi et al., 2023), which may also result from unique barriers and needs of Black communities in Maryland.

Finally, a larger portion (54%) of adults with disabilities on exiting cases were male than are represented in the overall SNAP caseload (Hall, 2021, 2022a; Gagliardi et al., 2023). A slightly higher percentage of woman than men in the national population have disabilities, however women with disabilities tend to be more vulnerable to under-employment and low pay than their male counterparts (McLaren et al., 2021). A higher portion of men with disabilities may have exited SNAP during the study period due to the better employment outcomes for these individuals compared to women with disabilities.

[15] Past research revealed participation barriers and factors families consider when choosing between SNAP and the Food Distribution Program on Indian Reservations (FDPIR), an alternative to SNAP that distributes goods to recipients (Finegold et al., 2009; Pindus et al., 2016). Native citizens in Maryland are not eligible for the latter program because there are no federally recognized tribes in the state. However, the findings may still provide relevant insight.

Table 4. Adult Recipient Demographics, by Adult Type

On Exiting Cases

	Adults with Children	ABAWDs	Adults with a Disability	Older Adults	Other Adults	All Adult Recipients
Gender						
Female	75%	44%	46%	59%	47%	56%
Male	25%	56%	54%	41%	53%	44%
Race/Ethnicity						
Asian^	3%	2%	1%	6%	2%	3%
Black^	52%	59%	55%	47%	55%	54%
Hispanic/Latinx	8%	4%	3%	5%	4%	5%
Native American^	1%	2%	1%	1%	2%	2%
Pacific Islander/Alaska Native^	0.3%	0.3%	0.2%	0.3%	0.2%	0.3%
White^	35%	33%	40%	39%	37%	36%
Age (Years)						
18 to 24	12%	28%	7%	-	6%	14%
25 to 34	39%	37%	19%	-	9%	27%
35 to 49	40%	35%	33%	-	14%	29%
50 to 59	7%	0%+	41%	-	71%	16%
60 & Older	2%	0%+	-	100%	-	14%
Average Age	36	32	44	71	49	42
Marital Status						
Never Married	59%	82%	68%	37%	59%	64%
Married	25%	6%	9%	22%	15%	16%
Previously Married*	16%	12%	23%	41%	27%	20%
Highest Education Level						
Did not Complete High School	21%	30%	36%	34%	28%	27%
Completed High School#	79%	70%	64%	66%	72%	73%
> Only High School	*62%*	*53%*	*53%*	*50%*	*56%*	*56%*
> Post-secondary Education	*17%*	*18%*	*10%*	*16%*	*16%*	*16%*

Note: ^Non-Hispanic/Latinx. *Previously Married includes recipients who are divorced, separated, or widowed. #General Education Development Program (GED) certificates are included in high school completion rates. Age is based on the month of exit from the program. Gender, race, and ethnicity categories come from predetermined fields in the state administrative database. Percentages may not add up to 100% due to rounding. +Values under 0.1% are rounded to 0%. Valid percentages are reported to account for missing data.

Previous SNAP Receipt

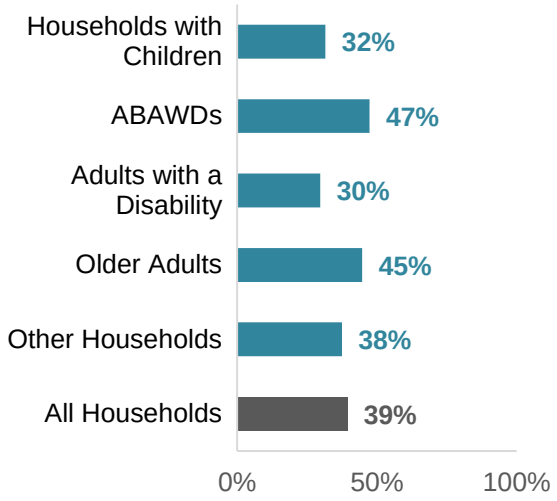
SNAP is a resource families can use for as long as they remain eligible. Exploring patterns of receipt prior to exiting the program can reveal more about the characteristics of families and for how long they utilize SNAP benefits. The analyses in this section show the percentage of households that ended their first SNAP spell at the time of exit, the median length of the exiting spell, and cumulative months of SNAP receipt in the 10 years prior to exit. Differences across household types and SFYs are described where applicable. Additional analyses for this chapter are provided in Appendix B. Specifically, we include SNAP spell length and cumulative receipt categories stratified by household type. These analyses reveal insights that otherwise may be obfuscated by analyses of averages or median lengths of time.

APPENDIX B PROVIDES ADDITIONAL DATA ON SPELL LENGTH AND CUMULATIVE MONTHS OF RECEIPT

Exits Ending the First SNAP Spell

Figure 4 shows the percentage of households that exited after their first SNAP spell[16] between SFYs 2011 and 2020. Overall, two fifths (39%) of all households in the study period exited after their first SNAP spell. Percentages varied by household type: for a higher proportion of ABAWDs (47%) and older adults (45%), this exit ended their first SNAP spell. In comparison, this exit ended a first spell for a smaller proportion of households with children (32%) and adults with a disability (30%). Two fifths (38%) of other households were new to the program.

Figure 4. Exit Ended First SNAP Spell, by Household Type



While two fifths (39%) of exiters in this study period ended their first SNAP spell, this percentage varied by year of exit (data not shown). Specifically, for 44% of SFY 2012 exiting households, the exit captured in this study ended their first SNAP spell, compared to only 35% for SFY 2019 exiting households. This change over time is likely linked to the economic effects of the Great Recession. These effects ramped up after its official end in 2009, and the SNAP program in particular experienced peak participation in 2013 (Brodersen et al., 2022; Hall, 2021; Pender & Jo, 2019;). It is likely, then, that there were higher percentages of new recipients on the SNAP caseload during the earlier part of the decade. To be sure, previous research showed that the number of *new* monthly SNAP applicants in Maryland doubled between 2007 and 2010 (Born et al., 2013).

Median Spell Length at Exit

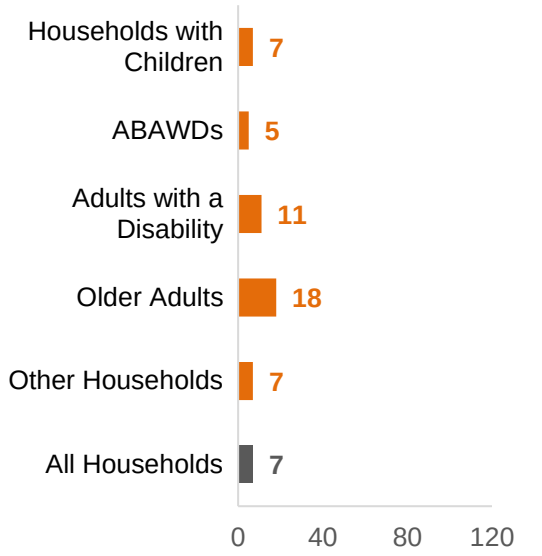
Figure 5 shows the median months of SNAP receipt during the exiting spell which represents the consecutive months of benefit receipt leading up to this exit. Households with ABAWDs had shorter median spell lengths before exit (5 months)

[16] A SNAP spell is a period of consecutive months during which households received benefits without exiting from the program.

than the median for all households (7 months), while households with adults with a disability (11 months) and older adults (18 months) had longer spells. These findings demonstrate how some families use SNAP as a short-term supplement, while others need benefits for a longer time.

Most household types had a median of less than 1 year of SNAP receipt before leaving the program, and these findings were consistent across SFYs. This observation may indicate that certification lengths impact the number of consecutive months of benefits households receive before experiencing a case closure. Most households in Maryland initially have a 6-month certification period that can be extended to 12 months if household composition and income remain stable (Family Investment Administration [FIA], 2023, sec. 410). However, certification lengths vary depending on household composition. For instance, households with ABAWDs are certified for 3-month periods (FIA, 2023, sec. 106), and those with adults with a disability or older recipients with no earned income can be certified for up to 24 months.[17] Researchers have found that many cases close during the recertification period (Grobe et al., 2019; Ribar et al., 2006; Staveley et al., 2002), regardless of eligibility and possibly due to challenges customers experience with completing the recertification process (Dehavenon, n.d.; Homonoff & Somerville, 2021; Mills et al., 2014; Ribar & Edelhoch 2008). For these reasons, spell length may in some cases more closely reflect certification length than a families' need and eligibility for SNAP at a given time.

Figure 5. Median Spell Length, by Household Type
Among Exiting Households



Note: A SNAP spell is a period of consecutive months during which households received benefits without exiting from the program.

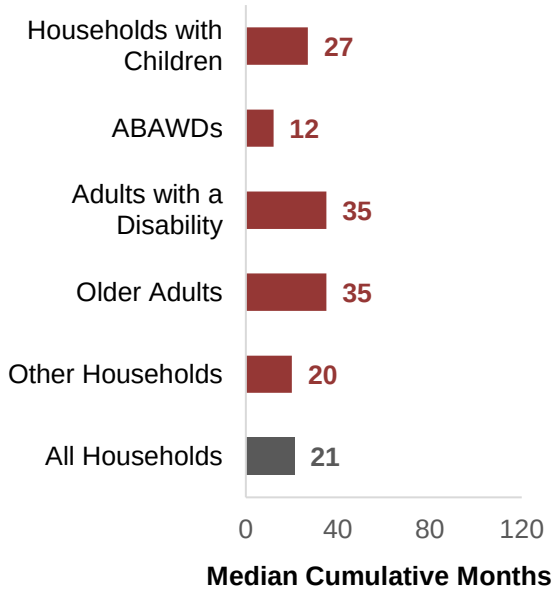
Cumulative Receipt 10 Years before Exit

Figure 6 displays the median months of SNAP receipt in the 10 years prior to exit. Unlike Figure 5, which shows how many consecutive months of SNAP benefits households received during their exiting spell, this figure represents *cumulative* months of receipt across all spells in the 10 years before exit. For example, all months of receipt from February 2001 to January 2010 would be represented in Figure 6 for a household whose case closed in January 2010. Similarly, a household that exited SNAP in February 2020 would have all months of receipt from March 2010 to February 2020 represented in this figure. National-level data suggest it is common for SNAP recipients to have multiple spells of receipt leading to an accumulation of months (Leftin et al., 2014).

[17] See the Maryland SNAP manual sect. 106.4 [ABAWD] Certification Period and 4.10.2 Certification Lengths for more information. https://dhs.maryland.gov/documents/.

Overall, households received a median of 21 months of SNAP benefits in the 10 years, or 120 months, prior to exit. As with spell length, cumulative receipt varied substantially by household type. Both older households and households with adults with a disability had nearly 3 years (35 months) of SNAP receipt in the previous 10 years. Households with children also had more months of SNAP receipt than all households at just over 2 years (27 months). Other households accrued 20 months of benefits in the 10 years before exit, while ABAWDs had the fewest cumulative months of receipt at 12 months.

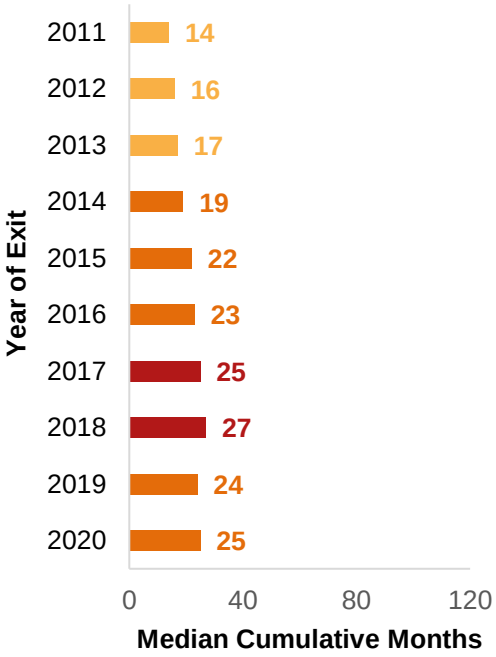
Figure 6. Cumulative Months of Receipt in the 10 Years Prior to Exit, by Household Type



Note: This figure represents the median months of receipt across all spells of receipt in the 10 years prior to the households' exit from SNAP.

The cumulative SNAP receipt of exiting households also varied by year of exit (Figure 7). The median months of SNAP receipt in the 10 years prior to exit nearly doubled from 14 months for households that left in SFY 2011 to 27 months for those exiting in SFY 2018. The percentage of first-time recipients in this study of exiters impacts the total cumulative receipt, as first-time recipients typically accumulate fewer months of benefits than do households with a history of SNAP receipt. As previously referenced, the proportion of exiting households that were first-time recipients decreased as the economy stabilized and increased again during the COVID-19 pandemic. The changes in cumulative months of receipt shown in Figure 7 mirror the changes in proportion of first-time recipients discussed on p.14.

Figure 7. Cumulative Months of Receipt in the 10 Years Prior to Exit, by SFY



Note: This figure represents the median months of receipt across all spells of receipt in the 10 years prior to the households' exit from SNAP.

In addition to economic factors, increased emphasis on SNAP access and outreach likely impacted median cumulative receipt trends over the study period. In the early 2000s there was significant investment in outreach activities conducted by local SNAP offices and community groups (Farm Security and Rural Investment Act, 2002). Outreach efforts increased SNAP uptake, particularly among very low-income households (Mabli & Ferrerosa, 2010; Rosenbaum, 2013; Keith-Jennings & Palacios, 2017). Examples of outreach activities in Maryland include eligibility pre-

screening, application assistance, and information dissemination (FIA, n.d.). States began submitting outreach plans in 2008 (Food and Nutrition Act of 2008), and these plans helped inform a network of best and promising practices. Outreach efforts became more targeted and direct, such as providing pre-screenings and application assistance to low-income households at local food banks (Alford et al., 2014; Mabli, 2015). By the mid-2010s, FNS nearly doubled investment in outreach, further committing to increasing SNAP access among low-income households.

Case Closure Reasons

SNAP cases close for a variety of reasons ranging from program ineligibility and administrative issues to voluntary departure. During the study period, case managers who work directly with SNAP households provided over 80 case closure reasons in the administrative data system. Table 5 groups these reasons into eight distinct categories. The codes in Maryland's data system are similar to those described in the FNS Quality Control Handbook (FNS, 2021).

As shown in Table 5, the most common case closure reason during the study period was *did not reapply,* accounting for three out of five (60%) case closures overall. Although not shown, this closure reason accounted for between half and two thirds of all closures each fiscal year. This category contains only one closure code that is typically used by case managers when households fail to submit an application during the redetermination period (FIA, 2023, sec. 440). Further details regarding why families fail to reapply are not uniformly captured by case managers in the administrative data system. Some recipients may forget to reapply or experience barriers to submitting documents, while others may believe they are no longer eligible for benefits and allow them to lapse.

The case closure reason *did not maintain eligibility* was the second most common closure reason accounting for one in six (16%) exits during the study period. This closure reason is used when households submitted applications but did not complete other certification procedures (FIA, 2023, sec. 440). Examples include failing to provide information that establishes financial eligibility such as pay stubs, missing redetermination interviews, and cases pending case managers' review.

While these two closure reasons account for three out of four (76%) exits, there are several other reasons households may exit the program. One in 12 (8%) households had income above the eligibility limit. SNAP recipients must generally meet gross income and net income standards to receive benefits (FIA, 2023, sec. 200–214). Gross income includes earned income such as wages or salary, and unearned income such as social security, disability benefits, or child support payments received. Net income deducts certain expenditures from the gross household income (e.g., child support payments made, dependent care costs, utility allowances).

Only 5% of cases that closed during the study period closed due to *ineligibility*, which captures ineligibility reasons other than income. Closure codes in this category vary. Some relate to changing household composition, such as the death of a household member or an underage child leaving the household. Remaining household members can reapply to determine eligibility in the new household composition. Other closure reasons under the ineligibility umbrella relate to not meeting other eligibility guidelines, such as citizenship status or felonies that disqualify someone from benefits.

Table 5. Case Closure Reasons, by Household Type

	Households with Children	ABAWDs	Adults with a Disability	Older Adults	Other Households	All Households
Did not reapply	60%	56%	63%	55%	63%	60%
Did not maintain eligibility	16%	25%	11%	7%	16%	16%
Income above limit	14%	7%	7%	7%	8%	8%
Ineligible	1%	1%	8%	19%	4%	5%
Residency	4%	2%	6%	6%	3%	4%
Customer requested closure	3%	1%	3%	5%	3%	3%
Noncompliance with ABAWD work requirement	0%	6%	0%	0%	1%	2%
Other	1%	1%	2%	2%	2%	2%
Total	100%	100%	100%	100%	100%	100%

Note: The *other* closure reason category accounts for 50 diverse administrative closure codes.

The next row in Table 5 shows that 4% of cases closed due to invalid residency. Case managers must determine whether all household members live in the state and within the residence reported, be it a rented or owned home, a shelter for unhoused people, or residential treatment facility (FNS, 2021). Case managers may select closure reasons under this category if the household failed to submit required documents to verify residency. Other closure reasons in this category relate to inaccurate household compositions. For instance, a case may close because the SNAP household includes individuals who *should not* be part of the SNAP household or if it does not include individuals who *should* be in the household. Cases that closed due to household members moving out of state also are included in this category.

An additional 3% of households voluntarily closed their SNAP cases. Sometimes households withdraw their application during the application or recertification process, or they may request benefits cessation once certified. While further details regarding why these households leave the program are not uniformly captured, previous research points to a few potential reasons. First, some households balance between earnings and a network of public benefits throughout the year to maximize income, and the costs of participating may exceed the benefits (Anderson et al., 2022; Chiarenza, 2023; Grobe, 2019). Second, participation in safety net programs is highly stigmatized which may contribute to a lack of utilization among eligible individuals (Lasky-Fink & Linos, 2022). Finally, some households voluntarily close cases when members obtain new employment or increased earnings. In some cases, recipients who voluntarily leave the program may remain eligible despite changes to household circumstances (Deponte et al., 1999).

The final major closure category in Table 5 shows that a small percentage (2%) of cases closed due to noncompliance with ABAWD work requirements. In addition to the general work requirement, ABAWDs must also work or participate in a work program for at least 80 hours per month or

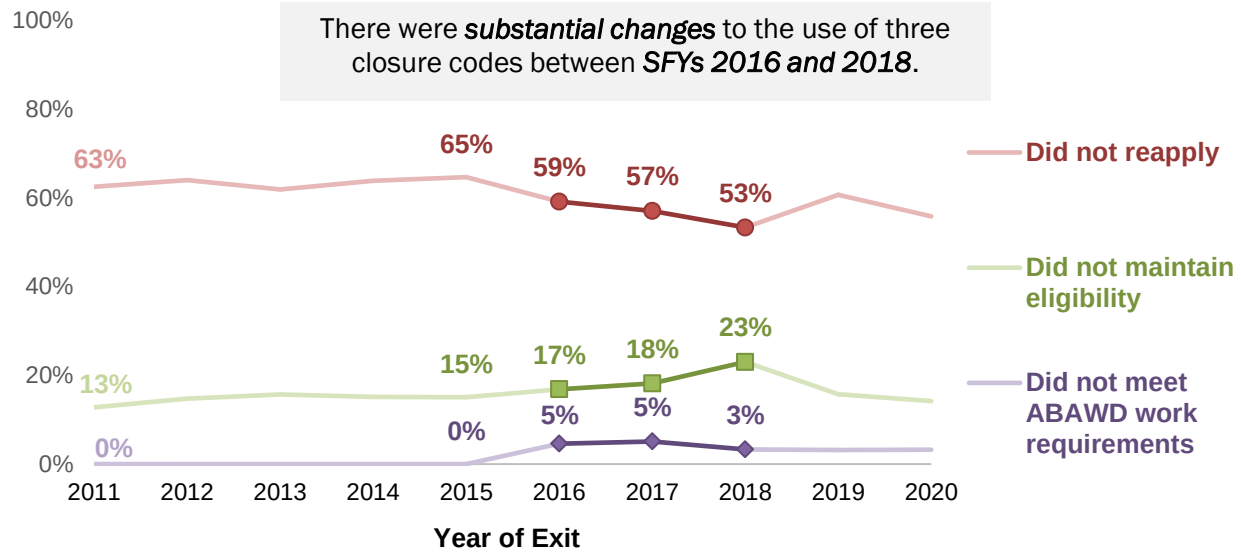
they are restricted to receiving 3 months of benefits in a 3-year period. During the Great Recession, this requirement was waived nationally until March 2016. Most ABAWDs in Maryland were exempt from these requirements for the majority of the study period (Hall, 2022b), which limits the percentage of ABAWDs whose cases could close for noncompliance.

Case closure reasons were consistent across household types with a few exceptions. Households with ABAWDs had a higher percentage of cases close due to not maintaining eligibility (25%) compared to all households (16%) which may relate to the additional eligibility requirements for these recipients. Additionally, a higher percentage of households with children (14%) exited the program due to having income above the eligibility limit compared to the percentage of all households (8%). Employment and earnings by adult types are presented in the next chapter and confirm that earnings were highest among adults with children. Finally, a larger proportion of cases with older adults (19%) closed due to being ineligible compared to all households (5%). Further investigation revealed that most closures among households with older adults in this closure category related to the death of a resident in the household.

Figure 8 illustrates a few notable trends in case closure reasons over time. First, the percentage of cases that closed because the household did not reapply at recertification decreased between SFYs 2016 and 2018. Further exploration revealed this decrease was driven primarily by households with ABAWDs.[18] Additionally, this decrease coincided with both the expiration of the ABAWD time limit waiver and an increase in cases that closed due to noncompliance with the ABAWD work requirement. Second, the percentage of cases that closed because the household did not maintain eligibility increased during the same period. While the origin of this trend is less clear, it may also be related to the expiration of the ABAWD time limit waiver. When the time limit was reinstated, some case managers may have defaulted to using the case closure reason *did not maintain eligibility* when closing cases for ABAWDs who did not meet work requirements.

[18] We checked this using two methods. First, we excluded all ABAWD households from the closure reasons over time analysis. Doing this resulted in negligible changes to the use of *did not reapply*, suggesting ABAWD households are driving the *did not reapply* decline shown in Figure 8. Second, we examined changes over time to closure reasons for *only* ABAWD households, rather than *all* households. Doing this showed a substantial decrease in *did not reapply* and a substantial increase in *did not meet ABAWD work requirements*, also suggesting that ABAWD households are driving the *did not reapply* decline.

Figure 8. Trends in Case Closure Reasons, by SFY



EMPLOYMENT AND EARNINGS

SNAP aids families experiencing short- and long-term financial hardship, such as low pay, insufficient or fluctuating hours, and employment instability (Keith-Jennings & Chaudry, 2018; Keith-Jennings & Palacios, 2017). The program's eligibility rules and benefit structure were designed to promote employment among recipients (Rosenbaum, 2013; Wolkomir & Cai, 2019); most adults are required to work at least 30 hours per week to receive benefits,[19] and recipients with earned income receive higher benefit amounts than those with only unearned income such as social security or cash assistance (FIA, 2023, sec. 213; Rosenbaum, 2013; Wolkomir & Cai, 2019). The Maryland SNAP program also includes a voluntary employment and training (E&T) program that provides employment support services (Maryland Department of Human Services [DHS], n.d.). Still, some question whether SNAP disincentivizes work among recipients, and policymakers have expanded work requirements despite evidence they do not improve employment outcomes (Food and Nutrition Service [FNS], 2023; Gray et al., 2021; Hall, 2022b; Hoynes and Schanzenbach, 2011, 2015; Parrott & Greenstein, 2014; Rosenbaum, 2013; Wolkmoir & Cai, 2019).

Employment instability and fluctuating hours make it challenging to quantify employment, and studies that examine employment at one point in time often overstate unemployment (Keith-Jennings & Palacios, 2017; Llobrera, 2023). However, previous research has shown that many SNAP recipients who can work do so (Rosenbaum, 2013; Keith-Jennings & Chaudhry, 2018). Furthermore, the percentage of SNAP households with work participation and earnings has increased over time in response to worsening economic conditions and increased outreach to low-income households (Keith-Jennings & Palacios, 2017; Rosenbaum, 2013; Mabli & Fererosa, 2010). Although we have robust research on employment while receiving SNAP, less is known about the employment and earnings of recipients after they exit SNAP.

This chapter presents employment and earnings of adult recipients before SNAP entry and after their exits from SNAP. In the previous chapter, Table 3 showed that most (82%) SNAP households have only one adult recipient, so analyzing employment at the recipient level yields similar results to analyses at the household level. While some households have multiple working recipients, employment and earnings at the household level are only slightly higher than they are at the recipient level. To see household level employment and earnings, see Appendix C.

HOUSEHOLD EMPLOYMENT AND EARNINGS

While this chapter focuses on adult recipients, APPENDIX C provides select employment and earnings analyses for the ENTIRE SNAP HOUSEHOLD. In general, the percentage of households with at least one employed adult was slightly higher than the percentage of individual adults employed. Similarly, household earnings are only slightly higher than individual earnings.

Analyses in this chapter detail the percentage of recipients employed at quarterly and annual intervals after exit, their median earnings, and the industries of employment after exit. According to the U.S.

[19] See https://www.fns.usda.gov/snap/work-requirements for more information on SNAP work requirements.

Department of Labor, one of the best predictors of future labor force participation is current or past employment (Workforce Information Advisory Council (WIAC), 2023). Similar conclusions have been drawn regarding recipients of TANF (Ybarra & Noyes, 2019). Moreover, nationally representative research determined employment participation did not change for most recipients after SNAP receipt (Cook & East, 2023); recipients who did not work prior to entering SNAP did not work after exiting, and recipients who did work before entering also worked after exit. Given this background, employment and earnings prior to SNAP receipt are provided in this chapter to contextualize findings after exit. Finally, some figures present findings by adult recipient types as employment and earnings tend to vary considerably based on adult types (Gagliardi et al., 2023).

Quarterly Employment and Earnings

The figures in this section show employment and earnings of adult recipients who exited the program at different phases of receipt. Analyses include information from before recipients entered SNAP to compare with employment findings once recipients exited the program. Analyzing data quarterly provides a detailed picture of how employment changed over time. Because this is a report on recipients who exit SNAP, data on employment and earnings *during* the SNAP spell were not analyzed. For more information on employment while receiving SNAP in Maryland, please see the report Maryland SNAP Households, 2022.

FOR EMPLOYMENT AND EARNINGS *DURING* THE SNAP SPELL, SEE THE REPORT *MARYLAND SNAP HOUSEHOLDS, 2022*

The measure of quarters is relative to each recipient: quarter one represents the first quarter after a recipient's exit regardless of when that exit occurred. Each quarter of employment data excludes adult recipients without the necessary amount of follow-up data. For instance, recipients who exited in January 2019 do not have 48 quarters of follow-up data and are excluded from this quarter's analyses.

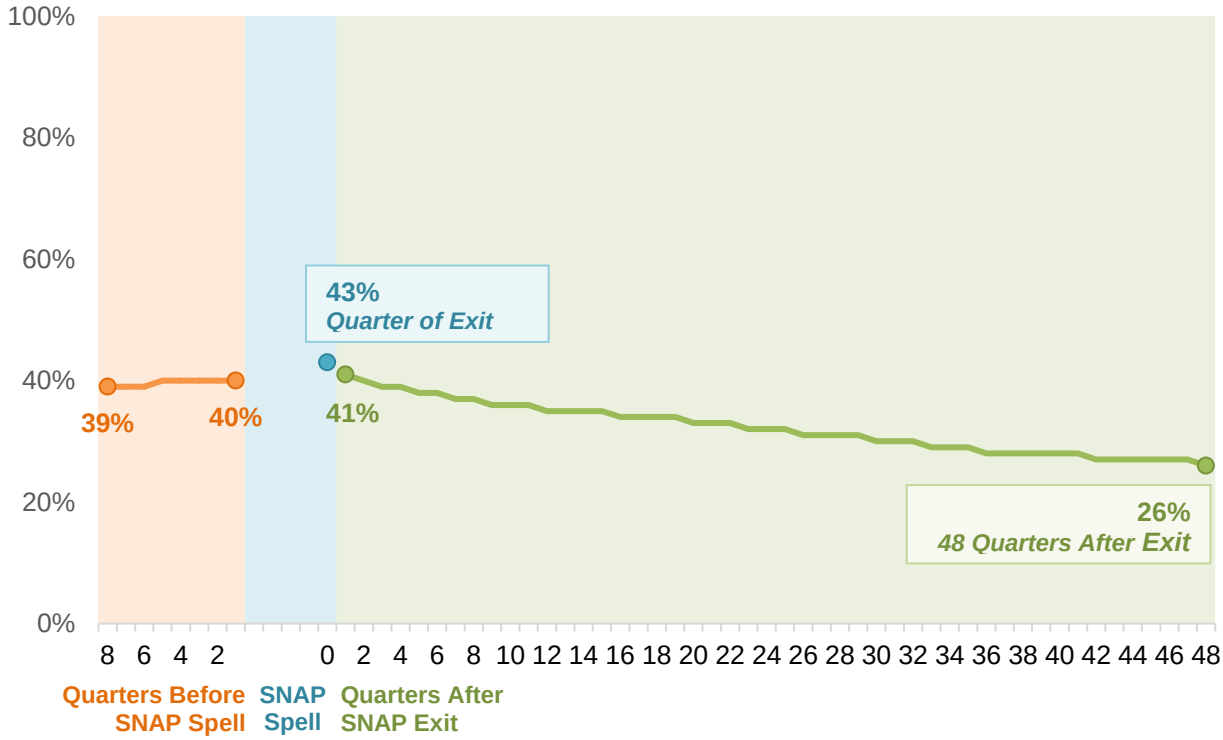
Figure 9 shows the percentage of recipients employed at quarterly intervals before entering SNAP, at the time of exit, and after leaving. The percentage of adult recipients employed just before SNAP receipt and just after exit was relatively consistent. Two fifths (39%) of all adult recipients worked in the 8th quarter before the start of their SNAP spells, and this remained stable across 8 quarters of observation. In the quarter of SNAP exit, employment increased slightly to 43%, and by the 8th quarter after exit, 37% of adults were employed. Over time, the percentage of adult recipients with any employment during the quarter steadily decreased. By the 48th quarter, or 5 years, after exit, one in four (26%) adult recipients were employed at some point in the quarter.

There are several reasons that may explain the decreasing and relatively low employment rate. Importantly, this figure shows quarterly employment. SNAP recipients are often employed in volatile markets (Butcher & Schanzenbach, 2018), and quarterly employment may undercount workforce engagement among recipients who are employed sporadically throughout the year. This is why measures of annual employment are typically higher than quarterly employment, as revealed later in this chapter. Additionally, some recipients may struggle with barriers that result in historically low labor market engagement such as a disability (BLS, 2023c), caring for children or other dependents (Keith-Jennings & Chaudry, 2018; Maestas et al., n.d.), or discrimination due to race, ethnicity, or sex (Lang & Spitzer, 2020). Other recipients may have to choose between employment and maintaining eligibility for public benefits, often to the end of

maximizing income (Anderson et al., 2022; Chiarenza, 2023). Individual life circumstances also impact the percentage of adult recipients employed. For instance, moving out of state, retirement, and death contribute to lower employment percentages.[20] Finally, as referenced in the Methods chapter, unemployment insurance data have many limitations such as lacking information on alternative work arrangements (e.g., contracting or gig-work) and out-of-state employment.

Figure 9. Quarterly Percentage of Adult Recipients Employed

On Exiting Cases: Before Spell, at Quarter of Exit, and After Exit



Note: Each quarter of employment data excludes adult recipients without the corresponding amount of follow-up data. Refer to the *Methods* chapter for data exclusions and data limitations. Valid percentages are reported to account for missing data.

Figure 10 expands on Figure 9 by showing the median quarterly earnings of adult recipients at various phases of receipt. Before entering SNAP, median quarterly earnings among employed adult recipients decreased by 10% from a median of $6,000[21] in the 8th quarter before the SNAP spell to $5,200 in the quarter before the SNAP spell. These earnings were considerably lower than the 2022 median quarterly earnings in Maryland of about $13,900.[22] In the quarter of exit, earnings increased to a median of nearly $6,600.

Many low-wage industries in which SNAP recipients are employed have sporadic, temporary, or seasonal hours (Keith-Jennings & Chaudry, 2018; Keith-Jennings

[20] For example, the authors conducted a sensitivity analysis that demonstrates the importance of this. Excluding participants of retirement age at each follow-up period, as well as excluding participants who passed away, resulted in a rate of employment that was 6 to 9 percentage points higher than what is shown throughout this chapter.

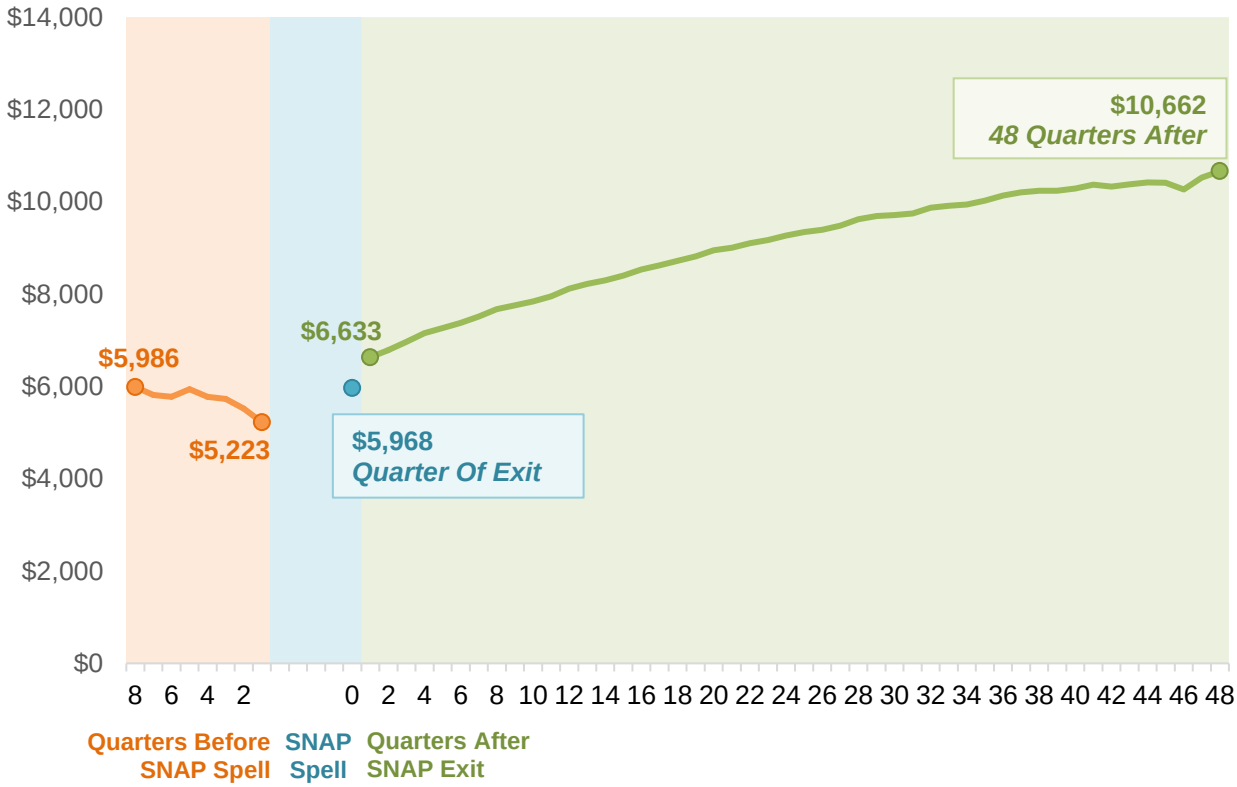
[21] All earnings throughout this report are rounded to the nearest hundred.

[22] Median quarterly earnings in Maryland were estimated using data obtained from the U.S. Census Bureau website (data.census.gov): 2022 American Community Survey 1-Year Estimates for Occupation by Sex and Median Earnings (S2411).

& Palacios, 2017). Therefore, one possible explanation for the decreased quarterly earnings before receipt is reduced hours in these kinds of occupations or industries. Industries in which recipients were employed after exit are explored later in this chapter. Job loss and changes to personal circumstances, such as taking on a new caretaking role or health concerns, may also result in decreased earnings just before SNAP receipt (Keith-Jennings & Chaudry, 2018; Maestas et al., n.d.).

Figure 10. Quarterly Median Earnings of Employed Adult Recipients

On Exiting Cases: Before Spell, at Quarter of Exit, and After Exit



Note: Earnings reflect adult recipients who were employed in the corresponding quarter and exclude adult recipients without the corresponding amount of follow-up data. Refer to the *Methods* chapter for data exclusions and data limitations. Earnings standardized to 2022 dollars.

Median earnings among employed SNAP recipients increased steadily each subsequent quarter after exit, from $6,600 in the 1st quarter after exit to around $10,700 in the 48th quarter. This increase demonstrates that families who left SNAP experienced improved financial outcomes over time. However, these earnings were still substantially lower than the median in Maryland ($13,900) and the median across the U.S (between $13,400 and $14,100) in 2022.[23] Additionally, many recipients in low-wage industries experience sporadic employment or working hours throughout the year, meaning they may earn substantially more in some quarters than others (Keith-Jennings & Chaudry, 2018; Keith-Jennings & Palacios, 2017). Figures 11 and 13 explore annual earnings which may more accurately represent the totality

[23] Median quarterly earnings in Maryland were estimated using data obtained from the U.S. Census Bureau website (data.census.gov): 2022 American Community Survey 1-Year Estimates for Occupation by Sex and Median Earnings (S2411). Median earnings in the U.S. were estimated by using the following data: https://www.bls.gov/news.release/pdf/wkyeng.pdf

of SNAP recipients' earnings in a given year.

There are a few reasons for the increase observed in Figure 10. During the study period, wages increased in response to rising inflation, particularly among individuals in low-wage industries (U.S. Bureau of Labor Statistics [BLS], 2023a; Federal Reserve Bank of Atlanta, 2023; Foster, 2023). Of relevance, the minimum wage in Maryland began increasing incrementally in 2015, which also led to pronounced earnings increases among low-wage workers (Nunn & Shambaugh, 2020; Wage and Hour Division, 2023). Finally, earnings typically increase with age, particularly among adults in their 20s and 30s (Haan, 2023), and with relevant experience accumulated over time (Goldsmith & Veum, 2002). However, even with these increases, wages were modest among SNAP recipients, and the next section demonstrates that not all recipients experienced the same amount of earnings growth.

Employment and Earnings by Adult Recipient Type

Previous research has demonstrated that employment and earnings among SNAP recipients vary considerably by adult types (Gagliardi et al., 2023). Therefore, analyses in this section present employment and earnings after program exit by adult recipient type. These figures show earnings at annual intervals, while the figures in the previous section measured earnings quarterly. Annual earnings provide a better illustration of the overall financial circumstances of adults who experience employment fluctuations throughout the year. As with the previous section, findings from before the start of recipients' SNAP spells are provided to set the stage for earnings and employment patterns observed after exit (WIAC, 2023; Cook & East, 2023).

Figure 11 shows the percentage of adult recipients in the study who were employed in the year before entering SNAP and their median annual earnings. Overall, half (51%) of adult recipients were employed in the year before SNAP entry and earned a median of $15,500 annually. Employment participation and median earnings among exiting SNAP recipients were slightly higher than the active Maryland SNAP caseload (Gagliardi et al., 2023). However, these two studies cover different time periods and populations, so comparisons should be interpreted with caution.

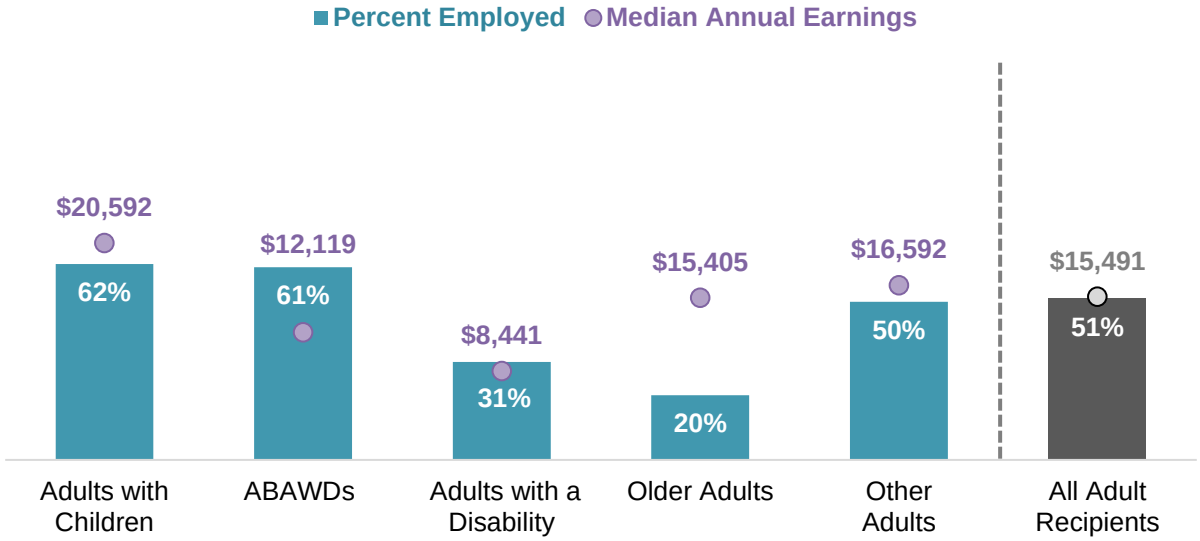
Annual earnings among SNAP recipients were considerably low, with median earnings barely exceeding the federal poverty threshold for an individual ($13,590) and falling far from the 2022 poverty threshold for a family of three ($23,030) (Office of the Assistant Secretary for Planning and Evaluation, [ASPE], 2022). Past research suggests SNAP-eligible individuals typically work in occupations with low wages, unpredictable wage growth, and a high degree of employment volatility (Butcher & Schanzenbach, 2018).

Employment and earnings varied substantially by adult recipient type, but a meaningful portion of recipients across types were employed before entering the program. The majority of adults with children (62%) and ABAWDs (61%) who exited SNAP during the study period were employed in the year before beginning their spell. The typical adult with children ($20,600) earned almost twice as much as the typical ABAWD ($12,100). Maximum earnings to qualify for SNAP increase as household size increases. Therefore, adults with children can earn more than ABAWDs and still qualify for SNAP. Appendix C demonstrates that adults with children tend to be employed in industries with higher earnings than those that employ ABAWD recipients. Other characteristic differences between these two groups may also contribute to earnings disparities, though these are beyond the scope of this report.

Half (50%) of other adults were employed in the year before their SNAP spell with median earnings of $16,600. Conversely, only one in five (20%) older adults were employed the year before SNAP, but these recipients earned a similar amount at $15,400. As shown in the previous chapter, the average ages of other adults and older adults were 49 years and 71 years, respectively. This higher average age may be a factor that explains the lower percentage of employed adults in these groups relative to younger adults. Age discrimination, health concerns, and caregiving responsibilities are all reasons older individuals may struggle to find employment (Butrica & Karamcheva, 2018; Heidkamp et al., 2012; Keith-Jennings & Chaudhry, 2018).

Finally, about one third (31%) of adults with a disability were employed sometime in the year before SNAP receipt, and they earned a median of about $8,400, the least of all adult recipients. Adults with a disability may work at a reduced rate due to their disabilities, access barriers, workplace discrimination, or to avoid losing benefits through public programs (Pulrang, 2022). These recipients may have lower earnings compared to other adult types because: (a) they are more likely to be employed part-time (BLS, 2023b); and (b) The Fair Labor Standards Act of 1938 allows employers to pay wage rates below the minimum wage in certain circumstances, including when individuals' productive capacities are impaired by a disability.

Figure 11. Employment and Median Earnings in the Year before Entry, by Adult Type
Among Adult Recipients on Exiting Cases



Note: Refer to the *Methods* chapter for data exclusions and data limitations. Valid percentages are reported to account for missing data. Earnings standardized to 2022 dollars.

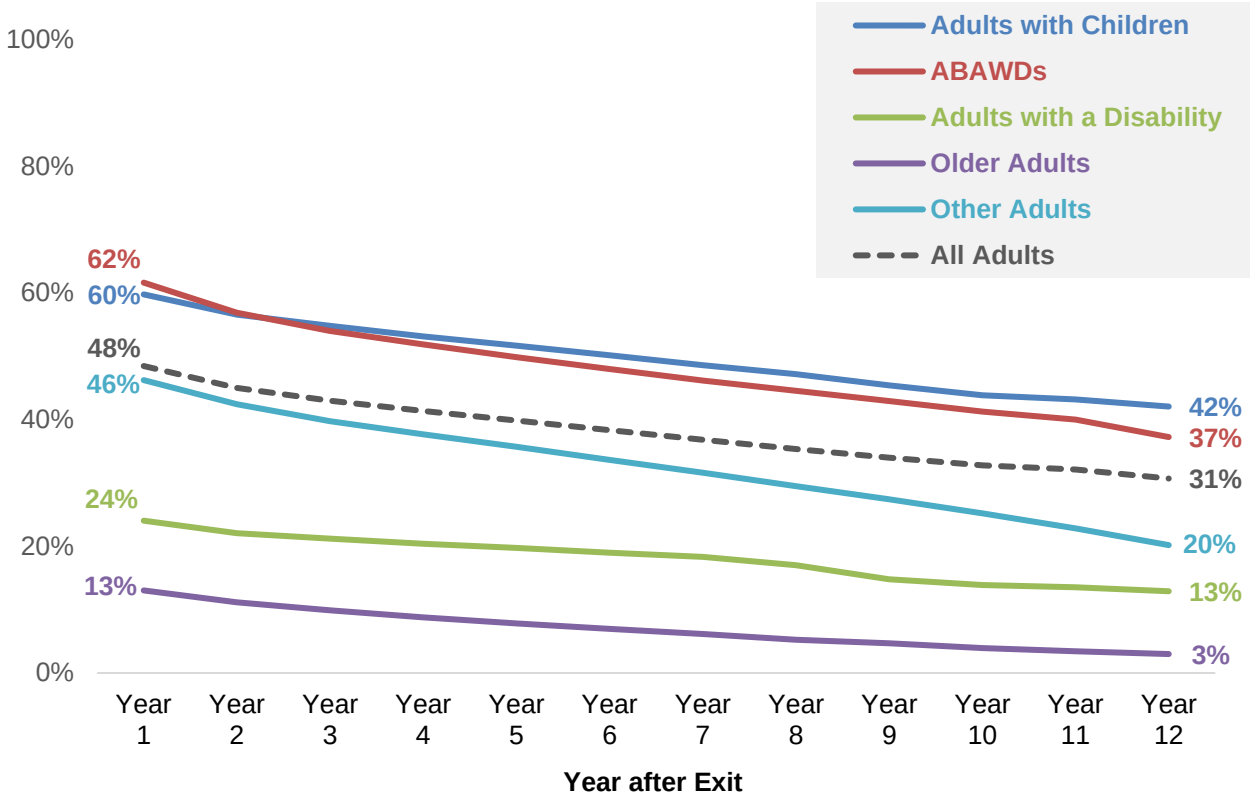
Figure 12 shows the percentage of adult recipients employed at any point during each year following their exits from SNAP. Compared to the quarterly data, these results may better reflect the rate of employment for adults who engage in non-standard work with sporadic schedules. Follow-up data for these analyses extends outside of the study period through December 2022, so up to 12 years of follow-up data are available for recipients who exited SNAP during the study period. Each year of employment data excludes adult recipients without the necessary amount of follow-up data. For instance, recipients who exited after December 2010 are excluded from year 12 analyses as there are not enough follow-up data for these recipients.

Overall, half (48%) of all adult recipients were employed in the 1st year after SNAP receipt. The percentage of recipients employed decreased each year, and in the 12th year after exit, only one third (31%) of adult recipients were employed. While this general pattern remained consistent, employment after exit varied by adult type, similar to the pre-SNAP employment. For example, a larger percentage of adults with children (60%) and ABAWDs (62%), and a smaller portion of adults with a disability (24%), older adults (13%), and other adults (46%) were employed in the 1st year after exit compared with the percentage of all adults (48%). These findings generally align with employment findings in Figure 11.

The percentage of adult recipients employed after exit decreased year over year, consistent with the quarterly employment decreases shown in Figure 9. This reduction was most prominent among other adults and ABAWDs, followed by adults with children who were of working age at the time of exit, and consequently, were most subject to volatile job markets (Butcher & Schanzenbach, 2018). Older adults and adults with a disability had the smallest changes in employment. Overall, the annual percentage of employed recipients shown in Figure 12 was higher than the quarterly percentage of employed recipients shown in Figure 9, demonstrating that some adult recipients are not employed continuously throughout the year.

Figure 12. Annual Percentage of Adult Recipients Employed after Exit, by Adult Type

Among Adult Recipients on Exiting Cases



Note: Each year of employment data excludes adult recipients without the corresponding amount of follow-up data. Refer to the *Methods* chapter for data exclusions and data limitations. Valid percentages are reported to account for missing data.

Figure 13 expands on the previous figure by presenting the median annual earnings of employed recipients each year after exit. Overall, annual earnings increased between the 1st year after exit ($21,600) and the 12th year after exit ($31,600).[24] By the end of the follow-up period, the median earnings across all adult types exceeded the federal poverty threshold for an individual ($13,590) (ASPE, 2022). However, only adults with children and ABAWDs earned considerably more than the poverty threshold for a family of three ($23,030), while earnings among adults with a disability, older adults, and other adults hovered just above or below this threshold. Recent evidence suggests that three in five low-wage workers remain in low-wage work over a 10-year period, and the longer they are "stuck" in low-wage work, the smaller their chances of upward mobility become (Escobari et al., 2021, p. 20).

Some types of recipients earned more and experienced larger increases in earnings than others, consistent with the previous findings explored in Figure 11. Adults with children earned the most after exit and were the only group of adults who earned above the median across adult types. ABAWDs and other adults initially earned similar amounts in the 1st year after exit ($18,100 and $21,400, respectively), but over time, these earnings diverged. By the 12th year after exit, ABAWDs earned more ($30,000) than other adults ($23,900). Earnings for

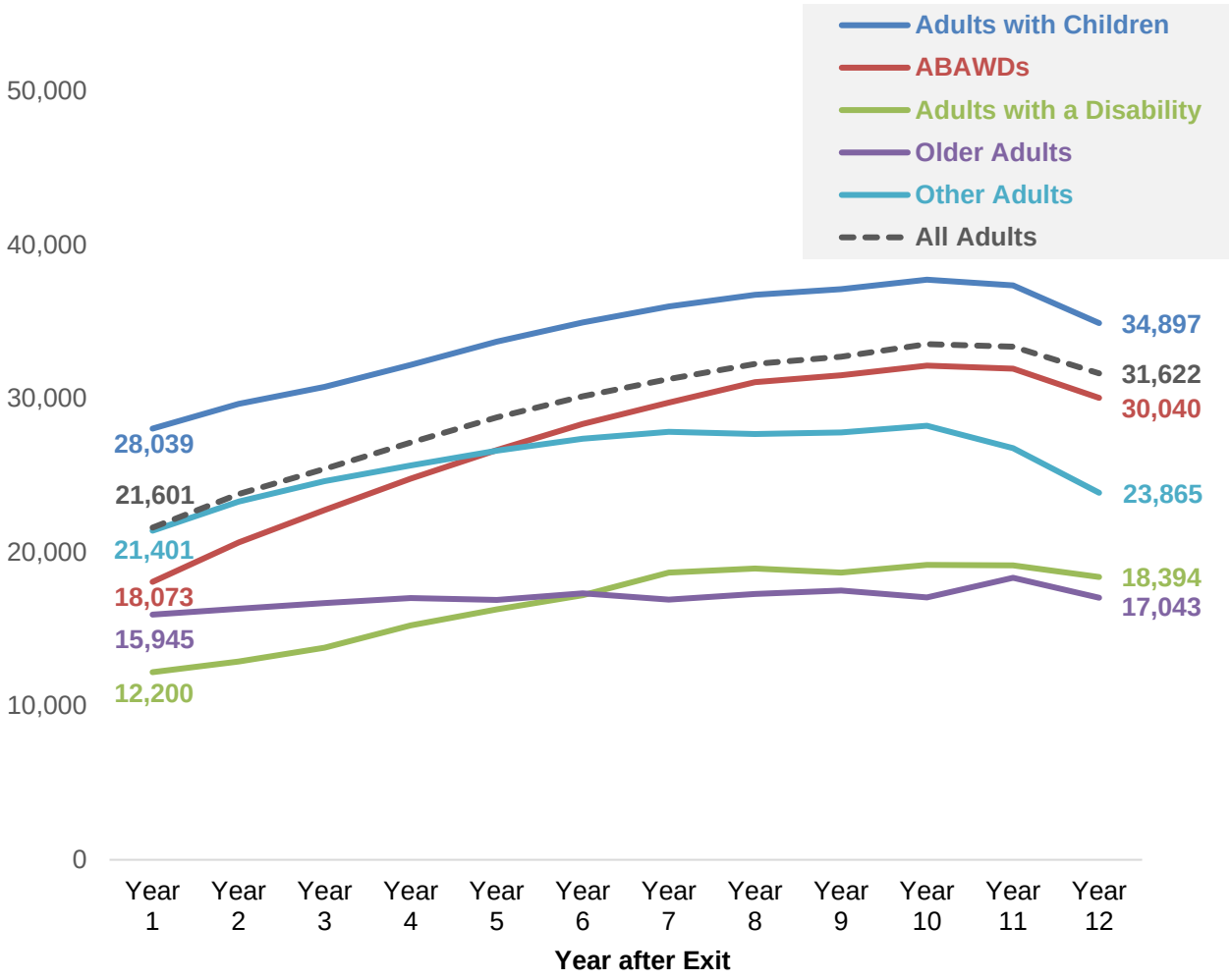
[24] Reasons for the growth in earnings over time are addressed in the discussion of Figure 10 on p. 25.

adults with a disability ($12,200) and older adults ($15,900) in the 1st year after exit were substantially lower than other adult types. While earnings among adults with a disability increased ($18,400), earnings among older adults barely budged ($17,000) throughout the 12 years of follow-up.

Across most adult types, there was a pronounced drop in earnings around 10 years after exit. For many recipients with 10 to 12 years of follow-up data, this time-period coincided with the COVID-19 pandemic, which had a devastating impact on the employment and earnings of low-income Americans (Benton et al., 2021). Despite disruptions, median annual earnings generally trended upwards across adult recipient types, though they remained low relative to the 2022 median annual earnings of $55,500 among part-time and full-time employees in Maryland.[25]

Figure 13. Annual Median Earnings after Exit, by Adult Type

Among Employed Adult Recipients on Exiting Cases



Note: Earnings reflect adult recipients who were employed in the corresponding year and exclude adult recipients without the corresponding amount of follow-up data. Refer to the *Methods* chapter for data exclusions and data limitations. Earnings standardized to 2022 dollars.

[25] Data were obtained from the U.S. Census Bureau website (data.census.gov) using the 2022 American Community Survey 1-Year Estimates for Occupation by Sex and Median Earnings (S2411).

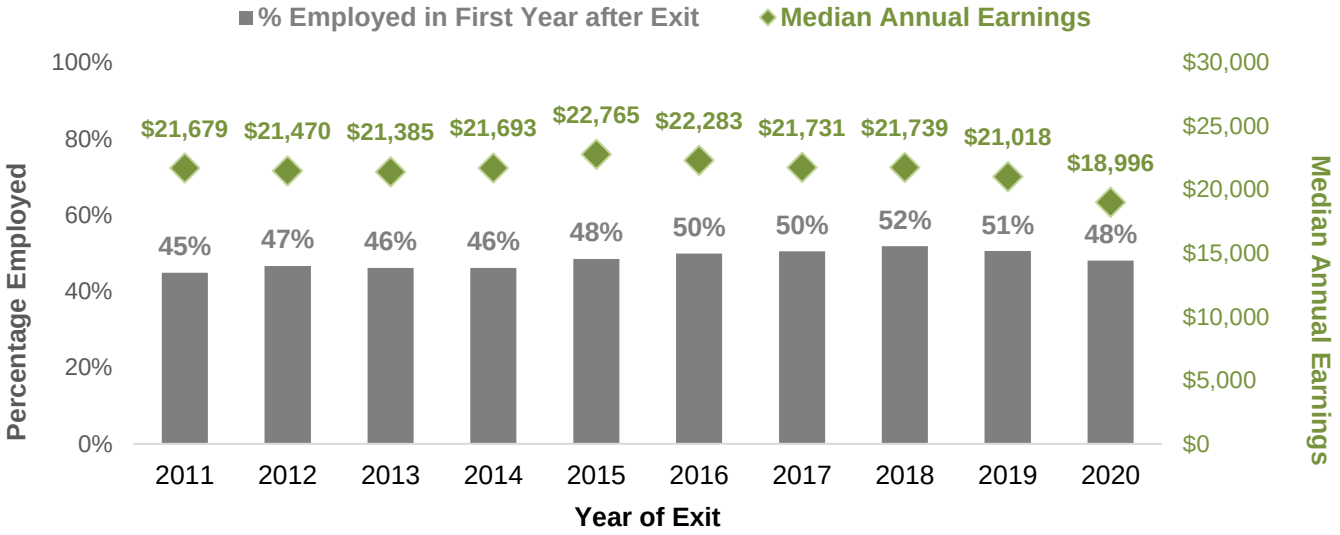
Employment and Earnings by SFY

This section examines patterns of employment and earnings over state fiscal years (SFY) 2011 to 2020, a period during which economic circumstances changed a great deal. As previously discussed, Maryland experienced a long economic recovery from the Great Recession, a period of economic stability, and a short but devastating recession at the start of the COVID-19 pandemic. Figure 14 examines the employment outcomes of adult recipients who left during these timeframes. Specifically, for recipients who left during each SFY of the study period, the figure shows the percentage who were employed in the 1st year after exit and their median earnings. This differs from previous figures, which examined post-exit employment in follow-up years regardless of when in the study period a recipient exited.

Figure 14 shows that roughly half of adult recipients who exited during any given SFY were employed in the 1st year after exiting SNAP. However, there are changes consistent with the economic context. For example, 45% of SFY 2011 leavers were employed in the year after exit. These exits occurred at the beginning of the Great Recession economic recovery. As recovery progressed to a period of economic stability, the percentage of leavers employed in the year after exiting SNAP gradually increased 7 percentage points from 45% in SFY 2011 to a high of 52% in SFY 2018. Notably, SFY 2018 was the last full year in which the 1-year follow-up period was unaffected by the pandemic. In SFY 2019, there was a slight decline in employment (51%), and another decline in SFY 2020 (48%). Still, even when leaving SNAP right before or during the pandemic, approximately half of recipients were employed.

Figure 14 also shows the median annual earnings among employed leavers in the 1st year after exit by SFY. As shown, median earnings in the year after exit consistently hovered between $21,000 and $23,000, with the exception of individuals who left SNAP in SFY 2020, who had slightly lower median earnings at $19,000. This finding speaks to the quality or consistency of employment which SNAP recipients obtain: regardless of larger macroeconomic conditions, these recipients truly represent the working poor, even after exiting the program.

Figure 14. Employment and Median Earnings in the 1st Year after Exit, by SFY
Among Adult Recipients on Exiting Cases



Note: Earnings reflect adult recipients who were employed in the 1st year after the year of exit. Refer to the *Methods* chapter for data exclusions and data limitations. Earnings standardized to 2022 dollars.

Industries of Employment and Earnings after Exit

The final section of this chapter examines industries in which SNAP recipients worked after exit. Table 6 provides the most common industries in which SNAP leavers worked in the quarter after exit and their median quarterly earnings. As previously referenced, Appendix C provides select employment and earnings analyses by household types, including industries of employment and the median earnings of recipients after exit. Table C1 highlights where adult types differ from the findings for all adults.

APPENDIX C PROVIDES INDUSTRY DATA SEGMENTED BY HOUSEHOLD TYPE.

Table 6 shows that industries of employment were diverse, but certain industries represented a larger portion of employment than others. Around one in eight adult recipients were employed in administrative and support services (13%) and restaurants (11%). An additional 15% of recipients who exited SNAP were employed in healthcare industries such as outpatient healthcare (6%), residential care facilities (5%), and hospitals (4%). Retail employers also employed many recipients who left SNAP, including general retail (4%), food and beverage retail (4%), and automotive dealerships and parts retail (2%). A smaller percentage of recipients were employed in industries such as education (5%), professional, scientific, and technical services (3%), and trade contractors (3%). The *other* industries category includes numerous industries (n=82) that each represent less than 1.5% of employed adult recipients.

Administrative & Support Services (NAICS 561): Organizations that support day-to-day operations—clerical, cleaning, and general management activities—and temporary employment services.

Restaurants (NAICS 722): Full-service or fast-food restaurants as well as caterers and mobile food services.

Outpatient Healthcare (NAICS 621): Outpatient healthcare facilities, medical and diagnostic laboratories, and home healthcare services.

Residential Care Facilities (NAICS 623): Organizations that provide nursing and residential care for individuals with physical or mental health needs.

Education (NAICS 611): Instruction or training services such as K-12 schools, community colleges, universities, and training centers.

General Retail (NAICS 452): Department stores and other general merchandise stores.

Hospitals (NAICS 622): Inpatient health services at general and surgical hospitals, psychiatric and substance abuse hospitals, and specialty hospitals.

Food & Beverage Retail (NAICS 445): Retail stores that sell food and beverages, such as grocery stores and specialty drink stores.

Professional, Scientific, & Technical Services (NAICS 541): Establishments where an individual or team is responsible for delivering skilled services to a client.

Social Assistance (NAICS 624): Organizations that provide social services directly to their clients, including food and housing services as well as child day care services.

Trade Contractors (NAICS 238): Establishments that provide skilled, trade labor involved in construction, including concrete work, plumbing, electrical work, painting, etc.

Accommodation (NAICS 721): Establishments that provide lodging or short-term accommodations for travelers.

Automotive Dealerships & Parts Retail (NAICS 441): Establishments that sell vehicles and retail stores that sell automotive parts and accessories.

Government (NAICS 921): Executive, legislative, and other government support at the federal, state, and local levels.

Personal Services (NAICS 812): Establishments that provide personal care services including laundry, pet care, photography, parking, dating, etc.

***Note:** Beginning in 2022, several NAICS codes changed. This report uses 2017 NAICS codes.

Some industries were associated with higher earnings than others. Median quarterly earnings were highest among SNAP leavers employed by professional, scientific, and technical services ($9,100), hospitals ($9,000), government ($8,900), and trade contractors ($8,700). Additional industries with higher wages included outpatient healthcare ($8,400), residential care facilities ($7,300), automotive dealerships and parts retail ($7,200), and education ($7,000). Nearly one third (30%) of all SNAP recipients in this study were employed in one of these higher earning industries in the quarter after exit. The *other* employment category includes another one third (31%) of adult recipients who earned a median of $7,200 in the quarter after exit.

Around two in five (39%) adult recipients were employed in lower-wage industries in the quarter after exit. Industries with the lowest quarterly earnings included restaurants ($4,000), general retail ($4,400), and food and beverage retail ($4,600). Other lower-wage industries included personal services ($5,200), administrative and support services ($5,400), accommodations ($5,600), and social assistance ($6,200). Employment in industries with higher earnings may offer recipients opportunities for upward mobility while employment in lower-wage industries may not offer such opportunities (Escobari et al., 2021).

The industries of Maryland SNAP exiters are very similar to industries that employ SNAP recipients nationally (Keith-Jennings & Palacios, 2017). Top industries nationally were in the education and health services, retail trade, and leisure and hospitality industries. Research has found that low wages are linked with the types of jobs in which SNAP recipients work rather than with shortcomings on the part of the recipient (Butcher & Schanzenbach, 2018). The top industries that employ SNAP recipients pay substantially lower wages, have lower income growth, and are more volatile than industries typically reported by people with above-median incomes.

Table 6. Industries of Employment and Median Earnings in the Quarter after Exit
Among Employed Adult Recipients on Exiting Cases

	Percentage Employed	Median Quarterly Earnings
Administrative & Support Services	13%	$5,414
Restaurants	11%	$4,049
Outpatient Healthcare	6%	$8,419
Residential Care Facilities	5%	$7,310
Education	5%	$7,025
General Retail	4%	$4,361
Hospitals	4%	$8,928
Food and Beverage Retail	4%	$4,597
Professional, Scientific, & Technical Services	3%	$9,141
Social Assistance	3%	$6,179
Trade Contractors	3%	$8,712
Accommodation	2%	$5,629
Automotive Dealerships & Parts Retail	2%	$7,231
Government	2%	$8,914
Personal Services	2%	$5,238
Other	31%	$7,151

Note: This analysis represents the employer with whom the recipient earned the highest wages in the 1st quarter after exit, among employed adult recipients. The *Other* category includes 82 industries, each with less than 1.5% of employed adult recipients. Refer to the *Methods* chapter for data exclusions and data limitations. Earnings standardized to 2022 dollars. Percentages may not add to 100% due to rounding. Valid percentages are reported to account for missing data.

RETURNS AFTER EXIT

As the previous chapter and its accompanying appendix shows, many adults within SNAP households worked after exiting the program. However, household and individual earnings after exit remain relatively low. When income is low, SNAP is a resource on which households rely to have access to nutritious food, and fluctuating economic and household circumstances may cause families to leave and return to the program many times (Mills et al., 2014). Previous research using national samples show that slightly more than half of SNAP leavers return to the program within 2 years (Mabli et al., 2011b; Leftin et al., 2014). The purpose of this chapter is to build on this previous literature and inform stakeholders of Maryland SNAP households' returns to the program after exiting.

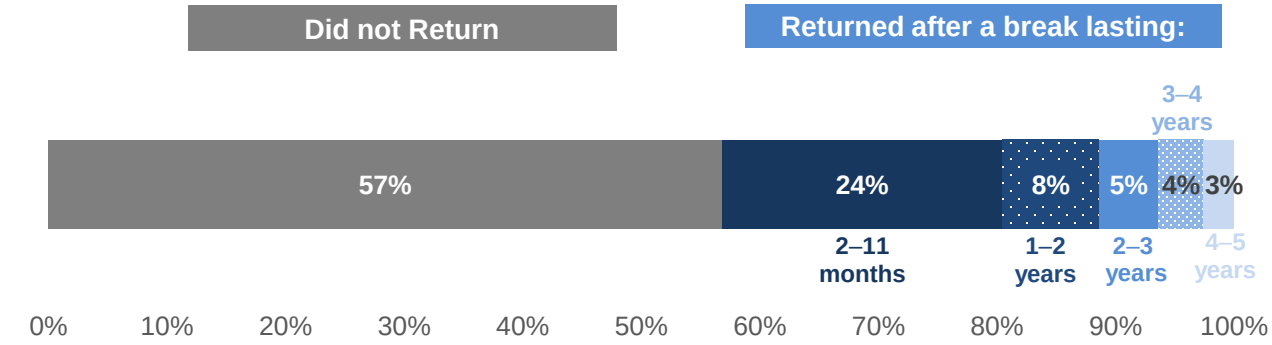
APPENDIX A EXPLORES CHURNERS (CASES THAT CLOSE AND RE-OPEN QUICKLY).

There are myriad reasons SNAP households may return to the program after exit. As shown in the household characteristics chapter, most cases close due to not reapplying or not maintaining eligibility, both of which relate to paperwork or other eligibility issues, such as not submitting recertification materials in a timely manner or missing recertification interviews. Some households may return after coming into compliance with requirements. Other households may return if they become eligible again, prompted by changes in employment, earned or unearned income, or household composition. Notably, previous research shows that both job loss and increases in household size are important triggers for returns to the program (Mabli et al., 2011a; Mabli et al., 2014). However, the administrative data only shows *if* a household or recipient returned to the program and does not include a field that captures *why* they may have returned.

Figure 15 shows the percentage of SNAP households that returned to SNAP within 5 years of exiting the program. As shown, two in five (43%) non-churn households returned to the program after exit, and three in five (57%) did not return within 5 years of exit. If a household returned to the program, they typically did so after a break lasting less than 2 years. Specifically, one quarter (24%) of all households returned after a break of less than 1 year, and an additional 8% returned after a break lasting between 1 and 2 years. Only one in eight (12%) households returned after a break lasting 2 or more years. Unsurprisingly, then, the typical household that returned did so after a 10-month break (median) in SNAP benefits. For a thorough exploration of returns including churners in the study population, see Appendix A.

Households that returned typically did so after a **10-month** break in benefits.

Figure 15. Percentage of Exiting Households that Returned within 5 Years



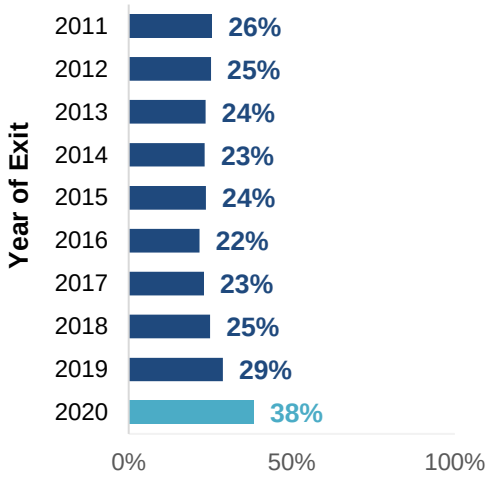
Note: This figure includes only households with at least 5 years of follow-up data (n=659,046). Cases that closed after December 2017 do not have 5 years of follow up data and are excluded from this analysis. The blue bars represent the first return to the SNAP program and do not include additional returns. The category *1–2 years* includes returns to SNAP after breaks lasting between 12 and 23 months, *2–3 years* includes returns to SNAP after a break of 24 to 35 months, and so on.

The analysis shown in Figure 15 includes *only* households that had 5 years of follow-up data after exit (i.e., exited in December 2017 or earlier). Appendix D provides the percentage of returns for *all* households: that is, it also includes households that left in January 2018 or later, regardless of the amount of follow-up data available. There are two key insights that Appendix D provides. First, it shows that returns to SNAP after a break in benefits of 5 or more years are extremely rare. Second, it shows that when including all households in the population, three in five (59%) households returned within 5 years of their exits, which is substantially higher than what is shown in Figure 15. This difference is likely due to the effects of the pandemic, during which the Maryland SNAP caseload reached historic levels (Hall, 2021).

Figure 15 includes only cases with at least 5 years of follow up data. APPENDIX D provides data for *ALL* CASES AND RETURNS, regardless of the amount of follow up data available. It shows that returns to SNAP after a break of more than 5 years are rare.

To explore the impacts of the pandemic on returns, Figure 16 shows the percentage of exiting cases that returned after a break in benefits lasting less than 1 year, segmented by state fiscal years (SFY). Each bar represents the percentage of exiting households in a given SFY that returned within 1 year. For most of the decade under examination, between 22% and 26% of exiting households returned after a 2- to 11-month break in benefits. Households that exited in SFY 2011, for example, had a 26% 1-year return rate, while households that exited in SFY 2018 had a 25% return rate. Unsurprisingly, however, this percentage began to increase for SFY 2019 exiting households. As shown, 29% of SFY 2019 exiting households returned within a year, which coalesces with the start of the pandemic. Households that exited in SFY 2020 had the highest rate of 1-year returns: two in five (38%) of these exiting households returned after a break in benefits lasting less than 1 year, an increase of 13 percentage points from SFY 2018 (the last cohort of exiters for whom 1-year returns were not affected by the pandemic).

Figure 16. Percentage of Exiting Households that Returned within 1 Year, by SFY



Note: This figure includes all households because all households had 1 year of follow-up data (n=844,925). This figure shows the percentage of households that returned to the program after a break lasting between 2 and 11 months.

CONCULSIONS

The Supplemental Nutrition Assistance Program (SNAP) reduces food insecurity and poverty while stimulating economic growth (Canning & Stacy, 2019; Keith-Jennings et al., 2019). Historically, participation increases during periods of economic downturn and decreases when the economy recovers (Klerman & Danielson, 2011; Rachidi, 2021). While these participation patterns are well documented, less is known about the patterns of program exits. Interest in research using state-level administrative data has grown in recent years (FNS, n.d.-a., 2022), and this report begins to fill the knowledge gap on SNAP case closures using administrative data from Maryland. Specifically, this report explores the characteristics of case closures from state fiscal years (SFYs) 2011 to 2020, a period of economic recovery and stability that was bookended by two recessions (i.e., the Great Recession and the COVID-19 recession).

Analyses of the monthly active and exiting SNAP caseload in Maryland suggest that the number of cases that closed increased as the number of active cases increased during early recovery from the Great Recession. Exits peaked in March 2016 in response to the expiration of the time-limit waiver for Able Bodied Adults without Dependents (ABAWDs). Economic circumstances improved during the latter half of the decade, and SNAP cases and closures both decreased as a result, though not to pre-recession levels. In the first few months of 2020, SNAP cases increased dramatically and case closures plummeted in response to the COVID-19 pandemic.

The economic environment of the past decade and a half, and its impact on Maryland's SNAP caseload, highlights the importance of SNAP for families.

Households that exited SNAP[26] reflect the diverse population eligible for benefits including families, single adults, older individuals, and those with disabilities. To capture the outcomes across these groups, this report disaggregates most findings by five household/adult types, defined on page 9. Among closures spanning July 2011 and June 2020, households with children and households with ABAWDs were the largest group of leavers, representing two out of every three closures (35% and 32%, respectively). These two household types were largely composed of working-age, able-bodied adults, distinguishing them from households with adults with a disability (13% of closures) or adults who are 60 or older (14% of closures).

Given the representation of working-age recipients among case closures, it is unsurprising that employment was most common among adults with children and ABAWDs. During the 1st year after their SNAP exits, about 60% of adults with children and ABAWDs were employed, aligning with their employment before SNAP entry. In contrast, a smaller percentage of adults with a disability and older adults were employed in the 1st year following exit (24% and 13%, respectively). The employment rate of all adult recipients (48%) obfuscates this variation inherent to different types of adults. This illustrates the importance of disaggregating certain findings by household and adult types.

[26] Case closures had to be operationalized prior to analyzing data. Some cases close and reopen very quickly. This is a phenomenon called churn, and it is standard practice to exclude these cases so that findings reflect meaningful exits from SNAP (Kenney et al., 2022; Leftin et al., 2014). The supplemental brief in Appendix A explores characteristics of cases that returned to SNAP, including how long they remained closed before reopening. This investigation revealed that cases that reopened after a break lasting 1 month were characteristically different from cases that remained closed for longer lengths of time. Therefore, this report focuses on cases that maintained a break lasting 2 or more months, and it excludes churners, defined as cases that reopened after a break lasting 1 month.

Across adult types, employment participation declined each year after exit. By the 12th year after exit, employment participation dwindled to 31% for all adults. This decline was quite pronounced among the two larger groups of leavers, decreasing by 18 and 25 percentage points for adults with children (42% employed) and ABAWDs (37% employed), respectively. While declines in employment are large, it is essential to acknowledge data limitations. For example, these data include individuals who may have retired or are deceased. Additionally, these data only include employers in the state of Maryland that are covered by Unemployment Insurance (UI), leading to the omission of out-of-state employment and jobs not covered by UI, such as independent contractors.

In contrast with employment participation, earnings among employed adults increased each year after exit for the first 10 years. However, employed adults who exited the SNAP program more than 10 years ago, experienced a slight decline in their earnings in the 11th and 12th years after their exits, likely because this period coincided with the COVID-19 pandemic. Among all employed adults, median earnings increased by 55%, rising from $21,600 in the 1st year after exit to $33,500 in the 10th year after exit. As adults faced pandemic-related unemployment and reduced hours associated with mandatory closures, earnings declined by about $2,000 in the 12th year post-exit.

Only employed adults with children exceeded the earnings for all employed adults. With median earnings of $28,000 in the 1st year after exit, adults with children earned 30% more than the overall median. By the 10th year after exit, their earnings reached $37,700. These are low earnings with which to support a family, but they do exceed the 2022 poverty guidelines of $23,030 for a family of three (ASPE, 2022). Similarly, the earnings among ABAWDs exceeded the poverty guidelines for a single person ($13,590) with median earnings of $18,100 in the 1st year after exit and an increase of nearly 80% to $32,100 in the 10th year after exit. Earnings among adults with a disability and older adults remained below $20,000 throughout the follow-up period.

While earnings did increase over time for employed individuals, many SNAP recipients experience periods of sporadic unemployment or decreased hours, as they are often employed in volatile industries (Butcher & Schanzenbach, 2018; Keith-Jennings & Chaudry, 2018). For instance, the administrative and support services industry—employing 13% of SNAP leavers immediately after exit—includes temporary positions. Furthermore, many of the industries that employ SNAP leavers offer low wages. In fact, two in five (39%) SNAP leavers worked in industries where they earned less than $7,000 in median quarterly earnings.

Lapses in employment or reduced hours may account for the multiple spells of SNAP benefits experienced by most exiting households. After exiting the program, households may reapply as their eligibility status changes or in response to worsening food insecurity. In fact, three out of five (61%) exiting households had previous spells before the exit selected for this report.[27] Conversely, only two in five (39%) households ended their first spell of SNAP benefits with this exit. Moreover, this report also examined returns to the program after the exit selected for analysis. In the 5 years post-exit, two out of five (43%) households returned to the SNAP program. One third of households returned after a break in

[27] Households with multiple closures during the study period had a single closure randomly selected for inclusion in this report. Although only one closure is selected, the data capture all months of benefit receipt in the 10 years before this exit and through December 2022. Please see the *Methods* chapter from more details.

benefits lasting less than 1 year (24%) or between 1 and 2 years (8%).

Patterns of benefit receipt further affirm that households experience multiple SNAP spells and exits. Households received SNAP for a median of only 7 consecutive months prior to exiting the program. However, over the 10 years before their exits, households received a median of 21 months, suggesting that households received multiple short spells of SNAP benefits. Research indicates that SNAP spells often end around the time of recertification when households may fail to submit necessary paperwork or miss required interviews (Dehavenon, n.d.; Homonoff & Somerville, 2021; Mills et al., 2014; Ribar & Edelhoch, 2008). Indeed, Maryland's recertification process may play a role in these multiple spells, with a majority (76%) of households experiencing case closures due to failure to reapply for the program (60%) or to maintain their eligibility by completing all recertification procedures (16%).

This report sheds light on SNAP closures in Maryland, offering valuable insights into the characteristics and outcomes of households that exit the program. As an inaugural exploration into SNAP closures, this report stands as a foundational resource for Maryland policymakers, offering a comprehensive understanding of who exits the SNAP program, the reasons for case closures, the likelihood of return, and employment and earnings trajectories after exit. Through an understanding of exiting households' outcomes, policymakers can pave the way for more targeted and impactful policies that promote economic stability for those in need and that uphold SNAP's mission to alleviate hunger.

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APPENDIX A: SUPPLEMENTAL RESEARCH BRIEF, EXPLORING SNAP CHURN IN MARYLAND

Introduction

Churn is a term with many applications across fields including economics, business, and health and human services (Edwards, 2015; Hudson, 2015). The general definition of churn in human services is a program exit followed by quick re-entry: it describes a well-established pattern of participation in safety net programs such as Temporary Assistance for Needy Families (TANF), Medicare, child-care subsidies, and the Supplemental Nutrition Assistance Program (SNAP).

There are two prominent churn patterns revealed by program participation research. The first type occurs among benefit-*ineligible* recipients who disconnect from services but become eligible again within a short period of time. This type of churn illustrates how individuals and families with fluctuating circumstances utilize public benefits to combat economic instability (Ha et al., 2012; Mills, 2011). Compared to non-churners, households that churn experience more changes in circumstances that could affect their eligibility (Mills et al., 2014). Changes in earnings or employment, other program benefits, other unearned income or assets (e.g., child support payments), and household size or composition can cause this type of churn (Glied & Swartz, 2022; Ha et al., 2012; Kim et al., 2022; Mills et al., 2014).

The second type of churn occurs among benefit-*eligible* recipients who disconnect from services for failing to comply with all program requirements or due to administrative errors or delays. This type of churn is sometimes called *administrative churn* and has been the subject of study among many programs such as cash welfare (Born et al., 2002; Brady & Luks, 1995), child-care subsidies (Davis et al., 2017; Ha & Meyer, 2010), and SNAP (Gray, 2019; Heflin et al., 2020, 2022; Kenney et al., 2022).[28] Examples of circumstances that lead to this type of churn can include unprocessed address changes, missed redetermination appointments, incomplete paperwork, mailing delays, and database issues (Dehavenon, n.d.; Homonoff & Somerville, 2021; Kenney et al., 2022; Mills et al., 2014). Administrative churn results in heavy costs for recipients, including the loss of benefits they otherwise would have received, the burden of reapplying to the program, and additional expenses incurred during their time without benefits (Born et al., 2002; Homonoff & Somerville, 2021; Mills et al., 2014). Both types of churn also impose notable costs to state and local agencies; for instance, the federal government covers only 50% of SNAP administrative costs, compared to 100% of the benefits (Mills, 2011).

How is churn operationalized in research?

Eligibility at the time of exit is often difficult to determine, but it can have an important impact on research results. The focus of the main SNAP closures report, which this research brief supplements, is households that made a potentially longer-term or "true" exit from SNAP. Therefore, households that remain eligible at the time of exit but return to the program quickly for administrative reasons should be excluded from the study. However, determining program eligibility is a complex process that relies on decision-making by case managers staff, and eligibility status is not often captured by data systems at the time of exit.

Many researchers operationalize churn by examining the length of time between exit

[28] Other terms include turnover (cash welfare; Plotnick, 1983) and instability or discontinuous spells (child-care subsidies; Kim et al., 2022; Davis et al., 2017).

and re-entry. The churn phenomena may be driven by three different behaviors that result in shorter or longer periods off the program: (a) participants complete recertification late and rejoin the program very quickly; (b) participants notice their benefits lapse and rejoin the program moderately quickly; and (c) participants exit the program and rejoin more slowly, but still within a short period (Finkel, 2019). Several studies suggest that households that remain eligible at the time of exit return to SNAP more quickly than households that became ineligible for benefits at the time of exit (Finkel, 2019; Kenney et al., 2022; Leftin et al., 2014). Research also suggests that case characteristics differ between households that return to safety net programs very quickly and those that spend more time off the program (Hall & Passarella, 2020; Leftin et al., 2014).

The length of time between program exit and subsequent re-enrollment, which defines a churn spell, varies by program and research study. In cash welfare and child-care subsidy programs, churn is often defined as a 1- to 3-month gap in participation (Born et al., 2002; Brady & Luks, 1995; Davis et al., 2017; Hall & Passarella, 2020). For federal SNAP reports, the federal Food and Nutrition Service has previously defined churn as a return at any point after a 1- to 4-month break in benefits (Heflin et al., 2020, 2022; Kenney et al., 2022; Mills, 2011; Mills et al., 2014; Ratcliffe et al., 2016).

In previous research on the safety net, cited throughout this appendix, researchers typically addressed churners in their data using one of two methods. First, they kept in their dataset cases that quickly reopened, but removed information about the benefits gap; in other words, they effectively counted the months in which there was a benefits gap as continuous receipt, often referred to as *bridging the gap*. Second, they chose to remove from the dataset these cases that reopened quickly, resulting in fewer overall records in the study. Either method reduced the noise from the churning phenomena so researchers could study exit patterns among recipients who truly disconnected from the program. Researchers choosing between these methods consider the research questions and types of data being analyzed.

How often and when does churn occur in SNAP?

Churn rates vary depending on the sample, study types, and definition of a churn spell. Further, previous research suggests that the rate may be significantly higher, particularly for larger families, Black participants, and elderly or disabled participants (Heflin et al., 2020, 2022; Kenney et al., 2022; Mills et al., 2014). Previous national-level research found that 7% to 29% of SNAP participants experienced churn (Leftin et al., 2014; Mabli et al., 2011b; Ratcliffe et al., 2016). Researchers using administrative data from federal fiscal year (FFY) 2011 estimated a churn rate of 17% to 28% among six study sites, and 21% in Maryland (Mills et al., 2014). While churn rates may differ across studies, there is consensus that most exits are concentrated around recertification periods, and many who exit the program remain eligible for benefits (Dehavenon, n.d.; Gray, 2019; Grobe et al., 2019; Homonoff & Somerville, 2021; Mills et al., 2014). Churning at recertification is not uncommon for participants; in FFY 2011, 13% of Maryland SNAP households experienced churn during income reporting or redetermination periods (Mills et al., 2014).[29]

[29] This study defined churn as a 1- to 4-month break in SNAP benefits.

Current Study

This research brief, the first of its kind in Maryland, explores characteristics of SNAP households that exit and return to SNAP at various time intervals. This study was an important first step to establish empirical evidence that could inform the definition of SNAP churn in Maryland. Rather than release this brief as its own deliverable, it is integrated into the main SNAP closures report as an addendum to provide additional context to the reader. The research in this brief informed the decision to exclude churners from our analyses of SNAP exits, and to focus instead on households that made true exits from SNAP. This decision is consistent with previous research on SNAP, child-care subsidies, and TANF (Hall & Passarella, 2020; Ha & Meyers, 2010; Kenney et al., 2022; Leftin et al., 2014; Mabli et al., 2011b;).

Using data on the full population[30] of 1,710,198 cases that closed between State Fiscal Years (SFY) 2011 and 2020, this appendix first examines the percentage of exiting cases that reopened at varying intervals. After establishing patterns of returns, the remainder of the brief explores key case characteristics of cases that reopened in an effort to appropriately define *churn*. Key characteristics include previous SNAP receipt, spell length, and primary reasons for case closures.

Each table in this appendix stratifies analyses by the number of months between a SNAP case closure and subsequent reopening. For example, if a household stopped receiving benefits anytime in January 2017 and began receiving benefits again sometime in March 2017, the household had a 1-month break in benefits (i.e., the case did not receive benefits in February 2017). Similarly, if a household stopped receiving benefits in January 2017 and began receiving benefits in March 2018, the household had a break in benefits that lasted 13 months.

The category that captures breaks lasting 12 or more full months (i.e., *12+ full months* category) excludes cases that did not have at least 5 years of follow-up data to ensure comparisons across cases are comparable.[31] This brief includes follow-up data through March 2023, so cases that closed in March 2018 are the last exits to have all 5 years of follow-up data. Consequently, cases that closed after March 2018 are excluded from the *12+ full months* category. The dashes within tables—which are only in the SFYs 2019 and 2020 columns—indicate that at the time of data retrieval, no cases that exited in SFYs 2019 and 2020 had 5 full years of follow-up data. However, some cases in SFY 2018 also do not have a full five years of follow-up data. Therefore, some denominators are slightly lower (not shown).

Findings

Percentage of Cases that Reopened. Table A1 shows that overall, 60% of cases that closed between SFYs 2011 and 2020 reopened at some point in the follow-up period. After exit, more than one in 10 (12%) cases reopened after only a 1-month break in benefits. An additional 7% reopened after a 2-month break in benefits. The percentage of cases that reopened continued to decrease through the *5-month break in benefits* category. Nearly one in three cases (30%) reopened after a break in benefits lasting 6 or more months. This pattern of returns was consistent across all SFYs in the study period, suggesting that if cases reopen, the majority will typically do after either a break in benefits lasting 2 months or less, or after a break in benefits

[30] The full population of case closures includes all instances in which a household concurrently experienced a case closure and break in benefits. Cases that were closed for less than 1 month are excluded from these analyses because benefits were received in every month without any breaks, despite a recorded case closure.

[31] Appendix D in this report illustrates that cases rarely reopen 5 years after exit.

lasting 6 or more months.[32] Similarly, a previous report found that a majority of *churners* in Maryland in FFY 2011 returned to SNAP after only a 1-month break in benefits (Mills et al., 2014).

Median Months of Receipt in the Previous Five Years. Table A2 demonstrates a clear pattern: cases that reopened more quickly had longer histories of SNAP receipt in the 60 months before the closure. Conversely, cases that reopened after a longer break in benefits had fewer months of SNAP receipt in the previous 60 months. As shown, cases that reopened after only a 1-month break in benefits had a median of 30 months of benefit receipt prior to closing; cases that reopened after a 2- to 11-month break in benefits had a median of 23 to 27 months of benefit receipt prior to closing. Finally, cases that reopened after a break of 12 or more months had a median of 19 months of benefit receipt.[33]

Spell Length. As shown in Table A3, the median spell length was generally 5 months of consecutive benefit receipt, regardless of how long cases were closed prior to reopening. This was also consistent across SFYs. These findings may reflect that household exits are concentrated around recertification periods. According to the Maryland SNAP manual, most recipients are certified for no more than six months at a time, though there are exceptions for certain categories of recipients (Family Investment Administration [FIA], 2023, sec. 410). Changes to household circumstances that affect eligibility are usually only required to be reported during eligibility redetermination, rather than when the change happens. This reduces reporting burdens for recipients and administrative burden on case managers. Additionally, eligible households may lose benefits around recertification periods due to challenges completing the necessary steps to recertify (Dehavenon, n.d.; Grobe et al., 2019; Homonoff & Somerville, 2021; Ribar & Edelhoch, 2008). Both of these scenarios may explain why most exits are concentrated around recertification periods (Grobe et al., 2019; Mills et al., 2014; Ribar et al., 2006; Staveley et al., 2002). Table A4 confirms that a majority (between 76% and 79%) of cases that closed in the study period had a SNAP spell of 1 year or less, regardless of when the case reopened.

Closure Reasons. The final tables in this brief analyze case closure reasons. Though similar, the results in each of these two tables represent different analyses. First, Table A5 shows the distribution of reopenings for all cases that closed for a particular reason during the study period. For example, about one in five (22%) cases that closed due to not maintaining eligibility or for failing to reapply reopened after only a 1-month break in benefits. Nearly one in three (between 30% and 31%) cases that closed for these two reasons reopened after a break lasting 12 or more months.

A larger proportion of cases that closed for not maintaining eligibility (22%) or reapplying (22%) reopened after a 1-month break in benefits compared to cases that closed for other reasons. For example, only 11% of cases that closed due to income above the limit reopened after a 1-month break in benefits. As another example, only 9% of cases that closed due to the ABAWD work requirement reopened after a 1-month break in benefits.

[32] These analyses calculate the percentage of cases that reopened each month out of all cases *that close*. The percentage of cases that reopened each month out of cases *that reopened* also demonstrate a similar pattern. Nearly one fifth of all households that returned did so after a 1-month break in benefits, and one third returned after a year or more off the program.

[33] Median months of previous SNAP receipt increased over time, regardless of how long it took for a case to reopen. This increase may be due to the economic fall out of the Great Recession and the related increase in eligible recipients (Brodersen et al., 2022; Pender & Jo, 2019).

Table A6, which complements Table A5, shows for each group of cases that opened within a given time period, the percentage that closed for each reason. For example, the first row shows that among cases that reopened after a break that lasted 1 month, the majority closed because they did not reapply (71%) or because they did not maintain eligibility (22%). In fact, these were the top case closure reasons for cases that reopened at any time interval.

These case closure reasons are used when households fail to submit an application for SNAP benefits during the redetermination period or when an application was submitted, but other information relevant to determining eligibility was not provided (FIA, 2023, sec. 440). The reason a household failed to submit an application is not captured, so it is challenging to determine what portion of cases experienced administrative churn. Recipients may forget or experience barriers to submitting applications; alternatively, they may know they are no longer eligible for services and choose not to reapply. Notably, the further removed the case was from their SNAP exit when they returned, the smaller the percentage of cases closed because they did not reapply. For example, 71% of cases that reopened after a 1-month break in benefits we closed because the household did not reapply for benefits, compared with 63% of cases that reopened after 12 or more months off the program.

Decision and Rationale

The findings in this brief show that 12% of SNAP cases close and subsequently reopen after only a 1-month break in benefits. These cases are characteristically different from households that reopen at later time periods. Specifically, they have higher median months of receipt before exiting and are more likely to close for administrative reasons. The closure reasons, specifically, justify categorizing these cases as churners and excluding them from descriptions of cases that make a potentially meaningful exit from the program. Including households that churn in the study population of the main report may skew findings on households that exit SNAP; therefore, this report excludes churners, which we define as cases that did not reopen within two months (i.e., reopened after a 1-month break in benefits).[34]

[34] In the methods chapter of the main report, we report that churners represent 15% of all case closures, whereas in this chapter, we report that they represent 12% of all closures. This difference is due to partial churners, which are cases that closed but did not have a break in benefits. There were 57,465 cases that experienced a case closure, but their case reopened very quickly, and therefore, they did not experience a disruption in benefits. For example, the case may have closed in January 2019 and reopened in February 2019; in this case, they received benefits in both months and are not included in this appendix as a case closure. As described in the methods chapter, the new administrative data system implemented in calendar year 2021 does not capture these partial churners. Therefore, we do not include them in our churn analysis in this appendix since they cannot be captured in the future. However, we provide the count of these cases in our methods chapter for clarity and transparency and include them in the percentage of closures that are excluded from analyses.

Figure A1. Churn Examples

January	February	March	April	May	June	Churn
Received	Received	Received	Received	Case Closed	Received	Partial Churn *Reopened within 1 month, had no break in benefits*
Received	Received	Received	Case Closed		Received	Churn *Reopened within 2 months, and had a full 1-month break in benefits*
Received	Received	Case Closed			Received	Non-Churn *Reopened within 3 months and had a full 2-month break in benefits*

Table A1. Percentage of SNAP Cases that Reopened within 5 Years, by SFY

Cases reopened after a break in benefits that lasted:	2011 *(n=129,123)*	2012 *(n=162,244)*	2013 *(n=156,069)*	2014 *(n=182,145)*	2015 *(n=196,644)*	2016 *(n=208,585)*	2017 *(n=197,586)*	2018 *(n=183,991)*	2019 *(n=170,539)*	2020 *(n=123,272)*	All Case Closures *(n=1,710,198)*
1 month	13%	13%	12%	12%	12%	12%	11%	12%	12%	13%	12%
2 months	7%	7%	7%	6%	7%	6%	7%	7%	7%	8%	7%
3 months	5%	5%	5%	5%	5%	4%	4%	5%	5%	6%	5%
4 months	4%	4%	4%	4%	4%	3%	3%	3%	4%	4%	4%
5 months	3%	3%	3%	3%	3%	3%	3%	3%	3%	4%	3%
6 to 11 months	12%	12%	11%	11%	10%	10%	11%	11%	13%	8%	11%
12+ months	20%	19%	19%	18%	17%	19%	21%	21%^	-	-	19%^
Total Returns	**62%**	**62%**	**59%**	**58%**	**58%**	**58%**	**60%**	**62%^**	**-**	**-**	**60%^**

Note: ^The counts for these analyses are slightly less than what is shown in the table because they exclude cases that did not have 5 years of follow-up data after exit. See text for more details. Columns may not sum to totals due to rounding. Valid percentages reported to account for missing data.

Interpretation Example: *Of all the SNAP cases that closed between SFYs 2011 and 2020, 12% reopened after a 1-month break in benefits.*

Table A2. Median Cumulative Months of SNAP Receipt in Previous 60 Months, by SFY

Cases reopened after a break in benefits that lasted:	2011 *(n=129,123)*	2012 *(n=162,244)*	2013 *(n=156,069)*	2014 *(n=182,145)*	2015 *(n=196,644)*	2016 *(n=208,585)*	2017 *(n=197,586)*	2018 *(n=183,991)*	2019 *(n=170,539)*	2020 *(n=123,272)*	All Case Closures *(n=1,710,198)*
1 month	19	21	24	29	31	33	37	37	36	35	30
2 months	18	18	23	25	29	30	33	35	35	31	27
3 months	18	18	21	24	27	30	34	32	32	30	26
4 months	17	18	19	24	26	29	30	30	30	29	24
5 months	15	18	19	23	25	28	31	30	30	28	24
6 to 11 months	14	17	18	23	24	26	29	30	27	25	23
12+ months	12	14	18	20	23	24	25	26^	-	-	19^

Note: ^These analyses exclude cases that did not have 5 years of follow-up data after exit.

Interpretation Example: *SNAP cases that closed between SFYs 2011 and 2020 and reopened after a 1-month break in benefits had a median of 30 months of receipt in the 60 months prior to the case closure.*

Table A3. Median Spell Length, by SFY

Cases reopened after a break in benefits that lasted:	2011 *(n=129,123)*	2012 *(n=162,244)*	2013 *(n=156,069)*	2014 *(n=182,145)*	2015 *(n=196,644)*	2016 *(n=208,585)*	2017 *(n=197,586)*	2018 *(n=183,991)*	2019 *(n=170,539)*	2020 *(n=123,272)*	All Case Closures *(n=1,710,198)*
1 month	5	5	5	6	5	5	5	5	5	5	5
2 months	5	5	5	5	5	5	5	5	5	5	5
3 months	5	5	5	5	5	5	5	5	5	5	5
4 months	5	5	5	5	5	5	5	5	5	5	5
5 months	5	5	5	5	5	5	5	5	5	5	5
6 to 11 months	5	5	5	5	5	5	5	5	5	5	5
12+ months	5	5	5	6	5	5	5	5^	-	-	5^

Note: A spell represents consecutive months of receipt before case closure. ^These analyses exclude cases that did not have 5 years of follow-up data after exit.

Interpretation Example: *SNAP cases that closed between SFYs 2011 and 2020 and reopened after a 1-month break in benefits had a median spell length of 5 months.*

Table A4. Percentage of Cases with a SNAP Spell of 1 Year or Less

Cases reopened after a break in benefits that lasted:	% *(n=1,710,198)*
1 month	**76%**
2 months	**77%**
3 months	**78%**
4 months	**78%**
5 months	**79%**
6 to 11 months	**79%**
12+ months	**76%**^

Note: A spell represents consecutive months of receipt before case closure. ^This analysis excludes cases that did not have 5 years of follow-up data after exit. Valid percentages reported to account for missing data.

Interpretation Example: *Three fourths (76%) of SNAP cases that closed between SFYs 2011 and 2020 and reopened after a 1-month break in benefits had a median spell length of 1 year or less.*

Table A5. Case Closure Reasons, Column Percentages

Cases reopened after a break in benefits that lasted:	ABAWD work requirement failure	Customer requested closure	Did not maintain eligibility	Did not reapply	Income above limit	Ineligible	Residency	Other
1 month	9%	6%	22%	22%	11%	13%	8%	19%
2 months	6%	7%	11%	12%	9%	9%	7%	11%
3 months	5%	6%	8%	8%	7%	7%	6%	7%
4 months	4%	5%	6%	6%	6%	6%	5%	5%
5 months	4%	5%	5%	5%	5%	5%	5%	4%
6 to 11 months	16%	21%	18%	18%	21%	21%	22%	18%
*12+ months^*	56%	50%	30%	31%	45%	42%	47%	35%
Total (n=1,710,198)	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Note: ^These analyses exclude cases that did not have 5 years of follow-up data after exit. Percentages may not sum to totals due to rounding. Valid percentages reported to account for missing data.

Interpretation Example: *Of all the SNAP cases that closed between SFYs 2011 and 2020 due to not maintaining eligibility, 22% reopened after a 1-month break in benefits and 11% reopened after a 2-month break in benefits.*

Table A6. Case Closure Reasons, Row Percentages

Cases reopened after a break in benefits that lasted:	ABAWD work requirement failure	Customer requested closure	Did not maintain eligibility	Did not reapply	Income above limit	Ineligible	Residency	Other	All Case Closures *(n=1,710,198)*
1 month	1%	0%	22%	71%	4%	1%	1%	1%	100%
2 months	1%	1%	21%	69%	5%	1%	1%	1%	100%
3 months	1%	1%	21%	68%	6%	1%	1%	1%	100%
4 months	1%	1%	21%	66%	6%	1%	1%	1%	100%
5 months	1%	1%	21%	66%	7%	1%	1%	1%	100%
6 to 11 months	2%	1%	21%	64%	8%	1%	1%	1%	100%
*12+ months^*	2%	2%	20%	63%	8%	1%	2%	2%	100%

Note: ^These analyses exclude cases that did not have 5 years of follow-up data after exit. Percentages may not sum to total due to rounding. Valid percentages reported to account for missing data.

Interpretation Example: *Of all the SNAP cases that closed between SFYs 2011 and 2020 and reopened after a 1-month break in benefits, 71% closed because the household did not reapply, 4% closed because their income was above the limit, and 1% closed due to residency.*

APPENDIX B: ADDITIONAL HOUSEHOLD DATA

Table B1. Number of Recipients on Exiting Cases, by Household Type

	Households with Children	ABAWDs	Adults with a Disability	Older Adults	Other Households	All Households *(n=844,925)*
Total Number of Recipients						
1 recipient	5%	88%	79%	83%	86%	62%
2 recipients	40%	7%	12%	13%	12%	18%
3 recipients	29%	3%	5%	2%	2%	11%
4 or more recipients	26%	2%	4%	2%	0.4%	9%
Number of Adult Recipients						
No adults	12%	0.4%	0.5%	0.4%	1.3%	4%
1 adult	65%	92%	87%	85%	85%	82%
2 adults	20%	7%	10%	13%	12%	12%
3 or more adults	3%	1%	2%	2%	2%	2%
Number of Child Recipients						
No children	–	94%	87%	95%	100%	65%
1 child	51%	3%	7%	3%	–	18%
2 children	31%	2%	4%	1%	–	11%
3 or more children	18%	1%	2%	1%	–	6%

Note: Percentages may not add up to 100% due to rounding. Valid percentages are reported to account for missing data.

Table B2. Spell Length and Cumulative Receipt Categories, by Household Type

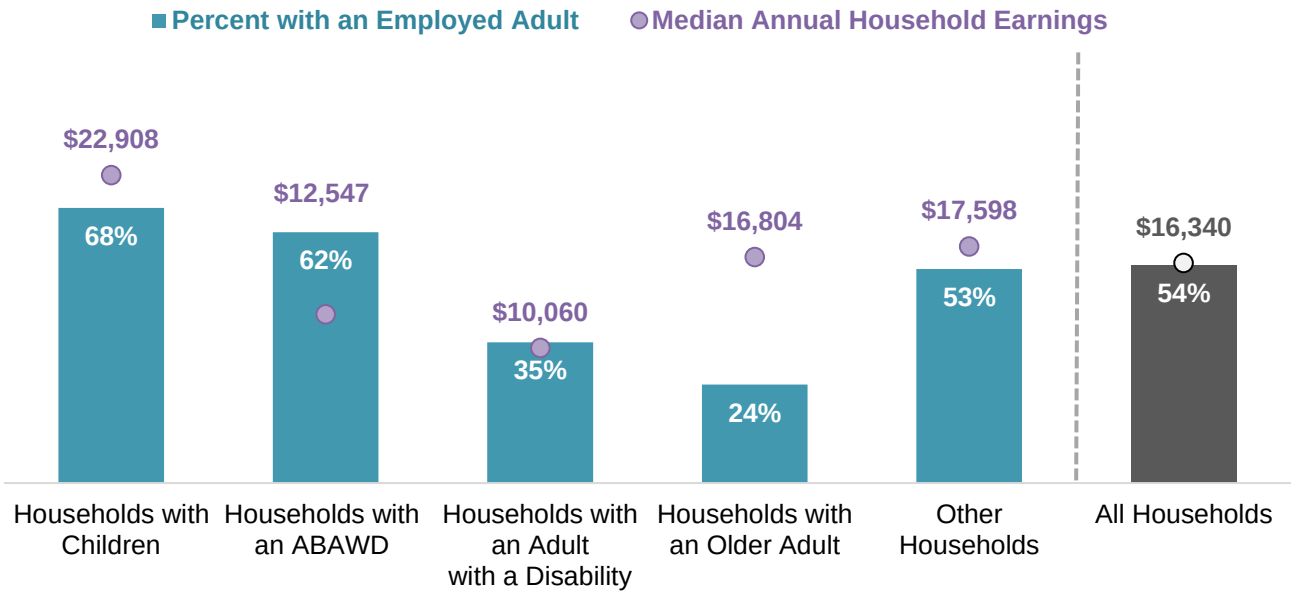
Among Exiting Households

	Households with Children	ABAWDs	Adults with a Disability	Older Adults	Other Households	All Households *(n=844,925)*
SNAP Spell *Consecutive Months*						
3 months or fewer	13%	27%	9%	6%	15%	16%
4 to 6 months	36%	42%	23%	13%	35%	34%
7 to 12 months	20%	16%	27%	24%	21%	20%
13 to 24 months	16%	9%	16%	17%	15%	14%
25 to 36 months	7%	3%	8%	13%	6%	6%
37 to 48 months	3%	1%	5%	7%	3%	3%
49 to 60 months	2%	1%	3%	5%	2%	2%
More than 60 months	3%	1%	7%	14%	3%	4%
Total	100%	100%	100%	100%	100%	100%
5 Years before Exit *Cumulative Months*						
6 months or fewer	17%	37%	12%	11%	23%	23%
7 to 12 months	13%	19%	14%	15%	15%	16%
13 to 24 months	17%	18%	14%	15%	18%	17%
25 to 36 months	21%	15%	20%	20%	20%	19%
37 to 48 months	13%	6%	14%	13%	11%	11%
49 to 60 months	18%	5%	26%	26%	12%	15%
Total	100%	100%	100%	100%	100%	100%

Note: Percentages may not round to 100% due to rounding. Valid percentages are reported to account for missing data.

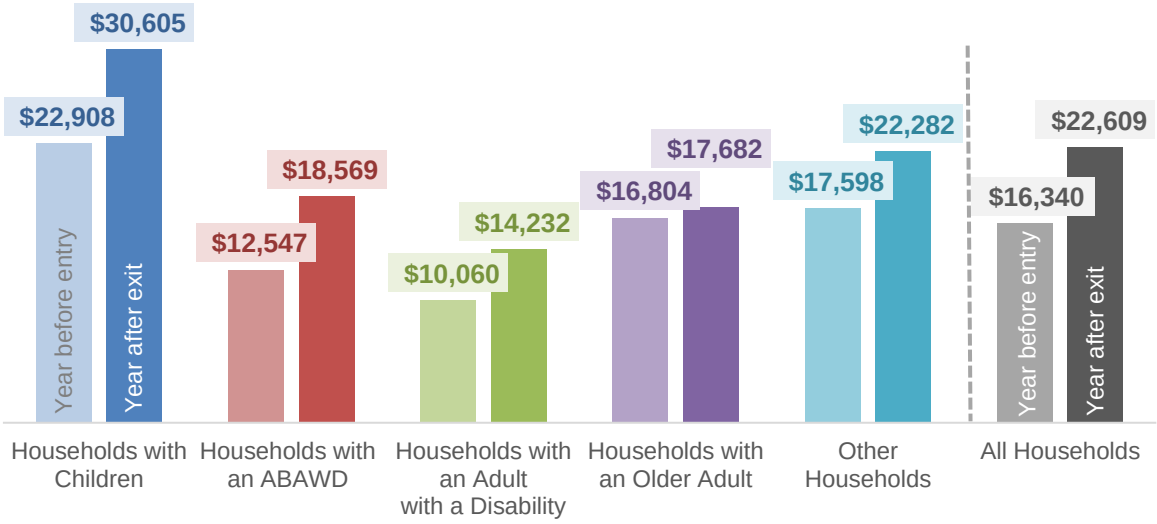
APPENDIX C: HOUSEHOLD EMPLOYMENT AND EARNINGS

Figure C1. Employment and Median Earnings in the Year before Entry, by Household Type
Among Exiting Households



Note: Percentages reflect the percentage of households (n=844,925) with at least one employed adult and the earnings reflect the median earnings across all employed adults in the household, regardless of recipient status (i.e., recipient or non-recipient in the SNAP household). Refer to the *Methods* chapter for data exclusions and data limitations. Valid percentages are reported to account for missing data. Earnings standardized to 2022 dollars.

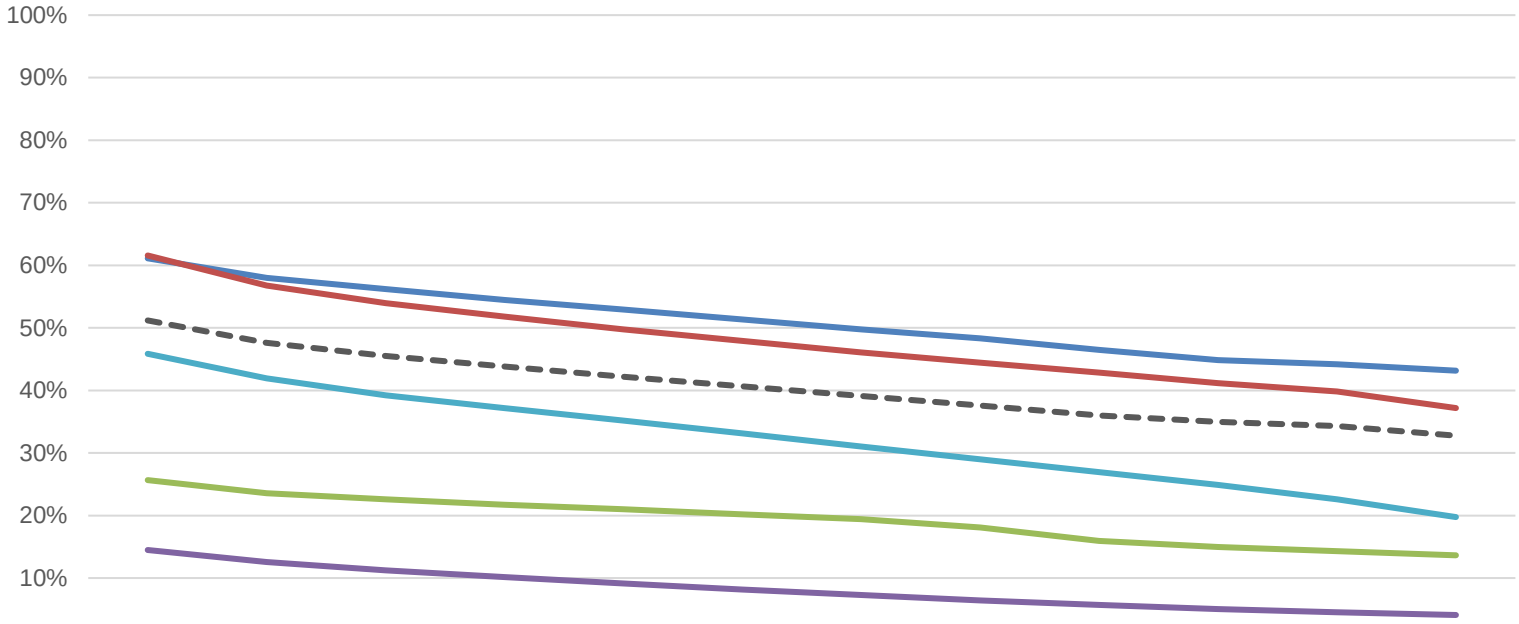
Figure C2. Median Earnings before Entry and after Exit, by Household Type
Among Exiting Households with an Employed Adult



Note: Earnings reflect members of the SNAP household (n=844,925) who were employed in the year before entry and year after exit, regardless of recipient status. Refer to the Methods chapter for data exclusions and data limitations. Earnings standardized to 2022 dollars.

Figure C3. Annual Percentage of Households with an Employed Adult after Exit

Among Exiting Households, by Household Type

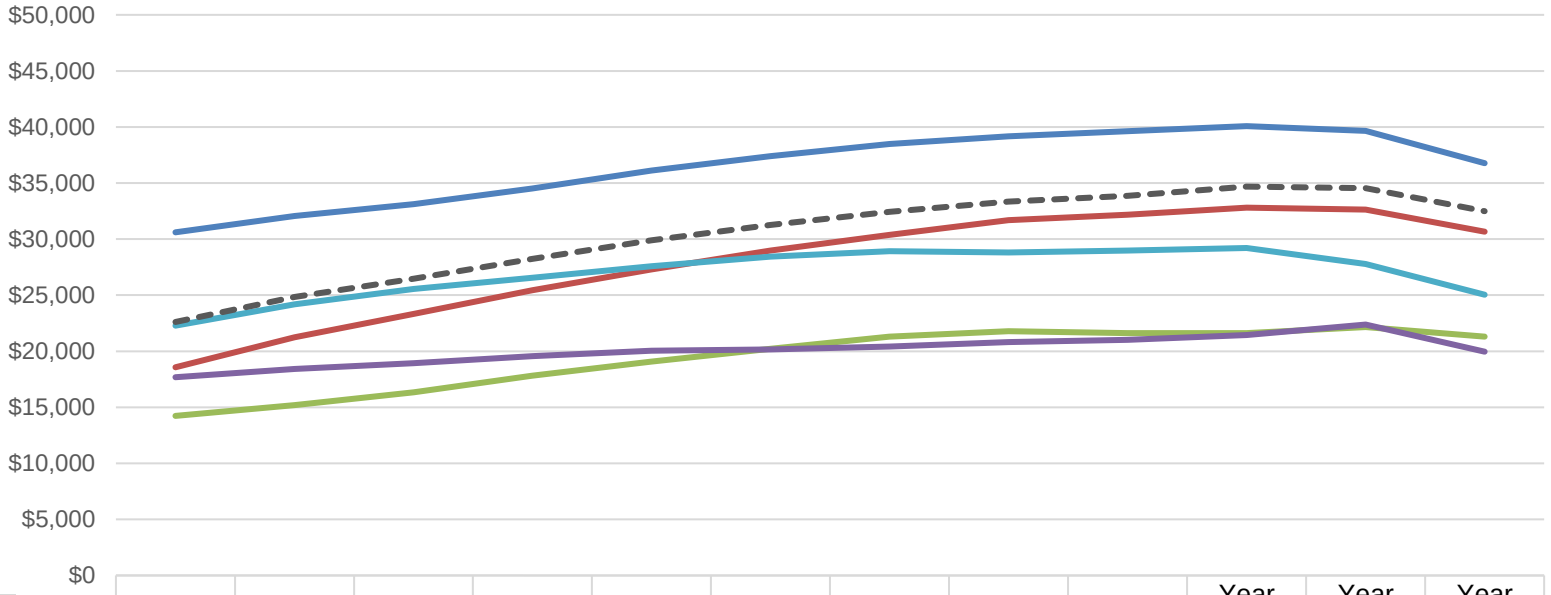


Households with:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Children	61%	58%	56%	54%	53%	51%	50%	48%	46%	45%	44%	43%
ABAWD	62%	57%	54%	52%	50%	48%	46%	44%	43%	41%	40%	37%
Adult with a Disability	26%	24%	23%	22%	21%	20%	19%	18%	16%	15%	14%	14%
Older Adult	14%	13%	11%	10%	9%	8%	7%	6%	6%	5%	5%	4%
Other Adult	46%	42%	39%	37%	35%	33%	31%	29%	27%	25%	23%	20%
All Households	51%	48%	45%	44%	42%	41%	39%	38%	36%	35%	34%	33%

Note: Percentages reflect the percentage of SNAP households (n=844,925) with at least one employed adult, regardless of recipient status (i.e., recipient or non-recipient in the household). Each year of employment data excludes adult recipients without the corresponding amount of follow-up data. Refer to the *Methods* chapter for data exclusions and data limitations. Valid percentages are reported to account for missing data**.**

Figure C4. Annual Median Household Earnings after Exit, by Household Type

Among Exiting Households with an Employed Adult



Households with:	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12
Children	$30,605	$32,072	$33,128	$34,502	$36,105	$37,402	$38,487	$39,159	$39,625	$40,076	$39,648	$36,783
ABAWD	$18,569	$21,247	$23,329	$25,432	$27,307	$28,967	$30,375	$31,694	$32,182	$32,806	$32,623	$30,676
Adult with a Disability	$14,232	$15,189	$16,334	$17,826	$19,082	$20,230	$21,306	$21,790	$21,617	$21,602	$22,155	$21,308
Older Adult	$17,682	$18,430	$18,946	$19,571	$20,033	$20,150	$20,417	$20,817	$21,019	$21,437	$22,380	$19,970
Other Adult	$22,282	$24,186	$25,554	$26,548	$27,589	$28,429	$28,924	$28,817	$28,967	$29,206	$27,772	$25,028
All Households	$22,609	$24,846	$26,476	$28,232	$29,894	$31,276	$32,418	$33,349	$33,850	$34,682	$34,540	$32,498

Note: Earnings reflect the median earnings across all employed adults in the SNAP household (n=844,925), regardless of recipient status (i.e., recipient or non-recipient in the household). Earnings reflect adult recipients who were employed in the corresponding year and exclude adult recipients without the corresponding amount of follow-up data. Refer to the *Methods* chapter for data exclusions and data limitations. Earnings standardized to 2022 dollars.

Table C1. Industries of Employment in Quarter after Exit, by Adult Type

Among Employed Adult Recipients on Exiting Cases

	Adults with Children	ABAWDs	Adults with a Disability	Older Adults	Other Adults	All Adults *(911,447)*
Administrative & Support Services	11%	15%	17%	13%	16%	13%
Restaurants	9%	15%	13%	6%	9%	11%
Outpatient Healthcare	8%	4%	3%	5%	4%	6%
Residential Care Facilities	7%	4%	5%	6%	5%	5%
Education	6%	4%	4%	9%	5%	5%
General Retail	4%	5%	5%	7%	5%	4%
Hospitals	6%	3%	2%	2%	3%	4%
Food and Beverage Retail	3%	4%	5%	5%	4%	4%
Professional, Scientific, & Technical Services	4%	3%	3%	3%	3%	3%
Social Assistance	4%	3%	6%	5%	4%	3%
Trade Contractors	3%	4%	3%	2%	4%	3%
Accommodations	2%	2%	2%	2%	2%	2%
Automotive Dealerships & Parts Retail	1%	2%	1%	2%	2%	2%
Government	2%	1%	1%	3%	2%	2%
Personal Services	2%	1%	1%	2%	1%	2%
Other	30%	32%	28%	28%	31%	31%
Total	100%	100%	100%	100%	100%	100%

Note: This analysis represents the employer with whom the recipient earned the highest wages in the first quarter after exit, among employed adult recipients. Shaded cells draw attention to differences across adult types and represent a 3-percentage point difference or more when compared to the *All Adults* column. The *Other* category includes 82 industries, each with less than 1.5% of employed adult recipients. Refer to the *Methods* chapter for data exclusions and data limitations. Percentages may not add to 100% due to rounding. Valid percentages are reported to account for missing data.

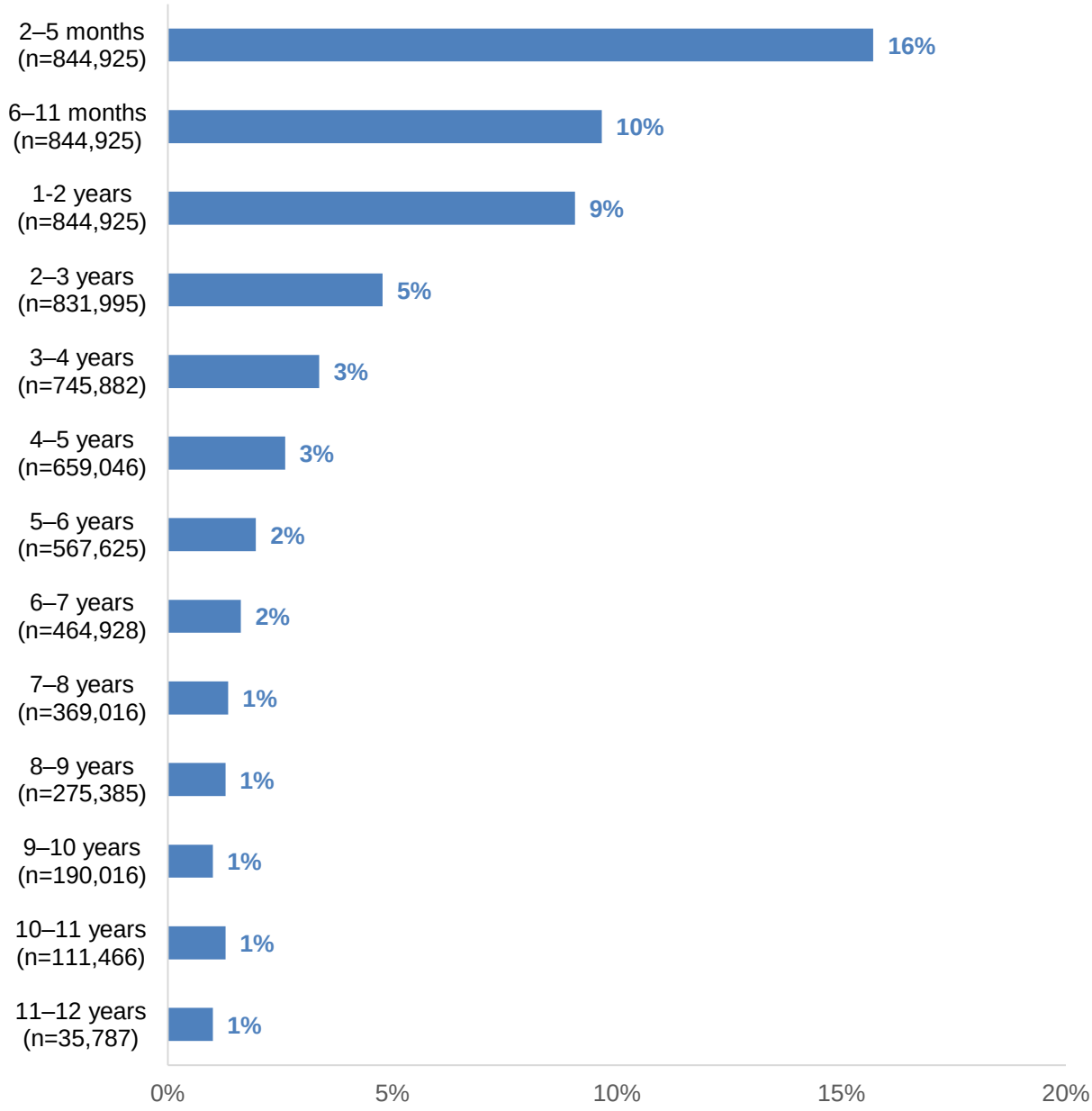
Table C2. Median Earnings in Industries of Employment in Quarter after Exit, by Adult Type
Among Employed Adult Recipients on Exiting Cases

	Adults with Children	ABAWDs	Adults with a Disability	Older Adults	Other Adults	All Adults *(911,447)*
Administrative & Support Services	$6,603	$4,883	$3,774	$4,731	$5,436	$5,414
Restaurants	$4,664	$3,781	$3,226	$3,554	$4,275	$4,049
Outpatient Healthcare	$8,921	$7,801	$5,293	$5,173	$7,256	$8,419
Residential Care Facilities	$7,945	$6,803	$4,903	$5,598	$7,034	$7,310
Education	$7,875	$6,446	$4,369	$4,527	$6,753	$7,025
General Retail	$5,074	$3,914	$3,446	$4,311	$4,916	$4,361
Hospitals	$9,356	$8,173	$7,639	$8,039	$8,711	$8,928
Food and Beverage Retail	$5,659	$4,233	$3,480	$4,169	$4,721	$4,597
Professional, Scientific, & Technical Services	$10,349	$7,704	$6,581	$6,052	$8,919	$9,141
Social Assistance	$6,873	$5,985	$3,079	$4,760	$6,140	$6,179
Trade Contractors	$10,526	$7,486	$7,241	$8,480	$8,662	$8,712
Accommodations	$6,309	$5,359	$4,278	$4,867	$5,620	$5,629
Automotive Dealerships & Parts Retail	$8,662	$6,499	$5,744	$5,789	$7,132	$7,231
Government	$10,133	$8,027	$5,573	$3,708	$8,111	$8,914
Personal Services	$5,916	$4,880	$3,792	$4,354	$5,054	$5,238
Other	$8,606	$6,112	$5,233	$5,530	$6,984	$7,151

Note: This analysis represents the earnings for the employer with whom the recipient earned the highest wages in the 1st quarter after exit, among employed adult recipients. The *Other* category includes 82 industries, each with less than 1.5% of employed adult recipients. Refer to the *Methods* chapter for data exclusions and data limitations. Earnings standardized to 2022 dollars.

APPENDIX D: ADDITIONAL SNAP RETURN DATA

Figure D1. Percentage of Exiting Households that Returned to SNAP



Note: This figure includes all households that exited SNAP between July 2010 and June 2020, regardless of available follow-up data (n=844,925). Therefore, percentages may be slightly different when compared to Figure 15, which only includes households with 5 years of follow-up data (n=659,046). The blue bars represent the first return to the SNAP program and do not include additional returns although cases may close and reopen more than once.

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