SOLVING THE FOOD ASSISTANCE (SNAP) BENEFITS CLIFFS

Fixing the Safety Net System

First in a Series on Safety-Net Assistance Program Benefit Cliff Solutions

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Abstract

Introduction

This paper is the first in a series by the Georgia Center for Opportunity on how to solve safety-net program benefit cliffs using computational analyses with spin-off technologies from its benefit cliff project.

SNAP Benefit Cliffs

The Supplemental Nutrition Assistance Program (SNAP), commonly known as the Food Stamp Program, has a benefit cliff problem. Using current eligibility standards, overcoming benefit cliffs requires pay raises above what most households typically receive, and in many cases, substantial increases beyond the reach of nearly all households. Setting aside the pandemic's emergency allotment program, benefit cliffs have never been higher using data going back to 2003. However, the emergency allotment program enacted in 2020 as part of the Families First Coronavirus Response Act created even worse benefit cliffs that lasted nearly three years for most states. Broad-Based Categorical Eligibility—impacting 2.4 percent of SNAP households—has been used to change rules of eligibility that eased benefit cliffs but did not eliminate them. A computational framework to address two fundamental marriage penalty questions was to used to isolate the impact of SNAP. For the first marriage penalty question—living together married as opposed to separately—SNAP worsened marriage penalties for some wage combinations and flipped some bonuses to penalties for other wage combinations. For the second question—living together married versus living together unmarried—SNAP has no marriage penalties, but this depends on rule compliance.

Evaluating SNAP Benefit Cliffs

The paper outlines the principles by which safety-net programs need to be designed to avoid benefit cliffs and evaluates the program design of SNAP against those principles. SNAP's factors are misaligned whereby the net income limit truncates the tapering of benefits before it reaches a level that is easily overcome with a typical pay raise, or for households *without* disabled or elderly members, the tapering can also be—and often is—truncated by the gross income limit. The SNAP tapering point—where benefits begin being reduced with increased income—cannot be determined without the net income analysis and is virtually unique for each household due to deductions against income. The benefit reduction rate is rarely the statutory 30 percent but fluctuates from 24 percent to an uncomfortably high 45 percent, depending on earnings and excess shelter expense deductions. The paper lays out six principles by which benefit cliff solutions should be evaluated and recommends a new system that fixes the extended tapering point and the fluctuating benefit reduction rate by eliminating the deductions against income while predetermining the exit income and benefit amount at levels that can be overcome by a typical pay raise.

Recommendations

The paper has six recommendations for Congress that include (1) how to limit future emergency allotment programs in duration, (2) requiring the U.S. Department of Agriculture to recalculate the Thrifty Food Plan, (3) recommending five steps to permanently eliminate SNAP benefit losses that cannot be easily overcome with a typical pay raise in a fiscally responsible manner, (4) suggesting two strategies to mitigate marriage penalties, (5) recommending amendments to 7 U.S. Code § 2026 on demonstration projects to better test benefit cliff and marriage penalty solutions, and (6) creating a new subsection for the Secretary of Agriculture to conduct experiments on how to solve benefit cliffs and mitigate marriage penalties in conjunction with states. Additionally, the paper recommends for the states that do not want to wait for Congress to act, or simply want to experiment with solutions, to apply for §2026 demonstration projects to solve SNAP benefit cliffs and mitigate marriage penalties.

Acknowledgments

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Executive Summary

Introduction

How to solve the benefit cliff problem of the Supplemental Nutrition Assistance Program (SNAP)—commonly known as the Food Stamp Program—is the first report of a series by the Georgia Center for Opportunity (GCO) on benefit-cliff solutions of safety-net programs. The solutions are derived using computational analyses from tools developed by GCO as spin-off technologies from its benefits cliff project. See benefitscliffs.org for more information on the project.

SNAP has a Benefit Cliff Problem

When it comes to benefit cliffs, the most important point for program participants is the ability to overcome them with a typical pay raise. Because of the earnings loss rate—also known as the effective marginal tax rate—a pay raise equal to the loss in a program's benefit is insufficient to fulfill this condition. Simply replacing the lost benefit with an equal amount in a pay raise has a 100 percent earnings loss rate, meaning no immediate incentive to choose the increase in earnings. More importantly, the earnings loss rate for a specific program worsens once taxes and other safety-net programs are considered. That is, a pay raise equivalent to a program-specific benefit loss transforms into an overall net financial loss once taxes and other safety-net benefits are taken into account.

Table ES-1

Earnings Loss Rate (ELR) Severity Scale Policy Guide

Severity	Range	Description
Prohibitive	100% < ELR	Benefit cliff: total disincentive, punitive, and very significant potential for behavioral change to avoid loss
Extreme	75% < ELR ≤ 100%	Extreme severity: little to no incentive for gaining more income, and significant potential for behavioral changes to avoid loss
High	50% < ELR ≤ 75%	High severity: high potential for behavioral changes to avoid loss
Moderate	25% < ELR ≤ 50%	Moderate severity: some moderate potential impact on behavior to avoid loss
Low	0% ≤ ELR ≤ 25%	Low severity: little to no potential impact on behavior to avoid loss
Negative	ELR < 0%	Negative severity: benefit gain exceeds gain in earnings, creating significant potential on behavior to earn more

This paper presents for the first time a Earnings Loss Rate Severity Scale Policy Guide (Table ES-1) and chooses a 25 percent earnings loss rate as a standard to evaluate the required income increase to overcome a benefit cliff and assumes a 2 percent pay raise to be typical for most households, giving a benchmark of 0.5 percent of benefit loss to income. An earnings loss rate

of 25 percent was chosen because higher rates will worsen work disincentives once the rate is compounded with the rates from taxes and other safety-net programs. Benefit losses equal to or less than the benchmark are not considered to be problematic for most households. However, benefit losses greater than the benchmark are a concern, and the further away they are from the benchmark, the more worrisome and problematic they become because of the diminished incentives to work or seeking higher pay or promotions.

Lower Earnings Loss Rates are not the only factor to encourage work, but they are a critical part of the overall solution. Economic Labor Supply Theory and experimentation show that work requirements are also important. SNAP has such requirements—both a general work requirement and a specific requirement for abled body adults without dependents. Therefore, it is important to align both work requirements and earnings loss rates that do not disincentivize work or seeking higher income throughout the period a household receives SNAP benefits. Moreover, there is an issue of fairness when earnings loss rates become too high that can result in net income loss when a family exits SNAP.

SNAP calculates benefits differently for households *without* disabled or elderly members than it does for households *with* disabled or elderly members. Also, SNAP produces different factors for five distinct areas: the 48 contiguous states and the District of Columbia, Alaska Urban, Alaska Rural 1, Alaska Rural 2, and Hawaii. Although SNAP provides benefits to households in U.S. territories, those areas were excluded from the analysis for this paper. SNAP benefits also increase by household size. In consideration of these program characteristics, thousands of scenarios were run for both household types, for each of the five areas, and by household size for not just the current year but going back historically twenty years.

Using SNAP factors effective October 1, 2022, every household requires pay raises above—and often far above—the 2 percent pay raise benchmark. Across the board, households with a single member are in the best position to overcome the benefit cliffs, but these increases are still higher than the benchmark.

Table ES-2

SNAP Benefit Cliffs for households **without** disabled or elderly members assuming Fair Market Rents for shelter costs, all income from earnings, and SNAP factors effective October 1, 2022

Household Size	At SNAP Exit	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	Income Loss	-11.7%	-7.9%	-11.8%	-20.7%	-27.4%
	Pay Raise to Overcome	46.8%	31.7%	47.1%	83.0%	109.8%
4 members	Income Loss	-15.4%	-14.4%	-20.2%	-31.6%	-37.5%
	Pay Raise to Overcome	61.5%	57.4%	80.8%	126.4%	150.1%

Table ES-3

SNAP Benefit Cliffs for Households **with** disabled or elderly members assuming Fair Market Rents for shelter costs, all income from earnings, and SNAP factors effective October 1, 2022

Household Size	At SNAP Exit	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	Income Loss	-1.1%	-1.1%	-1.5%	-4.7%	-5.2%
	Pay Raise to Overcome	4.2%	4.6%	6.1%	18.7%	20.9%
4 members	Income Loss	-6.6%	-6.9%	-15.2%	-21.6%	-19.6%
	Pay Raise to Overcome	26.3%	27.6%	60.7%	86.2%	78.5%

Specifically, the model measures the benefit levels at the exit income, that is, the benefit losses to income, which are used to calculate the percent increases in income—or pay raise—to overcome the losses assuming an earnings loss rate of 25 percent. For single member households, the data show benefit losses to income range from 7.9 percent for Alaska Urban to 27.4 percent for Hawaii for households *without* disabled or elderly members assuming fair market rents—that include both rent and utlities—per the U.S. Department of Housing and Urban Development for the excess shelter cost deductions, requiring pay raises from 31.7 percent to 109.8 percent to overcome the losses (Table ES-2). For these calculations, and all the following calculations used in this summary, it was assumed that all income comes from earnings—although the study itself ran scenarios varying the percent of income due to earnings but showed little variance on the results. For single-member households *with* disabled or elderly members, the benefit losses to income range from 1.1 percent for the 48 contiguous states and D.C. and Alaska Urban to 5.2 percent for Hawaii assuming fair market rents, requiring pay raises ranging from 4.2 percent to 20.9 percent to overceom the losses (Table ES-3).

Table ES-4

SNAP Benefit Cliffs for Households **without** disabled or elderly members assuming the unlikely scenarios of no shelter costs, all income from earnings, and SNAP factors effective October 1, 2022

Household Size	At SNAP Exit	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	Income Loss	-1.6%	-1.5%	-5.7%	-11.0%	-12.6%
	Pay Raise to Overcome	6.2%	6.1%	22.8%	43.9%	50.3%
4 members	Income Loss	-9.2%	-9.8%	-18.4%	-27.0%	-30.2%
	Pay Raise to Overcome	36.6%	39.2%	73.5%	108.1%	121.0%

Table ES-5

SNAP Benefit Cliffs for Households **with** disabled or elderly members assuming the unlikely scenarios of no shelter costs, all income from earnings, and SNAP factors effective October 1, 2022

Household Size	At SNAP Exit	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	Income Loss	-1.4%	-1.3%	-1.6%	-5.5%	-7.5%
	Pay Raise to Overcome	5.6%	5.1%	6.6%	22.0%	29.9%
4 members	Income Loss	-7.8%	-7.6%	-15.6%	-23.6%	-27.2%
	Pay Raise to Overcome	31.3%	30.3%	62.3%	94.5%	108.7%

To show the potential range of benefit cliffs, the calculations were also run for the unlikely scenarios of households having no shelter costs. The benefit losses to income range from 1.5 percent for Alaska Urban to 12.6 percent for Hawaii for single-member households *without* disabled or elderly members, requiring pay raises ranging from 6.1 percent to 50.3 percent to overcome the losses (Table ES-4), and for single-member households *with* disabled or elderly members, benefit losses to income range from 1.3 percent for Alaska Urban to 7.5 percent for Hawaii, requiring pay raises ranging from 5.1 percent to 29.9 percent to overcome the losses (Table ES-5).

However, the numbers just given are for single-member households that require the least increases in income to overcome benefit losses. Larger household sizes fare far worse. For example, for a household size of four *without* a disabled or elderly member, the benefit losses to income range from 14.4 percent for Alaska Urban to 37.5 percent for Hawaii assuming fair market rents, requiring pay raises ranging from 57.4 percent to 150.1 percent to overcome the losses (Table ES-2). For four-member households *with* a disabled or elderly member, the benefit losses to income range from 6.6 percent for the 48 contiguous states and D.C. to 19.6 percent for Hawaii, requiring pay raises from 26.3 percent to 78.5 percent to overcome the losses (Table ES-3).

Assuming the unlikely scenarios of no housing costs, the benefit losses to income for four-member households *without* disabled or elderly members range from 9.2 percent for the 48 contiguous states and D.C. to 30.2 percent in Hawaii , requiring pay raises ranging from 36.6 percent to 121 percent to overcome the losses (Table ES-4). For four-member households *with* disabled or elderly members, the benefit losses to income range from 7.6 percent for Alaska Urban to 27.2 percent for Hawaii, requiring pay raises ranging from 30.3 percent to 108.7 percent to overcome the losses (Table ES-5).

These SNAP benefit cliffs are bad enough, but they reached record highs during the COVID-19 pandemic because of the emergency allotment program. Enacted in March 2020, Section 2302

of the Families First Coronavirus Response Act allowed states to participate in an emergency allotment program to provide all SNAP households—regardless of income—the maximum allotments. A reinterpretation of the statute announced on April 1, 2021, by the Food and Nutrition Service of the U.S. Department of Agriculture allowed some households to receive allotments even above the maximum allotments.

Table ES-6

Pay raises to overcome SNAP benefits cliffs in 2020 at the onset of the COVID-19 pandemic due to the emergency allotment program for households **without** disabled or elderly members

Household Size	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	57.3%	56.3%	72.0%	87.6%	91.4%
2 members	77.5%	76.3%	97.5%	118.6%	124.0%
3 members	88.1%	86.8%	110.6%	134.7%	140.8%
4 members	92.6%	91.3%	116.4%	141.6%	148.2%
5 members	94.0%	92.5%	117.9%	143.6%	150.2%
6 members	98.3%	96.8%	123.5%	150.3%	157.3%

Table ES-7

Pay raises to overcome SNAP benefits cliffs in 2020 at the onset of the COVID-19 pandemic due to the emergency allotment program for households **with** disabled or elderly members

Household Size	Assumes Fair Market Rent for Shelter Costs					Assumes No Shelter Costs				
	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	41.0%	42.0%	53.7%	60.6%	55.5%	51.4%	48.0%	61.3%	74.7%	79.4%
2 members	59.5%	60.2%	79.4%	89.7%	79.0%	72.0%	68.3%	87.2%	106.1%	112.6%
3 members	68.9%	68.9%	91.4%	104.1%	85.8%	87.4%	84.4%	101.9%	124.1%	131.3%
4 members	77.3%	77.5%	104.6%	119.8%	100.9%	89.0%	86.7%	109.4%	133.1%	140.7%
5 members	83.2%	83.6%	112.4%	130.2%	111.3%	90.2%	88.2%	112.4%	136.9%	144.3%
6 members	86.6%	86.6%	118.6%	139.5%	114.2%	94.4%	92.9%	118.6%	144.3%	151.1%

All states and D.C. initially participated in the emergency allotment program in 2020, and the required pay raises to overcome SNAP benefit losses jumped to 56.3 percent for a household *without* a disabled or elderly member in Alaska Urban to over 150 percent for Hawaii using the earnings loss rate of 25 percent (Table ES-6). For households *with* disabled or elderly members, the required pay raises jumped to 41 percent in the 48 contiguous states and D.C. to over 150 percent in Hawaii (Table ES-7). Table ES-6 does not separate the data for households assuming fair market rents and no shelter costs for households *without* disabled or elderly members because the results are the same.

Table ES-8

Pay raises to overcome SNAP benefits cliffs in February 2023 due to the COVID-19 emergency allotment program for households **without** disabled or elderly members. Alaska did not participate in February 2023, but the table shows what the pay raises would have been had it participated.

Household Size	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	76.3%	76.3%	97.3%	118.4%	149.5%
2 members	104.0%	103.9%	132.6%	161.3%	173.0%
3 members	118.6%	118.4%	150.9%	183.6%	196.9%
4 members	124.9%	124.7%	159.0%	193.6%	207.5%
5 members	126.9%	126.5%	161.3%	196.5%	210.6%
6 members	132.9%	132.6%	169.1%	205.8%	220.7%

Table ES-9

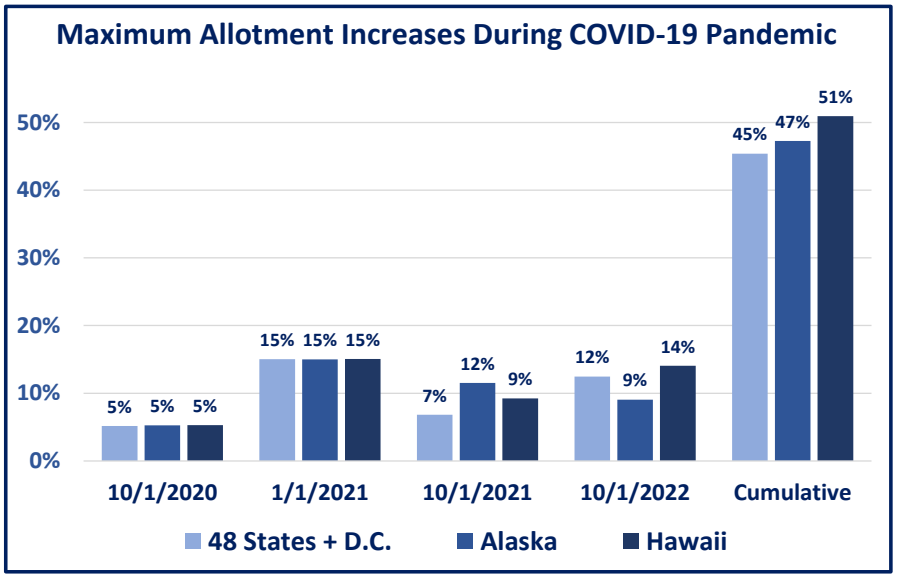
Pay raises to overcome SNAP benefits cliffs in February 2023 due to the COVID-19 emergency allotment program for households **with** disabled or elderly members. Alaska did not participate in February 2023, but the table shows what the pay raises would have been had it participated.

Household Size	Assumes Fair Market Rent for Shelter Costs					Assumes No Shelter Costs				
	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	51.8%	57.3%	75.3%	84.9%	76.6%	67.8%	64.3%	82.1%	99.9%	109.3%
2 members	76.2%	82.4%	109.2%	122.8%	109.5%	96.1%	92.1%	117.5%	143.0%	155.8%
3 members	87.1%	92.2%	126.6%	143.0%	120.4%	112.1%	108.2%	138.0%	167.9%	182.3%
4 members	100.8%	106.3%	144.8%	164.8%	141.5%	119.9%	116.4%	148.4%	180.7%	195.8%
5 members	109.0%	115.4%	152.9%	179.1%	156.4%	121.8%	119.9%	152.9%	186.2%	201.5%
6 members	113.7%	120.9%	162.0%	192.1%	162.7%	127.6%	127.1%	162.0%	197.3%	211.9%

By the end of the emergency allotment program in February 2023, 32 states—representing three-quarters of the U.S. population and of all persons participating in SNAP—were still participating in the program, and the required pay raises to overcome SNAP benefit losses increased from 76.3 percent in the 48 contiguous states and D.C. to over 200 percent for Hawaii for households *without* disabled or elderly members (Table ES-8), and from 51.8 percent in the 48 contiguous states and D.C. to over 200 percent for Hawaii for households *with* disabled or elderly members (Table ES-9). Alaska was one of 18 states that ended their emergency allotment programs before February 2023. Therefore, Tables ES-8 and ES-9 shade out the what the pay raises would have been had Alaska participated in the emergency alloment program that year. The other states not participating in the emergency allotment program in February 2023 were Arizona, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kentucky, Mississippi, Missouri, Montana, Nebraska, North Dakota, South Carolina (that ended its program the prior month), South Dakota, Tennessee, and Wyoming.

Chart ES-1

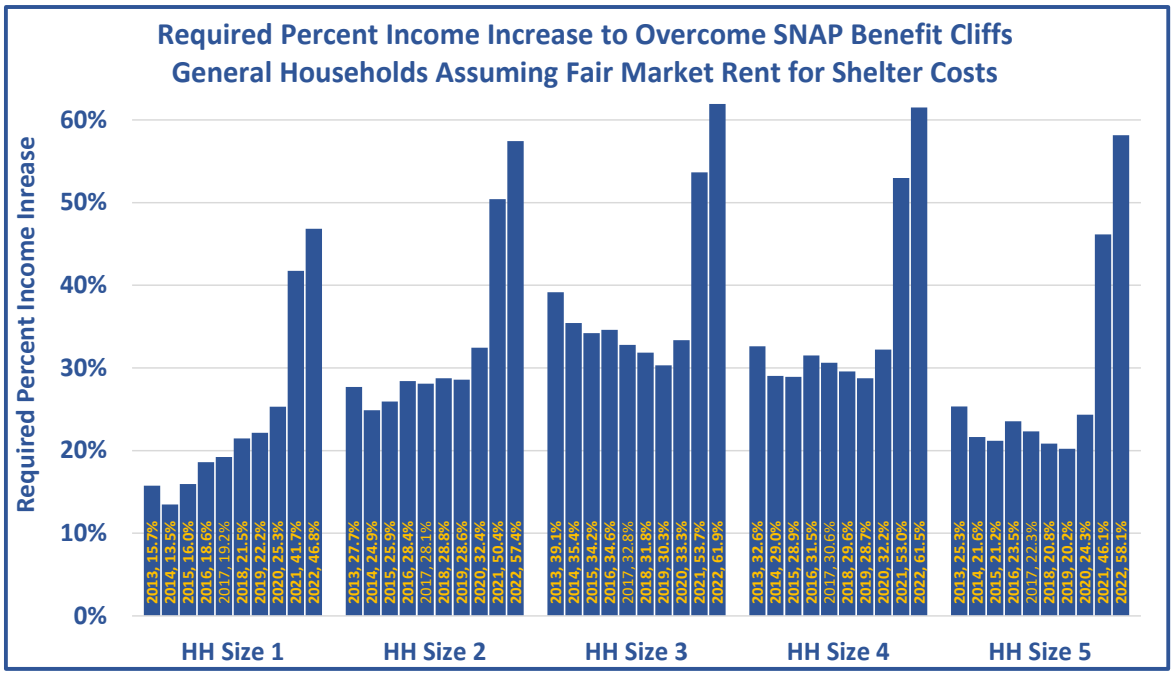
Increases in the maximum SNAP allotments during the COVID-19 Pandemic



The steep increases in the benefit cliffs during the pandemic were due in part to the significant increases in the maximum allotments that raised the maximum allotments over three years by 45 percent for the 48 contiguous states and D.C., by 47 percent for Alaska, and by 51 percent for Hawaii (Chart ES-1). These increases were the net effect even after offsetting the temporary nine-month 15 percent maximum allotment increases that expired on September 30, 2021. A large portion of the increases was not due to inflation—which would have been 18.2 percent—but from a recalculation of the Thrifty Food Plan, which is the basis for the maximum allotments, by the U.S. Department of Agriculture.

Chart ES-2

Pay raises to overcome SNAP benefit cliffs for households **without** elderly or disabled members for the 48 contiguous states and D.C. for SNAP factors effective October 1 each year from 2013 through 2022.



Setting the pandemic's emergency allotment program aside, the current benefit cliffs using SNAP factors effective October 1, 2022, are the highest they have been in twenty years, and may be the highest ever. Because the analyses ran data going back only twenty years, it is possible—despite appearing implausible—that benefit cliffs were worse prior to 2003. Chart ES-2 provides an example of the results for the 48 contiguous states and D.C. on October 1 for each year starting in 2013 through 2022.

Broad-based categorical eligibility has been a strategy used by thirty-three states and the District of Columbia to circumvent the SNAP gross income limit, impacting households *without* disabled or elderly members. While easing benefit cliffs for households estimated to be 2.4 percent of all SNAP households in FFY 2019, these households still require atypical pay raises to overcome the loss in SNAP benefits.

Marriage Penalties

A marriage penalty exists when a couple becomes worse off financially, such as paying more in taxes or receiving less in benefits, because they chose to marry or because they are married as opposed to being not married. The opposite of a marriage penalty is a marriage bonus. Marriage penalties were evaluated from two perspectives: from the perspective of a single mom with children who wants to marry her boyfriend assuming they do not live together (Question 1), and from the perspective whether they should marry (and live together) versus cohabitating

unmarried (Question 2). The baseline for the comparison was the natural state, that is, what the marriage penalty or bonus would be without any income/payroll taxes or safety-net assistance programs. Matrices were created for the scenarios with the mom's wages and her boyfriend's wages as the two variables, and each element of the matrix was the marriage penalty or bonus from the respective wage combination. The natural state matrix was then compared to a matrix that included only the impact of SNAP on that natural state, that is, isolating the impact of SNAP from taxes and other safety-net assistance programs.

For the wage combinations where SNAP impacted the matrices for question 1, it was shown that (1) in most combinations, the bonuses were lessened, (2) in some combinations where penalties existed, they were lessened, and (3) in a few cases where penalties existed, they were worsened. However, more concerning, (4) there were wage combinations where bonuses flipped to become penalties. For this question 1, the penalty is not limited to married couples but also extends to couples who live together, meaning choosing to live together as opposed to separately, penalizes both married couples and non-married couples alike.

For the second question, there are no marriage penalties due to SNAP. However, this conclusion comes with an important caveat. It assumes compliance with SNAP rules on who should be counted in the households and their incomes. Without compliance, there will be SNAP penalties every time, making it both it a public policy conern in addition to a program integrity concern.

Evaluating SNAP Benefit Cliffs

Basically, for safety net programs to avoid benefit cliffs that cannot be overcome with typical increases in earnings or other income, there must be a tapering point where benefits are reduced with increased income. The benefit reduction process continues until the exit income, but at the exit point, the loss in benefits must be small enough relative to income that it can be overcome easily with a typical pay raise.

Chart ES-3

The Four Critical Factors

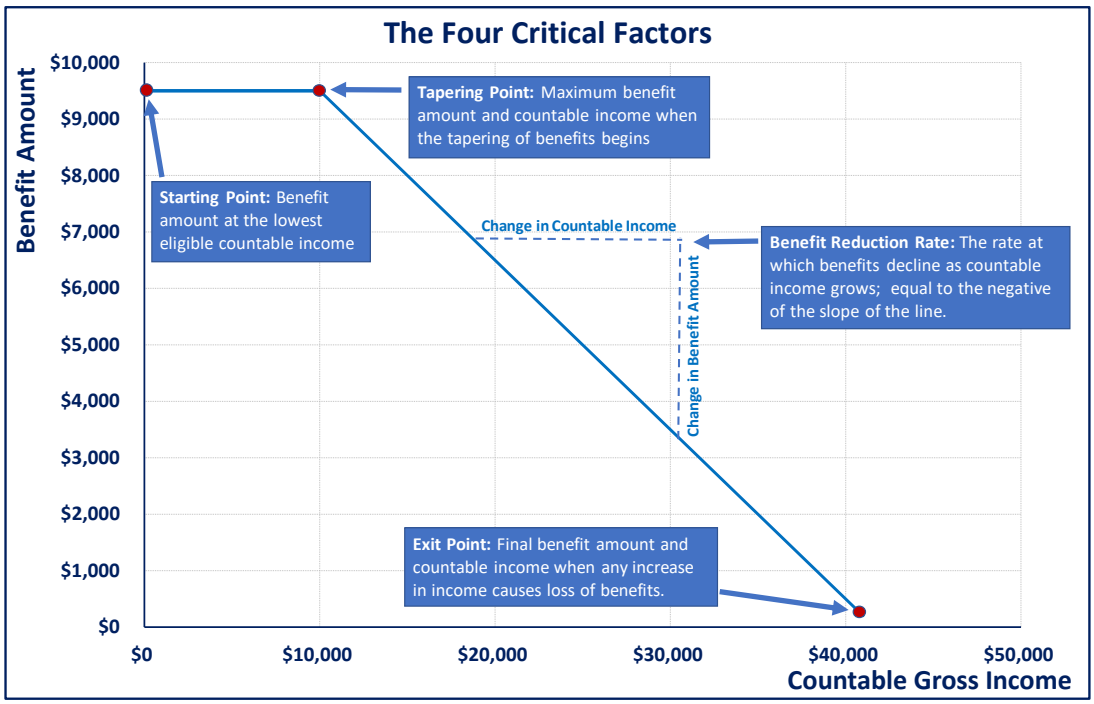
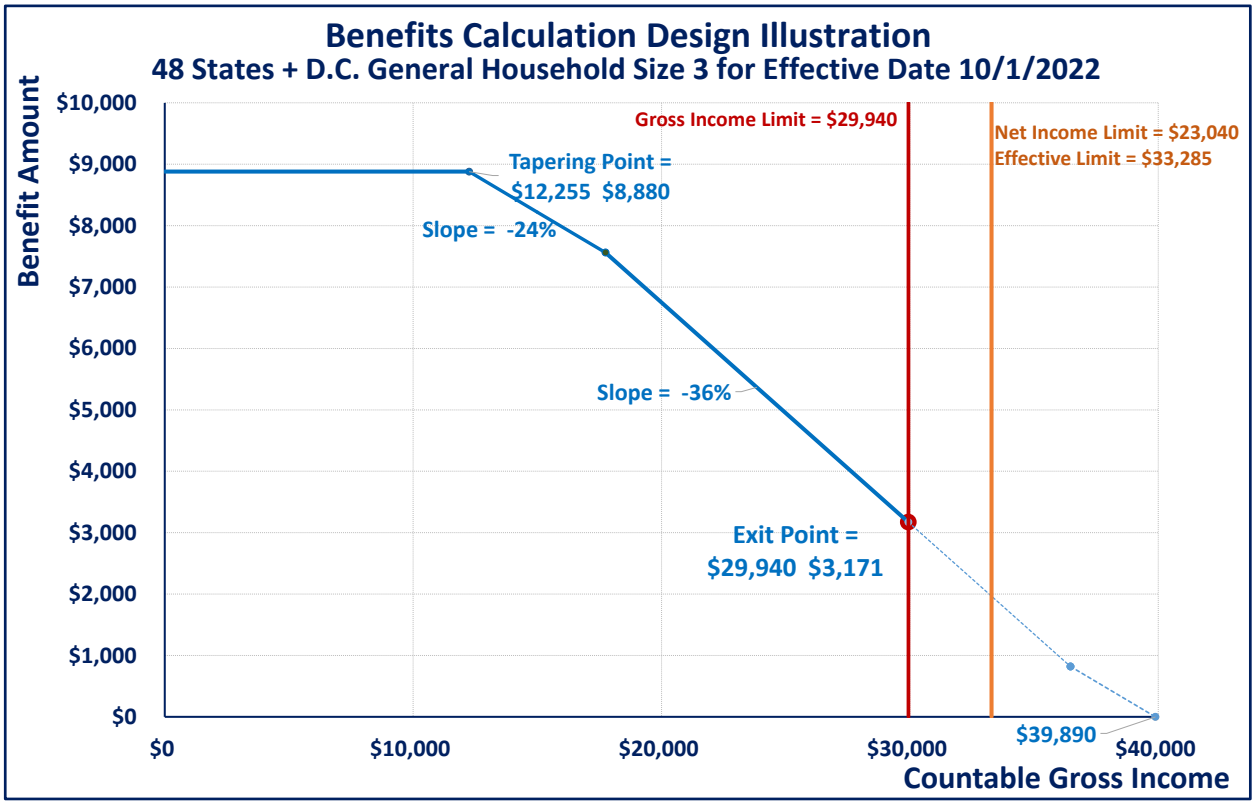


Chart ES-3 illustrates these four critical factors—the starting point, the tapering point, the benefit reduction rate, and the exit point—for designing saftey-net assistance programs that must be properly aligned to control for benefit cliffs.

Chart ES-4

Illustration of the misalignment of SNAP factors that cause benefit cliffs. This example uses SNAP factors effective October 1, 2022, for a three member household without disabled or elderly members with annual shelter costs of $13,428 within the 48 states plus the District of Columbia, and all income coming from earnings.



In the case of SNAP, there is a starting point, a tapering point, a benefit reduction rate, and an exit point, but they are grossly misaligned, causing benefit losses at exit that cannot be overcome with a typical pay raise. Chart ES-4 illustrates the misalignment. In fact, the critical factors are set by disparate processes that are not coordinated. The solution lies in calibrating these processes so that they work together.

The SNAP tapering point has two parts: the maximum benefit level and the countable income level when the tapering begins. The maximum benefit amount is determined by the maximum allotment for the household size and area, which is based on the Thrifty Food Plan for a household of four, as determined by the U.S. Department of Agriculture. The maximum allotment level for the four-person household is then converted for other household sizes.

Net income—needed to determine the tapering point and SNAP benefits--cannot be known ahead of time until all the income adjustments are made, and some of the expense deductions have no limit. Virtually all households have unique tapering points, each starting at a different income level. For example, all households can deduct dependent care expenses and child support payments without limit, and households *with* disabled or elderly members can deduct medical expenses above $35 each month without limit. Households also deduct 20 percent of

their earnings and a standard deduction. In addition, they can deduct excess shelter expenses according to a specific formula. Households *with* disabled or elderly members have no limit to their excess shelter expenses deduction, but households *without* disabled or elderly members do have a limit. Shelter expenses are defined as both housing and utility costs subject to some additional limitations.

Although federal statute sets a benefit reduction rate of 30 percent, the earnings and excess shelter expense deductions alter the mathematics causing the benefit reduction rate to fluctuate from 24 percent to an uncomfortably high 45 percent.

The exit point rarely occurs with the natural tapering of benefits to zero or to a level that is easily overcome with an increase in income, or a typical pay raise. Rather, the tapering process is truncated by the net income limit, or, in the case of households *without* disabled or elderly members, it is usually truncated by the gross income limit. The net income limit is statutorily set to be equal to the poverty level as published by the U.S. Department of Health and Human Services, and the gross income limit is set to be equal to 130 percent of that poverty level.

The approach to solve the SNAP benefit cliffs requires realigning the critical factors. Other strategies, such as relying on broad-based categorical eligibility to circumvent gross income limits for households *without* disabled or elderly members, have proven themselves to be unsuccessful and have only impacted a small percentage of SNAP households.

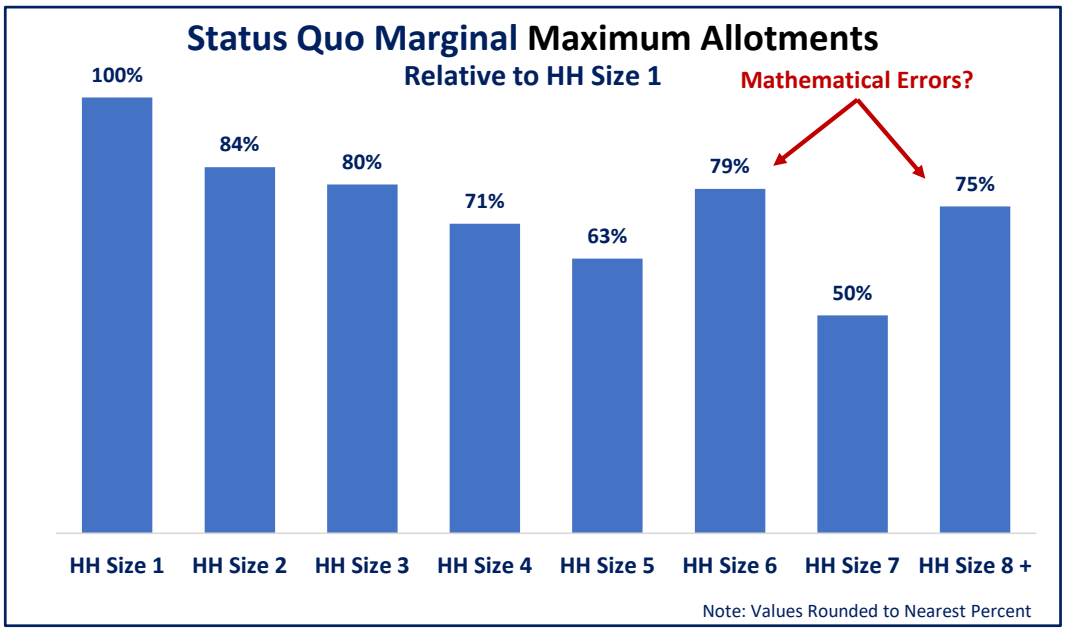
It is recommended that proposed solutions to the SNAP benefit cliff problem include the following criteria.

1. The starting benefit level must be adequate to fulfill the household's nutritional needs at zero income and be based on the concept of thriftiness.
2. Benefits must taper with increased countable income.
3. The benefit reduction rate—and in combination with taxes and other safety-net programs—must be low enough to incentivize earnings but not too low that it extends benefits into high income levels not associated with requiring assistance.
4. The SNAP exit point must be set at a SNAP benefit level that is easily overcome by a typical increase in income.
5. SNAP associated marriage penalties should be mitigated or eliminated.
6. Without compromising adequate assistance for those in need, the SNAP fiscal impact from the revenue should be better than cost neutral.

The maximum allotments that set the initial benefit level are crucial to get right. The large increases in the maximum allotments during the pandemic—coupled with procedural concerns per a report by the U.S. Government Accountability Office—strongly suggest the thrifty food plan needs to be recalculated to give the public trust that the Department of Agriculture reset the levels in good faith using best practice.

Chart ES-5

Current SNAP marginal maximum allotments. The marginal maximum allotments for household sizes 6, 8, and above appear to be mathematical errors.



Highlighted in Chart ES-5, research for this paper uncovered mathematical errors with the maximum allotment tables.[1] It would make sense for the U.S. Department of Agriculture to use the process in determining the thrifty food plan to correct the errors. Currently, the thrifty food plan is determined for a household with four members, and then converted to the other household sizes. Alternatively, the errors should be fixed for consistency and fairness.

SNAP deductions against income cause two problems. They shift the tapering point to higher income levels, and they cause the benefit reduction rate to fluctuate. The rationale why the tapering point is delayed until higher income levels as opposed to starting immediately with the commencement of income growth is not apparent. For U.S. income taxes, deductions against income make sense because they allow taxpayers to retain income for basic living expenses. However, food is one of those basic living expenses, and the same rationale cannot be applied to a food subsidy program like SNAP. Alternatively, commencing with the tapering of benefits sooner accepts the premise that food expenses are a priority and that it is a basic responsibility for households to share in the cost of the thrifty food plan when their income increases.

[1] The mathematical errors become evident when the marginal maximum allotments are examined and show up with household sizes 6 and 8. Marginal maximum allotments are how much is added to the maximum allotment by expanding to the next household size. As expected, the marginal maximum allotments diminish with household size for most household sizes. Household sizes 6 and 8 fall outside the pattern, exposing the error.

Moreover, tapering benefits sooner will help control fiscal costs, help offset any costs from other program changes, and prevent benefits from reaching households at income levels not associated with need.

These observations lead to the conclusion that deductions against countable income need to be eliminated. This is the simplest way to control the tapering point and stabilize the benefit reduction rate, and it would enable a precise calculation of the exit point using a predetermined income level and benefit level that could be easily overcome with a typical pay raise. Subsequently, the gross income level can be untethered from the poverty limit and calculated to coincide with the predetermined exit point.

Reforming SNAP in this manner would allow for greater program transparency for applicants and participants where they can be told exactly the countable income level they will exit the program, the exit benefit amount, and the required pay raise to overcome the loss in SNAP benefits. It also would make the calculation of benefits at any income level relatively easy. Moreover, it would simplify the required information and application process by eliminating the need for the administering agency to collect expense information and calculating net income. Finally, there would be no need for a net income limit.

Marriage penalties can be addressed using two strategies. First, Congress—or states using an approved Section 2026 demonstration project—could create a standard deduction just for married-couples with children to help offset marriage penalties, enabling these families to receive a larger SNAP allotment than a household of the same income and household size. Second, the definition for a SNAP household can be changed so that it counts all members of the household, making it easier for SNAP administering agencies to enforce compliance with whose income must be counted in determining eligibility.

Six Recommendations for Congress

Recommendation #1: Restrain any future emergency allotment program with sunset provisions linked to the ability of SNAP administering agencies to process eligibility and benefit determinations due to the emergency. Once an agency is able to return to normal operations for the impacted area, the emergency program should terminate for that agency.

Recommendation #2: Require the U.S. Department of Agriculture to revise its determination of the Thrifty Food Plan and use that process to create thrifty food plans for all household sizes, thereby fixing the mathematical errors in the maximum allotment tables.

Recommendation #3: Permanently eliminate SNAP benefit cliffs by following five steps.

- Step 1: fix the benefit reduction rate to a constant 30 percent[2] for all households.
- Step 2: eliminate all deductions against income.
- Step 3: predetermine the exit SNAP point when the benefit becomes equal to 0.5 percent of countable income.
- Step 4: untether the gross income limit from the poverty level, define it to be equal to the income at exit, and eliminate the net income limit.
- Step 5: redefine the minimum allotment as the benefit amount at exit and make it applicable to all household sizes.

Recommendation #4: Adopt a strategy to mitigate marriage penalties by giving married-couple households a standard deduction not available to non-married-couple households and changing the definition of a SNAP household .

Recommendation #5: Clarify how experimental projects in Section 2026 of Title 7 of the U.S. Code shall be construed, remove constraints to allow states to test strategies more fully, clarify text of the law to match practice, and offer cost sharing for projects to test strategies to remove benefit cliffs and mitigate marriage penalties.

Recommendation #6: Mandate that the Secretary of Agriculture sponsor experiments with states to eliminate benefit cliffs and mitigate marriage penalties.

Recommendation for the States

States that do not want to wait for Congress to act or who would like to experiment with solutions should submit a Section 2026 application for a demonstration project to eliminate SNAP benefit cliffs and reduce marriage penalties. Section 2026 allows states to waiver federal rules for demonstration projects consistent with any one of four purposes, and addressing benefit cliffs falls under at least two of those purposes, and arguably, mitigating marriage penalties also falls under two of those purposes.

In designing the projects and pursuant to statutory restrictions on such projects, states should consider limiting the demonstration to 15 percent of households participating in SNAP and waive requirements relating to maximum allotments, minimum allotments, deductions to countable income, and the benefit reduction rate. The experimental design—if it follows the steps in Recommendation #3—would then be able to taper benefits at a uniform rate so that when households exit the SNAP demonstration project, the benefit loss can be easily overcome by a

[2] Selecting the ideal BRR will take experimentation, and there is a good argument to make it 25 percent. However, 30 percent is the current statutory rate and would be a good starting point until research can provide evidence of the best balance for the tradeoff between incentivizing earning income and program cost.

typical pay raise. It is also recommended that states create a control group and monitor outcomes using techniques already successfully used by states with SNAP.

As part of the demonstration project, states may also consider creating a standard deduction for married couples with children and changing how they define and count who is in a household to control better for potential non-compliance of non-married couples who live together.

Section 2026 projects require a cost neutrality determination, and preliminary assessments suggest they will indeed be cost neutral if the projects follow the recommended principles of design.

Part 1: SNAP Has a Benefit Cliff Problem

Introduction

SNAP is the acronym for the Supplemental Nutrition Assistance Program and, prior to the 2008 Farm Bill,[3] was called the food stamp program. SNAP dispenses benefits to households[4] based on household size, means testing of resources and income, and gives special consideration to households *with* a disabled or elderly member.[5] The SNAP law defines elderly as age 60 or older.[6]

A benefit cliff is when an individual, family, or household loses more in net income and benefits from governmental assistance programs than it gains from additional earnings.[7] This net loss is a perverse incentive that undermines the natural desire to earn more income—known by economists as the substitution effect as part of the theory on labor supply. Equally damaging, and often overlooked, are high Earnings Loss Rates (ELRs)[8] that economists have dubbed Effective Marginal Tax Rates to measure the percent of additional income, including governmental assistance benefits, that is taken away with increased income. Worse still, SNAP allows for marriage penalties in certain situations.

Nearly every household losing a SNAP benefit with a normal increase in income will hit a benefit cliff, and the larger the household size, the greater the severity of the cliff. The rare exceptions are households with just one or two members with little to no expense deductions. This conclusion is reached by using computational tools developed by the Georgia Center for Opportunity that converts eligibility rules and related information into mathematical formulae and algorithms in unique computerized models, and running thousands of scenarios for all 50 states and the District of Columbia with data covering a twenty-year time span.

The modelling used for this paper isolates SNAP from other safety-net programs, including tax-based programs like the Earned Income Tax Credit. This paper is the first in a series[9] by the Georgia Center for Opportunity giving a deep dive into benefit cliffs and their solutions for major safety-net programs. Isolating the impact program by program will enable program-specific solutions. However, benefit cliffs for a family will change depending on the mix of safety-net

[3] Public Law 110-245, June 18, 2008.
[4] SNAP also allows for households of a single person and even, under special circumstances, if that person lives within a larger household.
[5] SNAP also has a homeless shelter deduction and broad-based categorical eligibility rules, which the latter has been used to circumvent eligibility rules for a subset of SNAP participants.
[6] 7 U.S. Code § 2012 – Definitions.
[7] A benefit cliff can also result from additional income other than earnings.
[8] Although called Earnings Loss Rates, they can technically include unearned income that SNAP and other safety-net programs count as income.
[9] The schedule for the release and availability for the other safety-net programs has not yet been set.

programs it participates in, which, as our research has shown,[10] most likely makes the cliffs worse. There will be exceptions to this rule, but they will be handled in subsequent publications.

Overcoming a benefit cliff requires a household to gain additional earned income (due to a raise) that is sufficient to exceed the loss in welfare benefits that the additional earned income triggers. Typically, pay raises are only a few percentage points, which varies based on inflation, industry market conditions, and what's happening macroeconomically. However, for most situations today overcoming lost SNAP benefits requires atypical pay raises out of reach for most recipients.

Theoretically, SNAP eligibility rules have components that could allow for benefits to taper to levels easily overcome with typical income increases. A tapering mechanism is a necessary design component for means-tested assistance programs to avoid benefit cliffs. However, other components of SNAP eligibility rules interfere with the benefit tapering mechanism, preventing it from being effective in almost all cases. Our computational analysis shows that it is mathematically possible for some one-member households where the individual is disabled or elderly to be able to overcome a benefits cliff with a pay raise less than 5 percent, but almost all other households will require percentage income increases in the double digits or worse.

Households without Disabled or Elderly Members

Table 1

Potential SNAP benefit losses to income at the exit point for households without disabled or elderly members, assuming Fair Market Rent shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	-11.7%	-7.9%	-11.8%	-20.7%	-27.4%
2 members	-14.4%	-12.3%	-17.8%	-28.5%	-33.9%
3 members	-15.5%	-16.7%	-21.6%	-33.1%	-36.9%
4 members	-15.4%	-14.4%	-20.2%	-31.6%	-37.5%
5 members	-14.5%	-12.0%	-18.6%	-29.5%	-36.9%
6 members	-15.8%	-13.6%	-20.3%	-31.0%	-38.5%
7 members	-13.5%	-11.1%	-19.2%	-28.2%	-36.6%
8 members	-12.6%	-11.0%	-20.2%	-29.4%	-37.4%

Table 1 shows expected SNAP benefit losses as a percentage of income for households *without* disabled or elderly members. These percentages are determined by dividing the benefit levels at the exit income by the exit income itself. Because the benefit amounts would be lost for incomes above the exit income, they are expressed as negative numbers. The table uses SNAP

[10] Georgia Center for Opportunity's website *benefitscliffs.org* not only allows users to explore benefit cliffs for 13 states down to the county level that represents more than one third of the U.S. population, the website also houses GCO reports related to benefit cliffs.

factors effective October 1, 2022, and assumes weighted averages of Fair Market Rent (FMR), based on the fortieth percentile, as published by the U.S. Department of Housing and Urban Development (HUD)[11] for the excess shelter expense deduction. No other deductible expenses are assumed, including child support payments and dependent care expenses. It also assumes that all gross income to the household is derived from earnings, and no assistance programs, including SNAP benefits, are added to income. Table 1 also assumes that the pandemic emergency allotment waiver is not being applied.

The numbers in Table 1 demonstrate for these households that SNAP benefits do not taper to zero. In almost every case, the amount of lost SNAP benefits is a double-digit percentage of gross income. Shelter costs are a significant factor in determining benefits because of the excess shelter expense deduction. Fair Market Rents was chosen as the basis for those costs because HUD provides data for political subdivisions of the states and the data are used for housing assistance programs, making them more comparable to households that would qualify for SNAP. HUD includes utility costs as part of FMR, which is another advantage of using HUD data because SNAP also includes utility costs as part of shelter costs. For the analysis, these rents were averaged for each state based on population, and then weighted for the 48 states, Hawaii, and Alaska.[12] While this gives a basis for shelter costs, the actual impact will vary across the areas based on the actual shelter costs of each household.

[11] Office of Policy Development and Research, U.S. Department of Housing and Urban Development, Fair Market Rents (4oth Percentile Rents) Datasets, "FMR History 1983 – Present: All Bedroom Unit data," available online at https://www.huduser.gov/portal/datasets/fmr.html#history.

[12] The computational analysis was run for all fifty states and the District of Columbia, and not for any of the territories, such as Guam, the Virgin Islands, or Puerto Rico. Alaska is the only state that applies different SNAP factors for different areas within its jurisdiction, and it is based on urban and two different rural classifications. Addendum 1 of the Alaska SNAP Manual lists the geographical areas for the urban, rural 1, and rural 2 classifications (http://dpaweb.hss.state.ak.us/manuals/fs/fsp.htm#t=addenda%2Faddendum_1.htm), and population data from the Alaska Department of Labor and Workforce Development (https://live.laborstats.alaska.gov/pop/index.html) was used to weight the data and match HUD FMR data.

Table 2

Annualized SNAP benefits at the countable gross income exit points over which the household would no longer be eligible to receive SNAP benefits for households without disabled or elderly members, assuming Fair Market Rent shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	$2,070 $17,676	$1,752 $22,092	$2,599 $22,092	$4,584 $22,092	$5,580 $20,328
2 members	$3,419 $23,808	$3,656 $29,760	$5,292 $29,760	$8,493 $29,760	$9,275 $27,384
3 members	$4,635 $29,940	$6,252 $37,428	$8,072 $37,428	$12,370 $37,428	$12,693 $34,440
4 members	$5,549 $36,084	$6,475 $45,108	$9,111 $45,108	$14,250 $45,108	$15,572 $41,496
5 members	$6,137 $42,216	$6,343 $52,776	$9,809 $52,776	$15,581 $52,776	$17,919 $48,564
6 members	$7,639 $48,348	$8,194 $60,444	$12,276 $60,444	$18,710 $60,444	$21,424 $55,620
7 members	$7,336 $54,492	$7,546 $68,112	$13,088 $68,112	$19,226 $68,112	$22,959 $62,676
8 members	$7,660 $60,624	$8,308 $75,780	$15,280 $75,780	$22,288 $75,780	$26,113 $69,732

Table 2 shows the annualized SNAP benefits at the gross income exit points over which the households would lose their SNAP benefits using the same assumptions shown in Table 1. Dividing the benefit amounts by the gross incomes in Table 2 will yield the percentages in Table 1. For example, the 11.7 percent for a single member household in the 48 contiguous states plus the District of Columbia shows the benefit amount received at the maximum allowable gross income, which are shown in Table 2. Unless noted otherwise, all tables and graphs in this report show the amounts on an annualized basis to help readers relate to the significance. In practice, SNAP allocates and calculates benefits on a monthly basis. Simply divide by 12 to convert to monthly amounts. For example, the $2,070 in benefits rounds to $173 monthly, and the $17,676 gross income equals $1,473 monthly.

In every case, the gross income in Table 2 is the SNAP gross income *limit* imposed on households *without* a disabled or elderly member, demonstrating that eligibility was terminated before benefits could taper to zero. The benefit amount is calculated with our computational model using precise SNAP factors and FMRs as shelter costs. These benefit amounts are what would be lost due to the benefit cliff, but they are not equal to what must be earned to overcome the cliff for two reasons. First, the lost benefit does not account for other losses due to taxes and other safety-net programs. For example, take the $2,070 loss for a 1 member household in the 48 contiguous states. If the household would earn $2,070 more to help it offset the loss in SNAP benefits, it would not get to keep all the $2,070 in earnings. In the very least, the householder would pay federal payroll taxes, which is 7.65 percent for an employee or 15.3 percent for a self-

employed individual.[13] There might be state and local income taxes, or perhaps the household is liable for federal income taxes. The cumulative effect is that the household is not held harmless from the loss in benefits with an equivalent pay raise.

The second reason relates to an economic phenomenon measured by the earnings loss rate. Higher rates of loss, even losses that do not completely offset additional earned income, diminish incentives for householders to earn more money. Suppose a household increases earnings such that its net income allows it to stay even after taxes, allowing it to purchase the lost $2,070 in SNAP benefits. What is the immediate incentive for the household to choose to accept the pay raise—or work towards a promotion that leads to pay raise—with a 100 percent earnings loss rate when there is no financial gain? Economists would say they are indifferent, meaning that there is no incentive to accept a pay raise in this case.

Earnings loss rates are an important economic concept when evaluating the impact of taxes and benefits on incentives to earn more money. They provide an objective way to quantify the losses due to taxes and benefit changes when earning more income. The concept is best applied to the total package of taxes and benefits to reflect the true impact on individuals and their families. In general, the lower the overall ELR, the greater the incentive to earn more money that is driven by the substitution effect of labor supply theory. When it comes to evaluating a single program, such as SNAP, ELRs need to be even lower because, on the whole, the impact of adding taxes and other benefit programs will only cause the overall ELR to increase. Therefore, as a matter of strategy for policymakers who wish to eliminate benefit cliffs and restore incentives to work, ELRs must be minimized as much as possible.[14]

Lower Earnings Loss Rates are not the only factor when evaluating the impact of safety-net programs on work incentives, but they are a critical part of the overall solution. For example, the Office of the Assistance Secretary for Planning and Evaluation (ASPE) of the U.S. Department of Health and Human Services summarizes Seattle-Denver Income Maintenance Experiment (SIME/DIME)[15] whose results have major implications for safety-net programs. SIME/DIME was one of four large-scale income maintenance experiments in the United States during the late 1960s and 1970s that validated labor supply theory. The report concluded that negative income

[13] Consisting of taxes for social security and Medicare, employer's match their employee's payroll tax. See the Internal Revenue Service, Topic No. 751, Social Security and Medicare Withholding Rates, https://www.irs.gov/taxtopics/tc751, and Self-Employment Tax (Social Security and Medicare Taxes), https://www.irs.gov/businesses/small-businesses-self-employed/self-employment-tax-social-security-and-medicare-taxes.

[14] Later in the paper we will discuss the disadvantages of too-low earning loss rates when designing safety-net programs. There is a tradeoff with incentives and program costs.

[15] Office of the Assistance Secretary for Planning and Evaluation (ASPE), U,S, Department of Health and Human Services, *Overview of the Final Report of the Seattle-Denver Income Maintenance Experiment* webpage, accessed August 31, 2023: https://aspe.hhs.gov/reports/overview-final-report-seattle-denver-income-maintenance-experiment.

tax safety-net programs without work requirements can lead to "significant reductions in virtually every major dimension of labor supply."[16] The SIME/DIME authors also analyzed the other three major experiments and concluded that the results of all four major experiments were "remarkably consistent."[17] Although the experiments did not study earnings loss rates, they nonetheless noted that lower earnings loss rates provide "less work disincentives"[18] for program participants and higher rates "may decrease their work effort enough to become dependent on the program because of the very low economic return to working."[19]

With regard to SNAP, it already has work requirements—both a general requirement and one specific for abled body adults without dependents. Work requirements should be enforced, and when they are, it is also important to strengthen the design of the program by controlling the earnings loss rates and SNAP losses at exit so that they do not interfere with labor supply as reduced hours worked can be the behavioral response. This is more than an economic issue for society and a fiscal issue for government. It is also a fairness issue for SNAP participants who want to improve their financial situations.

Table 3

Earnings Loss Rate (ELR) Severity Scale Policy Guide

Severity	Range	Description
Prohibitive	100% < ELR	Benefit cliff: total disincentive, punitive, and very significant potential for behavioral change to avoid loss
Extreme	75% < ELR ≤ 100%	Extreme severity: little to no incentive for gaining more income, and significant potential for behavioral changes to avoid loss
High	50% < ELR ≤ 75%	High severity: high potential for behavioral changes to avoid loss
Moderate	25% < ELR ≤ 50%	Moderate severity: some moderate potential impact on behavior to avoid loss
Low	0% ≤ ELR ≤ 25%	Low severity: little to no potential impact on behavior to avoid loss
Negative	ELR < 0%	Negative severity: benefit gain exceeds gain in earnings, creating significant potential on behavior to earn more

Table 3 introduces a policy guide to help policymakers decide what might be acceptable ELRs when it comes to taxation and safety-net assistance programs. It provides a scaling system to give context beyond the obvious points of a 0 percent ELR signifying no loss of income with

[16] SRI International, *Final Report of the Seattle-Denver Income Maintenance Experiment*, *Volume 1*, Design and Results, SRI International, May 1983, Part III, p. 94: available on Google Books: https://books.google.com/books?id=UAJAPA2qHA4C.
[17] Ibid., Part III, p. 169.
[18] Ibid., Part I, p. 14.
[19] Ibid., Part III, p. 191.

additional earnings and a 100 percent ELR meaning the household gains nothing from more earnings and sits on the precipice of a benefit cliff.[20]

The severity scale defines an ELR over 100 percent as prohibitive, and this is where benefit cliffs occur, and needless to say, ought to be avoided. ELRs between 75 percent and 100 percent are defined as extreme in severity, having little to no incentive for gaining more income, and would have a significant potential for behavioral changes to avoid the loss. ELRs between 50 percent and 75 percent are defined as high severity with a high potential for behavioral changes to avoid the loss. ELRs between 0 percent and 25 percent are defined as low severity and, in our view, are the ideal target for public policy. ELRs between 25 percent and 50 percent would be the next choice for public policy as being defined as moderate in severity. Negative ELRs are when total benefits exceed earnings. The Earned Income Tax Credit provides an example of a safety-net assistance program where negative ELRs are purposefully used to incentivize work before the credit levels off, which is prior to when it tapers off.

[20] Defining more precisely the impact of ELRs on incentives to work is a ripe area for economic behavioral research.

Table 4

Comparing earnings, full-time equivalent wages, and SNAP benefit at exit with the required earnings, full-time equivalent wage, and full-time equivalent hourly pay raise needed to overcome the SNAP benefit loss for households without disabled or elderly members, assuming an earnings loss rate of 25 percent, Fair Market Rents shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	Description	48 Contiguous States + District of Columbia		Alaska Urban		Alaska Rural 1		Alaska Rural 2		Hawaii	
		At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome
1 member	Earnings	$17,676	$25,956	$22,092	$29,100	$22,092	$32,488	$22,092	$40,428	$20,328	$42,648
	Hourly Wage	$8.50	$12.48	$10.62	$13.99	$10.62	$15.62	$10.62	$19.44	$9.77	$20.50
	Benefit/Pay Raise	$2,070	$3.98	$1,752	$3.37	$2,599	$5.00	$4,584	$8.82	$5,580	$10.73
2 members	Earnings	$23,808	$37,484	$29,760	$44,384	$29,760	$50,928	$29,760	$63,732	$27,384	$64,484
	Hourly Wage	$11.45	$18.02	$14.31	$21.34	$14.31	$24.48	$14.31	$30.64	$13.17	$31.00
	Benefit/Pay Raise	$3,419	$6.58	$3,656	$7.03	$5,292	$10.18	$8,493	$16.33	$9,275	$17.84
3 members	Earnings	$29,940	$48,480	$37,428	$62,436	$37,428	$69,716	$37,428	$86,908	$34,440	$85,212
	Hourly Wage	$14.39	$23.31	$17.99	$30.02	$17.99	$33.52	$17.99	$41.78	$16.56	$40.97
	Benefit/Pay Raise	$4,635	$8.91	$6,252	$12.02	$8,072	$15.52	$12,370	$23.79	$12,693	$24.41
4 members	Earnings	$36,084	$58,280	$45,108	$71,008	$45,108	$81,552	$45,108	$102,108	$41,496	$103,784
	Hourly Wage	$17.35	$28.02	$21.69	$34.14	$21.69	$39.21	$21.69	$49.09	$19.95	$49.90
	Benefit/Pay Raise	$5,549	$10.67	$6,475	$12.45	$9,111	$17.52	$14,250	$27.40	$15,572	$29.95
5 members	Earnings	$42,216	$66,764	$52,776	$78,148	$52,776	$92,012	$52,776	$115,100	$48,564	$120,240
	Hourly Wage	$20.30	$32.10	$25.37	$37.57	$25.37	$44.24	$25.37	$55.34	$23.35	$57.81
	Benefit/Pay Raise	$6,137	$11.80	$6,343	$12.20	$9,809	$18.86	$15,581	$29.96	$17,919	$34.46
6 members	Earnings	$48,348	$78,904	$60,444	$93,220	$60,444	$109,548	$60,444	$135,284	$55,620	$141,316
	Hourly Wage	$23.24	$37.93	$29.06	$44.82	$29.06	$52.67	$29.06	$65.04	$26.74	$67.94
	Benefit/Pay Raise	$7,639	$14.69	$8,194	$15.76	$12,276	$23.61	$18,710	$35.98	$21,424	$41.20
7 members	Earnings	$54,492	$83,836	$68,112	$98,296	$68,112	$120,464	$68,112	$145,016	$62,676	$154,512
	Hourly Wage	$26.20	$40.31	$32.75	$47.26	$32.75	$57.92	$32.75	$69.72	$30.13	$74.28
	Benefit/Pay Raise	$7,336	$14.11	$7,546	$14.51	$13,088	$25.17	$19,226	$36.97	$22,959	$44.15
8 members	Earnings	$60,624	$91,264	$75,780	$109,012	$75,780	$136,900	$75,780	$164,932	$69,732	$174,184
	Hourly Wage	$29.15	$43.88	$36.43	$52.41	$36.43	$65.82	$36.43	$79.29	$33.53	$83.74
	Benefit/Pay Raise	$7,660	$14.73	$8,308	$15.98	$15,280	$29.38	$22,288	$42.86	$26,113	$50.22

Using the Earnings Loss Rate Severity Scale Policy Guide, we can calculate the required earnings to overcome SNAP benefit losses for the households at the exit. Table 4 compares the countable gross income, full-time equivalent hourly wages, and the SNAP benefit amount when a household exits SNAP with the required earnings, full-time equivalent hourly earnings, and pay raise to achieve the earnings required to overcome the loss in the SNAP benefit assuming an ELR of 25 percent. The calculations are consistent with Tables 1 and 2 that assume a household *without* a disabled or elderly member, shelter costs equal to the weighted FMR averages for the states, no other expense deductions, and all gross income coming from earnings. The calculations were based on the SNAP factors effective October 1, 2022, and no participation in the emergency allotment program.

An ELR of 25 percent was chosen because it's the upper limit of the low range, and only the SNAP benefit is being considered. Once taxes and other benefits are considered, the ELR will jump higher. For example, if we choose an ELR of 50 percent, which is the upper limit of the moderate range, the actual ELR would likely fall between high to severe on the ELR Severity Scale Policy Guide once payroll taxes, income taxes, and other benefits were added to the household. The mathematics to calculate the required earnings to overcome the SNAP benefit loss is to simply

multiply the loss by a factor equal to the ELR reciprocal. Thus, for an ELR of 25 percent, its reciprocal equals 4. For example, to get the $25,956 earnings to overcome the benefit loss for a single member household for the 48 contiguous states and the District of Columbia, the SNAP benefit loss of $2,070 is multiplied by 4, which equals $8,280, and this amount is added to the exit earnings of $17,676. If we were to calculate for an ELR of 50 percent, the factor would become 2, and the required wage income would be half as much. However, to repeat the point already made, this would mean a cumulative ELR in the high to extreme ranges once taxes and other benefit programs are added to the household.[21]

Table 4 illustrates the problem of overcoming SNAP benefit cliffs for general households, that is, *without* an elderly or disabled member, assuming a weighted-average FMR. A single person in an Alaska Urban household would require the smallest pay raise to overcome the cliff, which would be a full-time equivalent hourly wage increase of $3.37. It gets worse for every other situation. A four-member household in one of the 48 contiguous states and the District of Columbia would require a full-time equivalent hourly pay raise of $10.67. This jumps to $12.45 in a designated urban area in Alaska, $17.45 in a designated rural 1 area in Alaska, $27.40 in a designated rural 2 area in Alaska, and $29.95 in Hawaii. On the extreme end of the Table, an 8 member household in Hawaii would require a full-time equivalent hourly pay raise of $50.22.

Table 5

Full-time equivalent pay raises required to overcome SNAP benefit losses for households without disabled or elderly members, assuming an earnings loss rate of 25 percent, Fair Market Rents shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	46.8%	31.7%	47.1%	83.0%	109.8%
2 members	57.4%	49.1%	71.1%	114.2%	135.5%
3 members	61.9%	66.8%	86.3%	132.2%	147.4%
4 members	61.5%	57.4%	80.8%	126.4%	150.1%
5 members	58.1%	48.1%	74.3%	118.1%	147.6%
6 members	63.2%	54.2%	81.2%	123.8%	154.1%
7 members	53.9%	44.3%	76.9%	112.9%	146.5%
8 members	50.5%	43.9%	80.7%	117.6%	149.8%

[21] It would be fair to argue that using an ELR of 25 percent is too low and a different benchmark should be used. However, our internal analysis and experience with benefit cliffs show how easily ELRs can become high and extreme in severity when multiple safety-net programs are simultaneously in effect for a household. Therefore, we assumed the more conservative 25 percent. For those who still think it is too low, the remedy to estimate an ELR of 0.5 is simple enough: just divide the required pay raises or require income increases in half. Because of the novelty of using ELRs, we fully expect at some point in time that evidence-based economic research will zero in on the ideal ELR to use.

Examining the impact of benefit cliffs is a relative question. At an individual level—or in the case of SNAP, at a household level—the impact has to do with the ability of the individual or household to overcome the cliff. If the household can increase its earnings (and other income) sufficiently relative to the loss in benefits and taxes, the cliff will have no impact on that specific individual or household. Therefore, as a public policy goal, it would make sense to design a safety-net assistance program in such a manner that it minimizes potential cliffs for most cases, that is, so it becomes relatively easy for most individuals or households to overcome the cliffs with additional earnings. However, Table 5 demonstrates that this is far from the case for SNAP for these households.

Pay raises are typically just a few percentage points. In the aggregate using all wages and salaries published by the Bureau of Labor Statistics,[22] the median increase was 2.6 percent for the twenty years prior to the pandemic. However, this increase includes many individuals who would be income ineligible for SNAP and covers only full-time employees that could skew the data for SNAP participants who typically experience more financial volatility.[23] Moreover, statistical averages can hide the experiences of individuals. Pay raises vary based on a whole host of factors, such as cost of living adjustments due to inflation, macroeconomic conditions, the financial situation of the employer, the estimated value that an employee brings to the job, and labor market supply and demand factors specific to the type of job under consideration. Large pay raises are atypical, often resulting from significant promotions, new careers using more highly demanded skills, or other opportunities that do not come around every day.

Table 5 shows percentage pay raises required to overcome the SNAP benefit losses based on the same assumptions as with Table 4. While it is indeed possible that a household could come upon such increases in their total earnings as found in the table, they do not appear to be likely, and many of them appear to be extremely unlikely. The smallest required increase is 31.7 percent, and on the other end, it is nearly 149.8 percent.

The impact of the potential benefit loss due to increased income is not limited to full-time workers. Benefit losses to income as shown in Table 1 and the required income increases to overcome those losses in Table 5 would apply to part-time workers as well. Moreover, behavioral responses might show up as alterations in hours worked as opposed to foregoing a pay raise. For example, a worker may decide to accept a pay raise but choose to cut back on hours worked

[22] U.S. Bureau of Labor Statistics, series id LEU0252881500, median usual weekly earnings (second quartile), Employed full time, Wage and salary workers, in current dollars.

[23] Jennifer Romich and Heather D. Hill, "Income Instability and Income Support Programs: Recommendations for Policy and Practice," *Family Self-Sufficiency and Stability Research Consortium*, Mathematica, May 1, 2017 (https://mathematica.org/publications/income-instability-and-income-support-programs-recommendations-for-policy-and-practice) ; Jonathan Morduch and Julie Siwicki, "In and Out of Poverty: Episodic Poverty and Income Volatility in the US Financial Diaries," *Social Service Review*, Volume 91, Number 3, September 2017.

to avoid the loss in benefits. Alternatively, if available as an option and feasible for a worker's situation, he or she might choose to increase worked hours, including working overtime, to overcome the benefit loss. However, especially among the more extreme cases such as for Hawaii and most of Alaska Rural 2, it would be nearly impossible for a full-time worker to add the number of work hours to overcome the benefit loss unless the worker received time-and-a-half or double-time overtime pay. Using a four-member household in Hawaii with a sole full-time worker earning income as an illustration, it would require 60 overtime hours at regular pay, 40 hours at time-and-a-half pay, or 30 hours at double pay. Finally, households with multiple wage earners would have an advantage of spreading the burden of working the additional hours among the wage earners.

Table 6

Potential SNAP benefit loss to countable gross income at the exit point for households without disabled or elderly members for the unusual cases of having no shelter costs, no expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	-1.6%	-1.5%	-5.7%	-11.0%	-12.6%
2 members	-4.9%	-6.0%	-13.1%	-20.3%	-22.8%
3 members	-8.0%	-8.8%	-16.9%	-25.1%	-28.1%
4 members	-9.2%	-9.8%	-18.4%	-27.0%	-30.2%
5 members	-9.6%	-9.9%	-18.6%	-27.4%	-30.7%
6 members	-11.2%	-11.1%	-20.2%	-29.4%	-33.1%
7 members	-10.3%	-10.3%	-19.2%	-28.2%	-31.8%
8 members	-11.0%	-11.0%	-20.2%	-29.4%	-33.1%

So far, we have examined cases using weighted average FMRs for households *without* a disabled or elderly member. Table 6 shows what happens to the SNAP benefit loss relative to countable gross income at the exit point if we assume *no* shelter costs at all. By removing the variability in shelter costs, these calculations equalize the results for all 48 contiguous and the District of Columbia and give us a near minimum of what SNAP benefit cliffs could be. These scenarios are less likely to occur because most households have some shelter costs or other expense deductions. Nevertheless, the revised assumptions ease the benefit losses to income with respect to assuming shelter costs, but they are all over the target of 0.5 percent of benefit loss to income. The purpose of running these scenarios is to demonstrate that even for unlikely scenarios, there is still a SNAP benefit cliff problem.

Table 7

Comparing earnings, full-time equivalent wages, and SNAP benefits at exit with the required earnings, full-time equivalent wages, and full-time equivalent hourly pay raises needed to overcome the SNAP benefit loss for households without disabled or elderly members, assuming an earnings loss rate of 25 percent with no shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	Description	48 Contiguous States + District of Columbia		Alaska Urban		Alaska Rural 1		Alaska Rural 2		Hawaii	
		At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome
1 member	Earnings	$17,676	$18,780	$22,092	$23,436	$22,092	$27,136	$22,092	$31,792	$20,328	$30,552
	Hourly Wage	$8.50	$9.03	$10.62	$11.27	$10.62	$13.05	$10.62	$15.28	$9.77	$14.69
	Benefit/Pay Raise	$276	$0.53	$336	$0.65	$1,261	$2.43	$2,425	$4.66	$2,556	$4.92
2 members	Earnings	$23,808	$28,496	$29,760	$36,852	$29,760	$45,396	$29,760	$53,940	$27,384	$52,388
	Hourly Wage	$11.45	$13.70	$14.31	$17.72	$14.31	$21.83	$14.31	$25.93	$13.17	$25.19
	Benefit/Pay Raise	$1,172	$2.25	$1,773	$3.41	$3,909	$7.52	$6,045	$11.63	$6,251	$12.02
3 members	Earnings	$29,940	$39,496	$37,428	$50,552	$37,428	$62,744	$37,428	$74,984	$34,440	$73,116
	Hourly Wage	$14.39	$18.99	$17.99	$24.30	$17.99	$30.17	$17.99	$36.05	$16.56	$35.15
	Benefit/Pay Raise	$2,389	$4.59	$3,281	$6.31	$6,329	$12.17	$9,389	$18.06	$9,669	$18.59
4 members	Earnings	$36,084	$49,292	$45,108	$62,812	$45,108	$78,268	$45,108	$93,868	$41,496	$91,688
	Hourly Wage	$17.35	$23.70	$21.69	$30.20	$21.69	$37.63	$21.69	$45.13	$19.95	$44.08
	Benefit/Pay Raise	$3,302	$6.35	$4,426	$8.51	$8,290	$15.94	$12,190	$23.44	$12,548	$24.13
5 members	Earnings	$42,216	$58,496	$52,776	$73,628	$52,776	$92,012	$52,776	$110,540	$48,564	$108,144
	Hourly Wage	$20.30	$28.12	$25.37	$35.40	$25.37	$44.24	$25.37	$53.14	$23.35	$51.99
	Benefit/Pay Raise	$4,070	$7.83	$5,213	$10.03	$9,809	$18.86	$14,441	$27.77	$14,895	$28.64
6 members	Earnings	$48,348	$69,920	$60,444	$87,328	$60,444	$109,360	$60,444	$131,584	$55,620	$129,220
	Hourly Wage	$23.24	$33.62	$29.06	$41.98	$29.06	$52.58	$29.06	$63.26	$26.74	$62.13
	Benefit/Pay Raise	$5,393	$10.37	$6,721	$12.93	$12,229	$23.52	$17,785	$34.20	$18,400	$35.38
7 members	Earnings	$54,492	$76,932	$68,112	$96,084	$68,112	$120,468	$68,112	$144,996	$62,676	$142,416
	Hourly Wage	$26.20	$36.99	$32.75	$46.19	$32.75	$57.92	$32.75	$69.71	$30.13	$68.47
	Benefit/Pay Raise	$5,610	$10.79	$6,993	$13.45	$13,089	$25.17	$19,221	$36.96	$19,935	$38.34
8 members	Earnings	$60,624	$87,308	$75,780	$109,012	$75,780	$136,900	$75,780	$164,932	$69,732	$162,088
	Hourly Wage	$29.15	$41.98	$36.43	$52.41	$36.43	$65.82	$36.43	$79.29	$33.53	$77.93
	Benefit/Pay Raise	$6,671	$12.83	$8,308	$15.98	$15,280	$29.38	$22,288	$42.86	$23,089	$44.40

Table 7 shows the required earnings to overcome SNAP benefit losses for the households at exit assuming an ELR of 25 percent with the same assumptions used for Table 6, which are households *without* a disabled or elderly member, no shelter costs, no expense deductions, and all income coming from earnings. The effective date for the SNAP factors is October 1, 2022. Specifically, Table 7 compares the gross income, full-time equivalent hourly wages, and the SNAP benefit when a household exits SNAP with the earnings, full-time equivalent hourly earnings, and pay raise to achieve the required to overcome the loss in the SNAP benefit.

The calculations in Table 7 (assuming no excess shelter expenses) show the same exit earnings as Table 4 that assumed a weighted-average FMR. The reason why is because the gross income limit truncates the tapering before it can run its full course. However, the results are different when it comes to the size of the benefit cliffs. The benefits upon exit are smaller due to having no shelter costs that eliminates the no excess shelter expense deduction. These lower SNAP benefits mean smaller benefit cliffs, but, as can be seen, it does not eliminate them.

Table 8

Full-time equivalent pay raises required to overcome SNAP benefit losses for households without disabled or elderly members, assuming an earnings loss rate of 25 percent, no shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	6.2%	6.1%	22.8%	43.9%	50.3%
2 members	19.7%	23.8%	52.5%	81.3%	91.3%
3 members	31.9%	35.1%	67.6%	100.3%	112.3%
4 members	36.6%	39.2%	73.5%	108.1%	121.0%
5 members	38.6%	39.5%	74.3%	109.5%	122.7%
6 members	44.6%	44.5%	80.9%	117.7%	132.3%
7 members	41.2%	41.1%	76.9%	112.9%	127.2%
8 members	44.0%	43.9%	80.7%	117.6%	132.4%

When compared to Table 5, the full-time equivalent pay raises required to overcome the SNAP benefit losses for households *without* disabled or elderly members are significantly less for the less likely scenario of removing shelter costs, as shown in Table 8. However, most increases require double digit percentage pay raises assuming earnings loss rates of 25 percent, and many households in Alaska Rural 2 and Hawaii have percentage increases over 100 percent. Only one-member households in urban Alaska, the 48 contiguous states, and the District of Columbia have percentages in the single digits that could be more easily overcome, but even these are about 6 percent, which will still be above many pay raises. Therefore, even for the less likely cases where the household does not have shelter costs or expense deductions, the burden to overcome the SNAP benefits cliffs is still high for most households *without* a disabled or elderly member.

Households with disabled or elderly members

Households *with* disabled persons or elderly persons (defined as age 60 or older) are treated differently by SNAP rules in three ways. First, there is no gross income limit, which often results in the termination of benefits for households *without* disabled or elderly members before the tapering can run its full course. However, both household types—those *with* and those *without* disabled and elderly members—are subject to a net income limit, which often causes benefit cliffs for households *with* disabled or elderly members, and sometimes for households *without* disabled or elderly members.

Second, households *with* disabled or elderly persons are not subject to a maximum for the excess shelter expense deduction, which not only allows for higher deductions before the tapering of benefits but also, as will be explained later, changes the tapering slope. Third, households *with* disabled or elderly members may deduct medical expenses above $35 per month. In combination, these households usually exit the program at higher incomes, which can be much higher, and the benefit cliffs are typically less.

Table 9

Potential SNAP benefit loss to gross income at the exit point for households with disabled or elderly members assuming Fair Market Rents shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	-1.1%	-1.1%	-1.5%	-4.7%	-5.2%
2 members	-2.1%	-2.3%	-8.3%	-13.1%	-12.8%
3 members	-4.8%	-5.1%	-12.3%	-17.8%	-16.0%
4 members	-6.6%	-6.9%	-15.2%	-21.6%	-19.6%
5 members	-7.4%	-7.8%	-16.4%	-23.7%	-22.0%
6 members	-8.7%	-9.2%	-18.4%	-26.5%	-23.7%
7 members	-8.6%	-9.0%	-17.8%	-26.5%	-24.3%
8 members	-9.8%	-10.0%	-19.0%	-28.0%	-26.8%

Table 10

Comparing earnings, full-time equivalent wages, and SNAP benefits at exit with the required earnings, full-time equivalent wages, and full-time equivalent hourly pay raises needed to overcome the SNAP benefit loss for households with disabled or elderly members, assuming earnings loss rates of 25 percent, Fair Market Rents shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	Description	48 Contiguous States + District of Columbia		Alaska Urban		Alaska Rural 1		Alaska Rural 2		Hawaii	
		At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome
1 member	Earnings	$26,055	$27,159	$29,420	$30,764	$28,540	$30,268	$30,820	$36,588	$33,730	$40,790
	Hourly Wage	$12.53	$13.06	$14.14	$14.79	$13.72	$14.55	$14.82	$17.59	$16.22	$19.61
	Benefit/Pay Raise	$276	$0.53	$336	$0.65	$432	$0.83	$1,442	$2.77	$1,765	$3.39
2 members	Earnings	$32,485	$35,277	$37,530	$40,966	$36,140	$48,120	$39,100	$59,624	$43,260	$65,364
	Hourly Wage	$15.62	$16.96	$18.04	$19.70	$17.38	$23.13	$18.80	$28.67	$20.80	$31.43
	Benefit/Pay Raise	$698	$1.34	$859	$1.65	$2,995	$5.76	$5,131	$9.87	$5,526	$10.63
3 members	Earnings	$40,785	$48,657	$48,030	$57,774	$44,620	$66,556	$48,060	$82,236	$56,350	$92,378
	Hourly Wage	$19.61	$23.39	$23.09	$27.78	$21.45	$32.00	$23.11	$39.54	$27.09	$44.41
	Benefit/Pay Raise	$1,968	$3.78	$2,436	$4.68	$5,484	$10.55	$8,544	$16.43	$9,007	$17.32
4 members	Earnings	$44,715	$56,479	$52,940	$67,564	$49,530	$79,610	$52,970	$98,650	$60,870	$108,678
	Hourly Wage	$21.50	$27.15	$25.45	$32.48	$23.81	$38.27	$25.47	$47.43	$29.26	$52.25
	Benefit/Pay Raise	$2,941	$5.66	$3,656	$7.03	$7,520	$14.46	$11,420	$21.96	$11,952	$22.98
5 members	Earnings	$49,125	$63,725	$57,860	$75,912	$55,695	$92,127	$57,890	$112,854	$65,400	$122,860
	Hourly Wage	$23.62	$30.64	$27.82	$36.50	$26.78	$44.29	$27.83	$54.26	$31.44	$59.07
	Benefit/Pay Raise	$3,650	$7.02	$4,513	$8.68	$9,108	$17.52	$13,741	$26.43	$14,365	$27.63
6 members	Earnings	$56,540	$76,172	$66,290	$90,650	$63,075	$109,463	$64,770	$133,386	$75,430	$146,830
	Hourly Wage	$27.18	$36.62	$31.87	$43.58	$30.32	$52.63	$31.14	$64.13	$36.26	$70.59
	Benefit/Pay Raise	$4,908	$9.44	$6,090	$11.71	$11,597	$22.30	$17,154	$32.99	$17,850	$34.33
7 members	Earnings	$60,470	$81,210	$71,200	$96,936	$70,440	$120,560	$70,440	$145,084	$79,960	$157,748
	Hourly Wage	$29.07	$39.04	$34.23	$46.60	$33.87	$57.96	$33.87	$69.75	$38.44	$75.84
	Benefit/Pay Raise	$5,185	$9.97	$6,434	$12.37	$12,530	$24.10	$18,661	$35.89	$19,447	$37.40
8 members	Earnings	$64,400	$89,608	$77,820	$109,096	$77,820	$136,980	$77,820	$165,012	$84,480	$175,152
	Hourly Wage	$30.96	$43.08	$37.41	$52.45	$37.41	$65.86	$37.41	$79.33	$40.62	$84.21
	Benefit/Pay Raise	$6,302	$12.12	$7,819	$15.04	$14,790	$28.44	$21,798	$41.92	$22,668	$43.59

Table 9 shows the percent SNAP benefit loss to gross income at the exit point for households *with* disabled or elderly members. It assumes weighted averages of Fair Market Rent for shelter costs, no other expense deductions, and all income coming from earnings using SNAP factors effective October 1, 2022. As with all prior tables, it assumes that the pandemic emergency allotment waiver is not being applied. The percentages are far better than those for households *without* a disabled or elderly member, but they are still all above the 0.5 percent benchmark. Especially for larger household sizes, Hawaii, and the rural areas of Alaska, they are still very problematic.

Table 10 provides earnings, hourly wage, and SNAP benefit at exit for households *with* disabled or elderly members. It also provides the earnings, hourly wage, and pay raise required to overcome the loss in SNAP benefits. The results are again better than those for households *without* disabled or elderly members. First, the earning levels at the exit point are thousands of dollars more—ranging from $2,040 to $21,901—compared to Table 4. The reason is twofold. There is no gross income limit for households *with* disabled or elderly members. This moves the exit point further up the income range. In fact, they can be even higher in the income range than displayed in Table 10 because our computer run only included shelter costs, leaving the other deductions zeroed out. These other deductions—dependent care costs, medical expenses, and child support payments— have no statutory limits and could shift the exit income out even further.

Second, the pay raise requirements for households *with* disabled or elderly members are less severe, and appear to be more manageable for one-member households in Alaska Urban, Alaska Rural 1, the 48 contiguous states, and the District of Columbia. The actual impact on the households will vary based on each household's shelter costs. Table 10 assumes weighted average FMRs as published by HUD.

Table 11

Full-time equivalent pay raises required to overcome SNAP benefit losses for households with disabled or elderly members, assuming an earnings loss rate of 25 percent, Fair Market Rents shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	4.2%	4.6%	6.1%	18.7%	20.9%
2 members	8.6%	9.2%	33.1%	52.5%	51.1%
3 members	19.3%	20.3%	49.2%	71.1%	63.9%
4 members	26.3%	27.6%	60.7%	86.2%	78.5%
5 members	29.7%	31.2%	65.4%	94.9%	87.9%
6 members	34.7%	36.7%	73.5%	105.9%	94.7%
7 members	34.3%	36.1%	71.2%	106.0%	97.3%
8 members	39.1%	40.2%	76.0%	112.0%	107.3%

Table 11 shows the required pay raises to overcome cliffs for households *with* disabled or elderly members assuming an ELR of 25 percent, FMRs for shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver. These are better than the percentages for households *without* disabled or elderly members found in Table 5, but they are still high with most being double digit percentage increases. It shows them to be possibly manageable for one-member households in urban Alaska, the 48 contiguous states, and the District of Columbia, requiring pay raises of less than 5 percent. The only other SNAP benefit cliff in Table 11 that would be more easily overcome is one-member households in Alaska Rural 1 that requires about a 6 percent income increase.

Table 12

Potential SNAP benefit loss to countable gross income at the exit point for households with disabled or elderly members for the unusual cases of having no shelter costs, no expense deductions, all income coming from earnings, SNAP factors effective October 1, 2022, and no emergency allotment waiver.

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	-1.4%	-1.3%	-1.6%	-5.5%	-7.5%
2 members	-2.7%	-2.6%	-8.9%	-15.3%	-18.2%
3 members	-6.2%	-5.9%	-13.4%	-20.9%	-24.2%
4 members	-7.8%	-7.6%	-15.6%	-23.6%	-27.2%
5 members	-8.3%	-8.1%	-16.4%	-24.7%	-28.3%
6 members	-9.7%	-9.7%	-18.4%	-27.2%	-30.8%
7 members	-9.2%	-9.1%	-17.8%	-26.5%	-30.1%
8 members	-10.1%	-10.0%	-19.0%	-28.0%	-31.7%

Table 13

Comparing earnings, full-time equivalent wages, and SNAP benefits at exit with the required earnings, full-time equivalent wages, and full-time equivalent hourly pay raises needed to overcome the SNAP benefit loss for households with disabled or elderly members, assuming no shelter costs, no other expense deductions, all income coming from earnings, SNAP factors effective on October 1, 2022, and no emergency allotment waiver.

Household Size	Description	48 Contiguous States + District of Columbia		Alaska Urban		Alaska Rural 1		Alaska Rural 2		Hawaii	
		At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome	At Exit	Needed to overcome
1 member	Earnings	$19,890	$20,994	$26,190	$27,534	$26,190	$27,918	$26,190	$31,958	$23,625	$30,685
	Hourly Wage	$9.56	$10.09	$12.59	$13.24	$12.59	$13.42	$12.59	$15.36	$11.36	$14.75
	Benefit/Pay Raise	$276	$0.53	$336	$0.65	$432	$0.83	$1,442	$2.77	$1,765	$3.39
2 members	Earnings	$25,785	$28,577	$33,570	$37,006	$33,570	$45,550	$33,570	$54,094	$30,405	$52,509
	Hourly Wage	$12.40	$13.74	$16.14	$17.79	$16.14	$21.90	$16.14	$26.01	$14.62	$25.24
	Benefit/Pay Raise	$698	$1.34	$859	$1.65	$2,995	$5.76	$5,131	$9.87	$5,526	$10.63
3 members	Earnings	$31,695	$39,567	$40,950	$50,694	$40,950	$62,886	$40,950	$75,126	$37,200	$73,228
	Hourly Wage	$15.24	$19.02	$19.69	$24.37	$19.69	$30.23	$19.69	$36.12	$17.88	$35.21
	Benefit/Pay Raise	$1,968	$3.78	$2,436	$4.68	$5,484	$10.55	$8,544	$16.43	$9,007	$17.32
4 members	Earnings	$37,590	$49,354	$48,315	$62,939	$48,315	$78,395	$48,315	$93,995	$43,980	$91,788
	Hourly Wage	$18.07	$23.73	$23.23	$30.26	$23.23	$37.69	$23.23	$45.19	$21.14	$44.13
	Benefit/Pay Raise	$2,941	$5.66	$3,656	$7.03	$7,520	$14.46	$11,420	$21.96	$11,952	$22.98
5 members	Earnings	$43,965	$58,565	$55,695	$73,747	$55,695	$92,131	$55,695	$110,659	$50,775	$108,235
	Hourly Wage	$21.14	$28.16	$26.78	$35.46	$26.78	$44.29	$26.78	$53.20	$24.41	$52.04
	Benefit/Pay Raise	$3,650	$7.02	$4,513	$8.68	$9,109	$17.52	$13,741	$26.43	$14,365	$27.63
6 members	Earnings	$50,370	$70,002	$63,075	$87,435	$63,075	$109,467	$63,075	$131,691	$57,915	$129,315
	Hourly Wage	$24.22	$33.65	$30.32	$42.04	$30.32	$52.63	$30.32	$63.31	$27.84	$62.17
	Benefit/Pay Raise	$4,908	$9.44	$6,090	$11.71	$11,598	$22.30	$17,154	$32.99	$17,850	$34.33
7 members	Earnings	$56,265	$77,005	$70,440	$96,176	$70,440	$120,560	$70,440	$145,088	$64,710	$142,498
	Hourly Wage	$27.05	$37.02	$33.87	$46.24	$33.87	$57.96	$33.87	$69.75	$31.11	$68.51
	Benefit/Pay Raise	$5,185	$9.97	$6,434	$12.37	$12,530	$24.10	$18,662	$35.89	$19,447	$37.40
8 members	Earnings	$62,160	$87,368	$77,820	$109,096	$77,820	$136,984	$77,820	$165,016	$71,490	$162,162
	Hourly Wage	$29.88	$42.00	$37.41	$52.45	$37.41	$65.86	$37.41	$79.33	$34.37	$77.96
	Benefit/Pay Raise	$6,302	$12.12	$7,819	$15.04	$14,791	$28.44	$21,799	$41.92	$22,668	$43.59

Somewhat surprising, removing all shelter costs from households *with* disabled or elderly members does not make SNAP benefit cliffs better. They make them worse. Table 12 shows SNAP benefits to income at the exit point assuming no shelter costs, the only factor changed when compared to Table 9. For every case, the percentages are higher. This dynamic is the opposite effect for households *without* disabled or elderly members where all percentages were lower. The reason has to do with the fact that shelter costs impact not just the tapering point but also the benefit reduction rate.[24]

Table 13 can help us understand why removing a deduction makes it worse. What happens in most every case is that the exit income is reduced, but the benefit amount remains the same,

[24] As will be shown later, the excess shelter expense deduction increases the benefits reduction rate (BRR), impacting how quickly benefits taper with increased income. With shelter costs, the excess shelter expense deduction is in play, and BRRs range from 36 percent to 45 percent, causing benefits to taper more quickly. Without shelter costs, BRRs range between 24 percent and 30 percent, causing benefits to taper more slowly with increased income.

causing the percentage loss to income to go up.[25] The exit income reduces because there is no excess shelter expense deduction, which starts the tapering of benefits at a lower gross income level. The benefit amount at exit is determined by the net income limit that starts at the tapering point. Therefore, starting at a lower or higher tapering point does not change the benefit amount at exit. The reason households *without* disabled or elderly have the opposite effect (where lower expense deductions lead to lower benefit cliffs) is because the gross income limit does not shift with less deductions. Instead, having less deductions means that the tapering will start at lower income levels, allowing for more tapering before hitting the gross income limit, which is independent of the tapering point and the tapering.

Table 14

Full-time equivalent pay raises required to overcome SNAP benefit losses for households with disabled or elderly members, assuming earnings loss rate of 25 percent, no shelter costs, no other expense deductions, all income is earnings, SNAP factors effective October 1, 2022, and assuming no emergency allotment waiver.

Household Size	48 Contiguous States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	5.6%	5.1%	6.6%	22.0%	29.9%
2 members	10.8%	10.2%	35.7%	61.1%	72.7%
3 members	24.8%	23.8%	53.6%	83.5%	96.8%
4 members	31.3%	30.3%	62.3%	94.5%	108.7%
5 members	33.2%	32.4%	65.4%	98.7%	113.2%
6 members	39.0%	38.6%	73.6%	108.8%	123.3%
7 members	36.9%	36.5%	71.2%	106.0%	120.2%
8 members	40.6%	40.2%	76.0%	112.0%	126.8%

Compared to households with shelter costs, all cases without shelter costs require higher percentage pay raises to overcome the SNAP benefit cliffs,[26] but the differences are not that great. Table 14 displays these revised percentages. Only one-member households in the 48 contiguous states and D.C., Alaska Urban, and Alaska Rural 1, have required income increase percentages in the single digits, but all are above 5 percent and above the benchmark of 2 percent. All other cases require much higher pay raises assuming an earnings loss rate of 25 percent.

[25] The exceptions to this pattern are all in Alaska: urban household size 8, rural 1 household sizes 5 through 8, and rural 2 household sizes 7 and 8. The reason for the exceptions is technical due to the mathematics of the tapering slope. In short, the excess shelter expense deduction increases the benefit reduction rate until the deduction is exhausted due to higher income. This causes a kinked tapering line. Should the net income limit hit after the kink point in that line, then the exit income is the same. The seven Alaska cases are the only times that this happened for the computational analysis.

[26] The exceptions again are the seven cases for Alaska, and for the same reasons explained in the prior footnote.

Record High Benefit Cliffs During the COVID-19 Pandemic

For the COVID-19 Pandemic, Section 2302 of the Families First Coronavirus Response Act[27] created an emergency allotment program whereby the states[28] could request and receive permission to award all SNAP households an emergency allotment equal to the difference between the maximum allotment and the allotment per non-emergency rules in determining the amount of the benefit. This program initially had the effect of awarding every household, no matter what the income of the household, the maximum allowable SNAP benefit, which, unsurprisingly, also created historically high benefit cliffs.

The act established the duration of the emergency allotment program to coincide with the duration of the officially declared COVID-19 emergency, but the Consolidated Appropriations Act of 2023 ended the program with the February 2023 emergency allotment issuance.[29] According to a Food and Nutrition Service (FNS) webpage dedicated to the emergency allotment program,[30] all states and the District of Columbia initially participated in the emergency allotment program. When the program terminated at the end of February 2023, 32 states and the District of Columbia were still participating, accounting for 74 percent of the U.S. population and 76 percent of all persons participating in SNAP.[31]

Since the start of the pandemic, the maximum allotment—that is, the effective allotment for every SNAP household with the issuance of the emergency allotment—was increased four times plus a minimum emergency allotment was added that increased the benefit above the maximum allotment for many households. As illustrated in Chart 1, the cumulative increases in the SNAP maximum allotments ranged from 45 percent to 51 percent in three years, depending on the area. FNS issued its regular cost of living adjustment on October 1, 2020, which was 5 percent

[27] Public Law 116–127—March 18, 2020.
[28] Technically, the governing statute of SNAP defines state to include not just the fifty states but the District of Columbia, Guam, the Virgin Islands, and Indian tribal organizations that meet the requirements of a state agency, 7 U.S. Code § 2012.
[29] Division HH, Title IV, Section 503 of Public Law 117–328—December 29, 2022.
[30] Food and Nutrition Service, U.S. Department of Agriculture, "SNAP COVID-19 Emergency Allotments Guidance webpage," accessed May 10, 2023: https://www.fns.usda.gov/snap/covid-19-emergency-allotments-guidance.
[31] The percentages exclude U.S. territories. FNS lists the District of Columbia and the following states as participating in February 2023: Alabama, California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Kansas, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Nevada, New Hampshire, New Jersey, New Mexico, New York, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, Texas, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin. FNS lists these states as not participating in February 2023, most of which had not extended participation months earlier: Alaska, Arizona, Arkansas, Florida, Georgia, Idaho, Indiana, Iowa, Kentucky, Mississippi, Missouri, Montana, Nebraska, North Dakota, South Carolina, South Dakota, Tennessee, and Wyoming. Having terminated with the January 2023 issuance, South Carolina is the exception.

for all areas. The Consolidated Appropriations Act of 2021[32] increased the maximum allotments by 15 percent for the first six months of 2021. Three months later, the American Rescue Plan Act of 2021[33] extended the 15 percent increase until September 30, 2021. When the Department of Agriculture came out with its annual cost of living adjustment for the new fiscal year, it was coupled with a major adjustment to the Thrifty Food Plan,[34] which is the basis for the maximum allotments. Despite the expiration of the temporary 15 percent increase in the maximum allotment, the revised allotments more than offset the loss. The annual increases—calculated from the prior year—were 22.9 percent for the 48 contiguous states and the District of Columbia, 28.3 percent for Alaska, and 25.7 percent for Hawaii. The following year—for the Federal Fiscal Year starting October 1, 2022, the 48 contiguous states and D.C. received a 12.5 percent increase, Alaska received a 9.1 percent increase, and Hawaii received a 14.1 percent increase.

Chart 1

SNAP maximum allotment increases during the COVID-19 pandemic. These amounts exclude the additional $1,140 minimum emergency allotments received by many households after April 1, 2021.

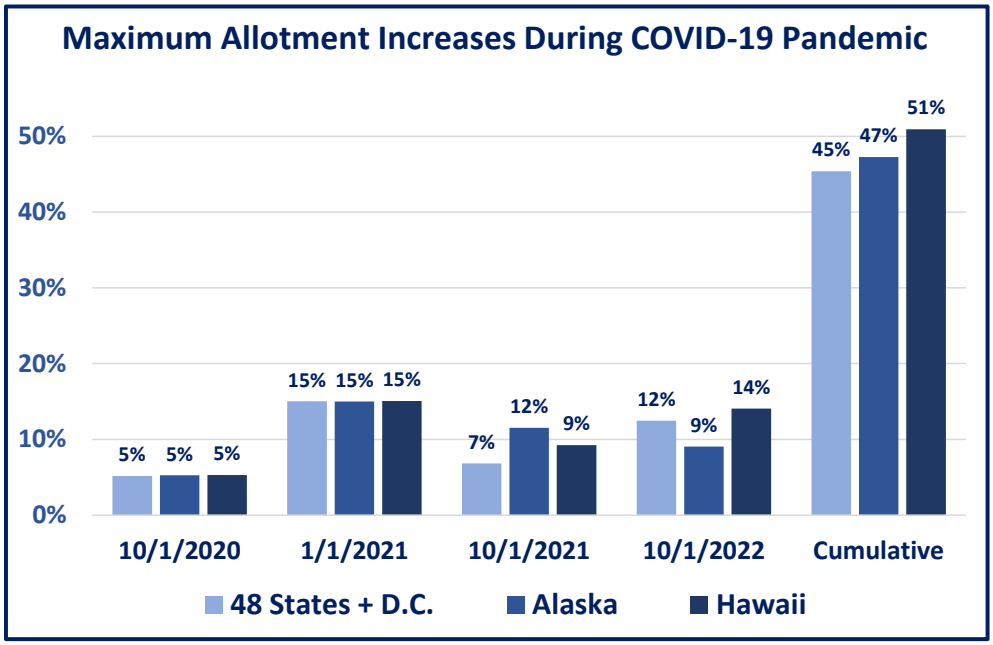


Chart 2 illustrates the impact of minimum emergency allotment using the example of a three member household in the 48 contiguous states and D.C. On April 1, 2021, FNS revised its guidelines for the emergency allotment program by reinterpreting the language of the Families First Coronavirus Response Act to allow for households to receive allotments above the

[32] Public Law 116-260—December 27, 2020.
[33] Public Law 117-2—March 11, 2021.
[34] The adjustment was the first reevaluation to be done every five years as mandated by the 2018 Farm Bill, Public Law 115–334—December 20, 2018.

maximum SNAP allotment.[35] The new guidelines established a minimum $95 monthly emergency allotment for all households, which annualizes to $1,140 per year. For a household *with* a disabled or elderly member—assuming a weighted average Fair Market Rent, no other expense deductions, and all income coming from earnings for a state participating in the emergency allotment program in one of the 48 contiguous states or D.C—would have received a total $835 a month, or $10,020 annualized, in SNAP benefits from zero income up to the normal tapering point at $21,585 in countable gross income, which was above the maximum allotment of $740 per month (or $8,880 annualized). At incomes above the tapering point, the benefit amount sloped downwards to an income of $24,752 where it received the maximum allotment until the household exited the program at $40,785 when the income reached the net income limit of $23,040. This household would have required income of $76,305 to overcome the SNAP benefit cliff using an ELR of 25 percent, requiring a $35,520 increase in income, or an $17.08 increase in an equivalent full-time hourly wage.

[35] Food and Nutrition Service, U.S. Department of Agriculture, SNAP Emergency Allotment Determination Memo, April 1, 2021 (https://www.fns.usda.gov/sites/default/files/resource-files/fns-determination-regarding-enhanced-emergency-allotments.pdf) and FNS, Revised SNAP Emergency Allotments Guidelines, April 1, 2012 (https://fns-prod.azureedge.us/sites/default/files/resource-files/snap-covid-emergency-allotments-phase-3-guidance.pdf).

Chart 2

Illustration of the impact of the minimum emergency allotment effective February 2023 for three member household with a disabled or elderly member in the 48 contiguous states and the District of Columbia participating in the emergency allotment program, assuming Fair Market Rent for shelter costs, no other expense deductions, and all income coming from earnings. Dollars are annualized, not monthly, for illustration purposes.

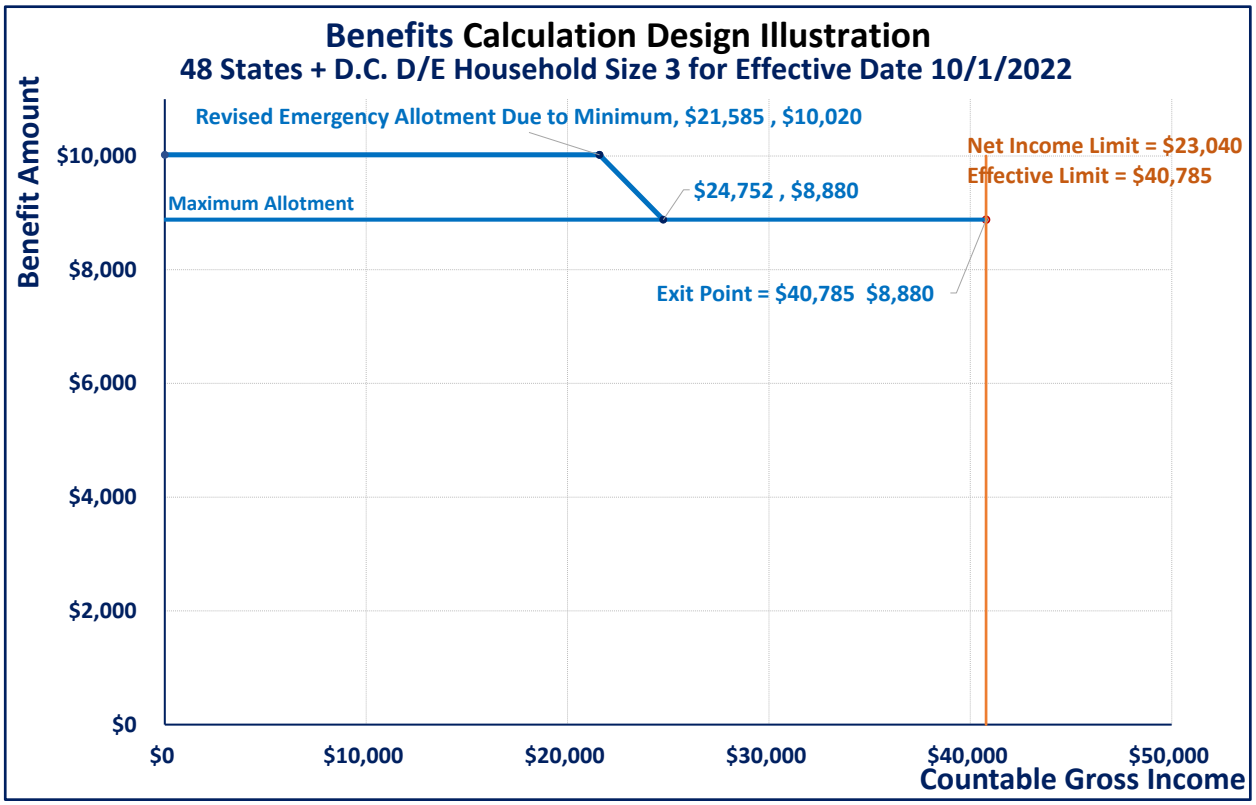


Table 15 demonstrates the record and extremely high SNAP benefit cliffs created by the emergency allotment program for households *without* disabled or elderly members. Because of the gross income limit and the emergency allotments, the results were the same for households with or without shelter costs. The data for Alaska effective October 1, 2022, are grayed out because Alaska did not participate in the emergency allotment program after that date, but the table shows what it would have been had Alaska participated.

The required percentage increases in earnings to overcome the SNAP cliffs across the board were extremely high, assuming earnings loss rates of 25 percent, and as the pandemic progressed over the three years, the percentages increased significantly. By effective date October 1, 2022, most household sizes required increases over 100 percent, and some even over 200 percent, requiring a doubling or even tripling of income.

Table 15

Full-time equivalent pay raises required to overcome SNAP benefit losses for households without disabled or elderly members using an earnings loss rate of 25 percent during the years of the COVID-19 pandemic assuming the state participates in the emergency allotment program. Alaska did not participate in the program after 10/1/2022.

Household Size	Effective Date	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	10/1/2019	57.3%	56.3%	72.0%	87.6%	91.4%
	10/1/2020	59.0%	58.1%	74.1%	90.3%	94.3%
	1/1/2021	67.7%	66.9%	85.2%	103.7%	108.6%
	10/1/2021	71.6%	73.9%	94.3%	114.7%	124.0%
	10/1/2022	76.3%	76.3%	97.3%	118.4%	149.5%
2 members	10/1/2019	77.5%	76.3%	97.5%	118.6%	124.0%
	10/1/2020	80.1%	78.8%	100.6%	122.5%	128.1%
	1/1/2021	92.1%	90.8%	115.6%	140.8%	147.4%
	10/1/2021	97.2%	100.2%	127.7%	155.5%	159.4%
	10/1/2022	104.0%	103.9%	132.6%	161.3%	173.0%
3 members	10/1/2019	88.1%	86.8%	110.6%	134.7%	140.8%
	10/1/2020	90.9%	89.6%	114.3%	139.2%	145.7%
	1/1/2021	104.7%	103.1%	131.5%	160.0%	167.6%
	10/1/2021	110.6%	113.8%	145.1%	176.6%	181.1%
	10/1/2022	118.6%	118.4%	150.9%	183.6%	196.9%
4 members	10/1/2019	92.6%	91.3%	116.4%	141.6%	148.2%
	10/1/2020	95.8%	94.4%	120.4%	146.6%	153.4%
	1/1/2021	110.2%	108.6%	138.4%	168.5%	176.4%
	10/1/2021	116.3%	119.7%	152.6%	185.7%	190.6%
	10/1/2022	124.9%	124.7%	159.0%	193.6%	207.5%
5 members	10/1/2019	94.0%	92.5%	117.9%	143.6%	150.2%
	10/1/2020	97.1%	95.8%	122.1%	148.6%	155.6%
	1/1/2021	111.8%	110.1%	140.5%	171.0%	179.0%
	10/1/2021	118.0%	121.4%	154.8%	188.3%	193.2%
	10/1/2022	126.9%	126.5%	161.3%	196.5%	210.6%
6 members	10/1/2019	98.3%	96.8%	123.5%	150.3%	157.3%
	10/1/2020	101.8%	100.3%	127.8%	155.6%	162.9%
	1/1/2021	117.0%	115.3%	147.1%	179.0%	187.4%
	10/1/2021	123.5%	127.1%	162.0%	197.2%	202.3%
	10/1/2022	132.9%	132.6%	169.1%	205.8%	220.7%

Chart 3

Illustration of exit point for a one-member Hawaiian household without disabled or elderly members during the COVID-19 Pandemic SNAP effective date October 1, 2021, per the emergency allotment program with the minimum emergency allotment

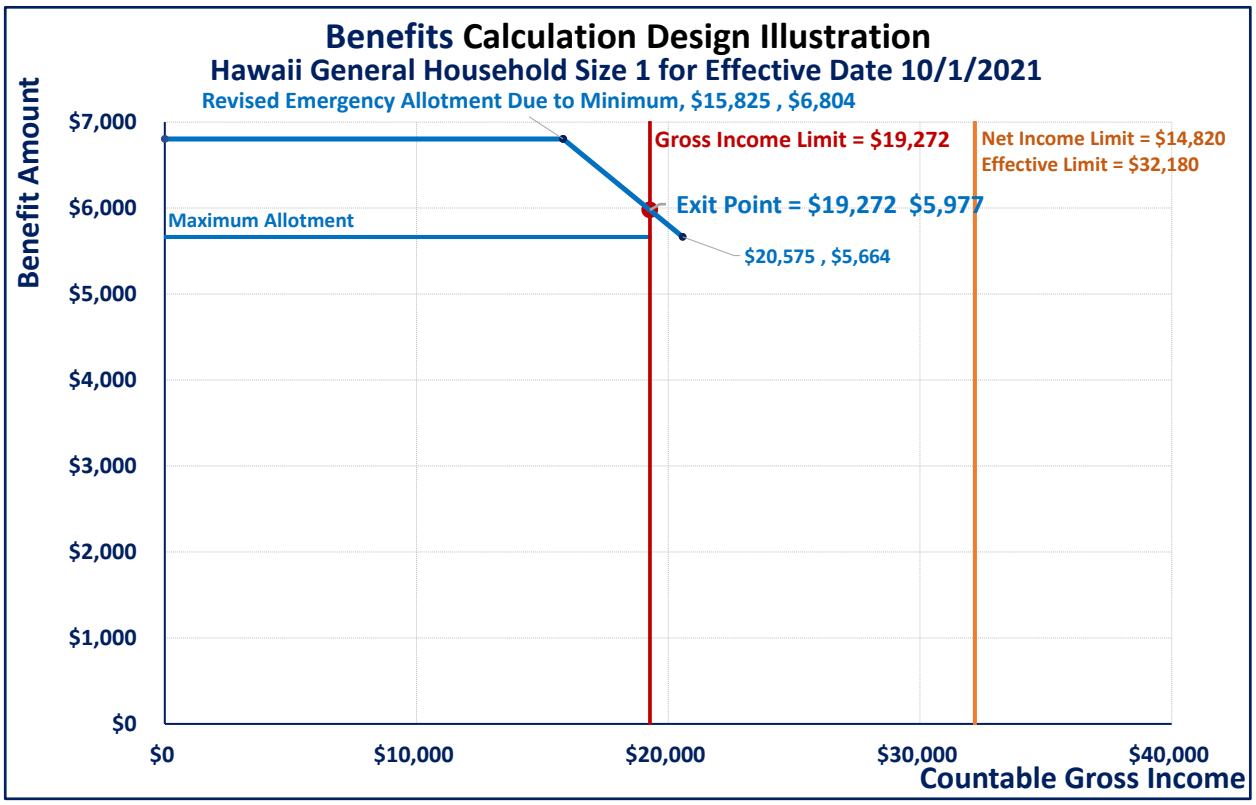


Table 15 shows an unusual Hawaiian one-member household benefit loss situation for effective dates October 1, 2021, and October 2, 2022. In this case, every household received an allotment greater than the maximum allotment due to the April 1, 2021, rule change that allowed for a minimum emergency allotment. Chart 3 illustrates the Hawaiian case. The one-member Hawaiian household was the only case found where the household had an amount greater than the maximum allotment at the exit point, making the needed income to overcome the SNAP benefit loss even higher than expected. The uniqueness of this Hawaiian scenario was shown to illustrate an unexpected result from the minimum emergency allotment, but does not diminish the problem of the extreme benefit cliffs for other scenarios.

Table 16

Full-time equivalent pay raises required to overcome SNAP benefit losses for Households with disabled or elderly members using an earnings loss rate of 25 percent during the years of the COVID-19 pandemic assuming the state participates in the emergency allotment program. Alaska did not participate in the program after October 1, 2022.

Household Size	Effective Date	Assumes Fair Market Rent for Shelter Costs					Assumes No Shelter Costs				
		48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
1 member	10/1/2019	41.0%	42.0%	53.7%	60.6%	55.5%	51.4%	48.0%	61.3%	74.7%	79.4%
	10/1/2020	41.9%	44.8%	57.5%	65.3%	58.7%	53.0%	49.7%	63.4%	77.2%	82.2%
	1/1/2021	48.1%	51.5%	66.2%	75.0%	67.6%	60.8%	57.2%	72.9%	88.7%	94.7%
	10/1/2021	50.0%	56.2%	72.7%	82.6%	70.4%	63.9%	62.7%	80.0%	97.3%	101.7%
	10/1/2022	51.8%	57.3%	75.3%	84.9%	76.6%	67.8%	64.3%	82.1%	99.9%	109.3%
2 members	10/1/2019	59.5%	60.2%	79.4%	89.7%	79.0%	72.0%	68.3%	87.2%	106.1%	112.6%
	10/1/2020	61.1%	64.1%	84.5%	95.8%	83.6%	74.6%	70.7%	90.2%	109.9%	116.5%
	1/1/2021	70.3%	73.8%	97.2%	110.2%	96.2%	85.8%	81.5%	103.7%	126.3%	134.2%
	10/1/2021	73.2%	80.7%	105.7%	119.4%	100.3%	90.2%	89.3%	113.8%	138.5%	144.2%
	10/1/2022	76.2%	82.4%	109.2%	122.8%	109.5%	96.1%	92.1%	117.5%	143.0%	155.8%
3 members	10/1/2019	68.9%	68.9%	91.4%	104.1%	85.8%	87.4%	84.4%	101.9%	124.1%	131.3%
	10/1/2020	69.6%	72.6%	98.0%	111.2%	91.4%	87.8%	84.9%	105.6%	128.6%	136.1%
	1/1/2021	79.6%	82.2%	112.6%	127.8%	105.1%	99.7%	95.2%	121.4%	147.8%	156.5%
	10/1/2021	83.2%	90.3%	123.1%	138.6%	109.9%	104.9%	104.5%	133.3%	162.2%	168.4%
	10/1/2022	87.1%	92.2%	126.6%	143.0%	120.4%	112.1%	108.2%	138.0%	167.9%	182.3%
4 members	10/1/2019	77.3%	77.5%	104.6%	119.8%	100.9%	89.0%	86.7%	109.4%	133.1%	140.7%
	10/1/2020	79.4%	82.1%	111.7%	127.6%	107.2%	92.0%	88.8%	113.3%	137.9%	145.8%
	1/1/2021	91.3%	94.5%	128.5%	146.8%	123.3%	105.8%	102.2%	130.3%	158.6%	167.7%
	10/1/2021	95.8%	103.7%	140.5%	159.3%	129.1%	111.7%	112.2%	143.1%	174.1%	180.4%
	10/1/2022	100.8%	106.3%	144.8%	164.8%	141.5%	119.9%	116.4%	148.4%	180.7%	195.8%
5 members	10/1/2019	83.2%	83.6%	112.4%	130.2%	111.3%	90.2%	88.2%	112.4%	136.9%	144.3%
	10/1/2020	85.5%	89.2%	116.5%	138.4%	118.0%	93.3%	91.4%	116.5%	141.9%	149.4%
	1/1/2021	98.4%	102.5%	134.1%	159.2%	135.7%	107.4%	105.1%	134.1%	163.2%	171.9%
	10/1/2021	103.3%	112.5%	147.2%	172.9%	142.7%	113.3%	115.4%	147.2%	179.1%	185.4%
	10/1/2022	109.0%	115.4%	152.9%	179.1%	156.4%	121.8%	119.9%	152.9%	186.2%	201.5%
6 members	10/1/2019	86.6%	86.6%	118.6%	139.5%	114.2%	94.4%	92.9%	118.6%	144.3%	151.1%
	10/1/2020	89.1%	92.5%	122.8%	148.0%	121.6%	97.7%	96.3%	122.8%	149.5%	156.4%
	1/1/2021	102.4%	106.3%	141.2%	170.2%	139.9%	112.3%	110.8%	141.2%	171.9%	179.9%
	10/1/2021	107.6%	117.2%	155.5%	183.8%	147.4%	118.6%	122.0%	155.5%	189.3%	194.3%
	10/1/2022	113.7%	120.9%	162.0%	192.1%	162.7%	127.6%	127.1%	162.0%	197.3%	211.9%

Table 16 shows what were the required pay raises to overcome lost SNAP benefits when exiting the program during the COVID-19 Pandemic for households *with* disabled or elderly members. It includes both cases assuming Fair Market Rent for shelter cost (left side of table) and assuming no shelter costs (right side). These calculations also assume no other expense deductions and all income coming from earnings. While these numbers were better than those for households *without* disabled or elderly members, they were still very high, and they got worse with each successive effective date. By effective date October 1, 2022, no required income increase was below 50 percent, and most were over 100 percent, requiring a doubling or near tripling of income. As with Table 15, the data for Alaska effective October 1, 2022, are grayed out because Alaska did not participate in the emergency allotment program after that date.

Pandemic Aside, SNAP Benefit Cliffs Are Getting Worse

Setting aside the COVID-19 Pandemic and the emergency allotment program, SNAP benefit cliffs are getting worse and, based on twenty years of data, have never been higher. This was not always the trend. The benefit cliffs cycled up to a high in 2009 before slowly coming down and leveling off for a few years. However, since the pandemic, they are getting worse.

To illustrate the point, the ten charts that follow show the income increases required to overcome benefit cliffs over a ten year period on October 1st of each year from 2013 to 2022 for the 48 States and the District of Columbia, Alaska Urban, Alaska Rural 1, Alaska Rural 2, and Hawaii. Each area has two charts: one for households *without* disabled or elderly members, and the second for households *with* disabled or elderly members. In every case, the computations assumed earnings loss rates of 25 percent, weighted Fair Market Rent averages for shelter costs, no other expense deductions, and all income coming from earnings. Due to the variability in shelter costs, deductible expenses, and the percentage of income coming from earnings, the actual increases on specific households will differ. However, as the charts show, the trend is the same for all computational scenarios that were run. Based on an examination of the data, and setting aside the pandemic's emergency allotment program, benefit cliffs are getting worse.

Chart 4 through Chart 13

These charts show the required increased income needed to overcome SNAP benefit cliffs on the effective date of October 1st for the ten year period from 2013 to 2022 assuming earnings loss rates of 25 percent, weighted average Fair Market Rents for shelter costs, no other expense deductions, all income coming from earnings, and no participation in the pandemic emergency allotment program.

Chart 4

Households without a disabled or elderly member in the 48 contiguous states and the District of Columbia.

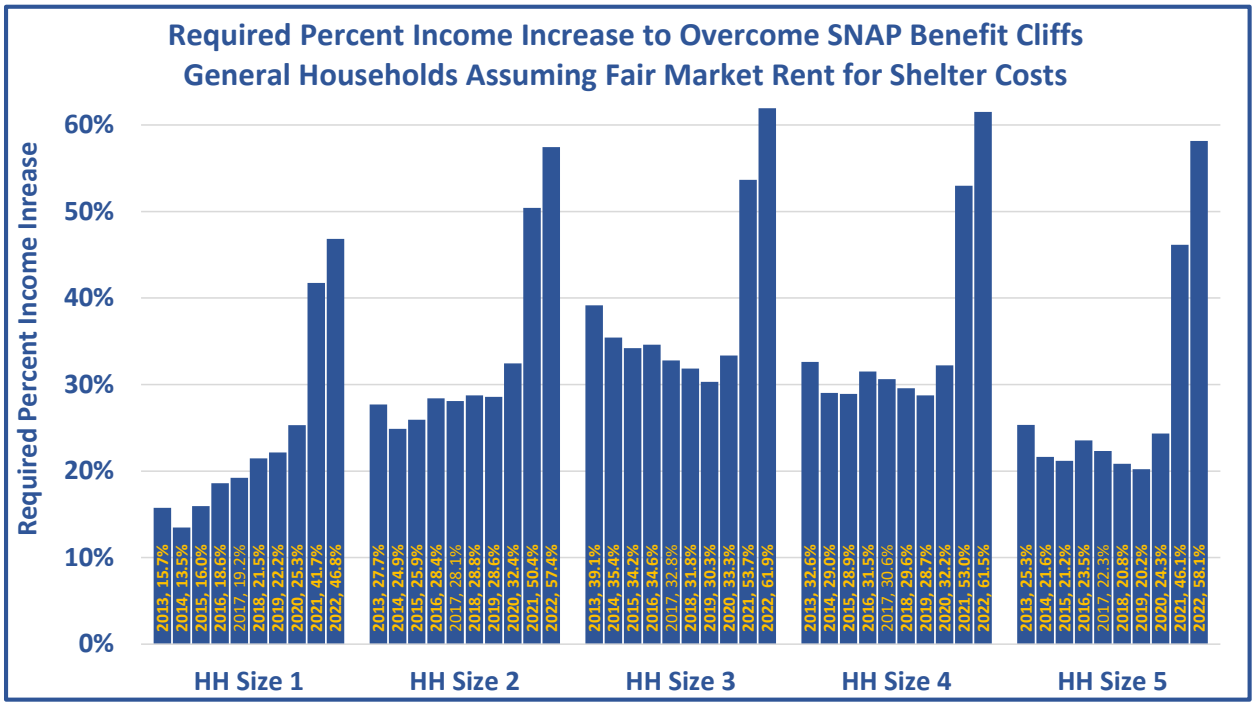


Chart 5

Households <u>with</u> a disabled or elderly member in the 48 contiguous states and the District of Columbia.

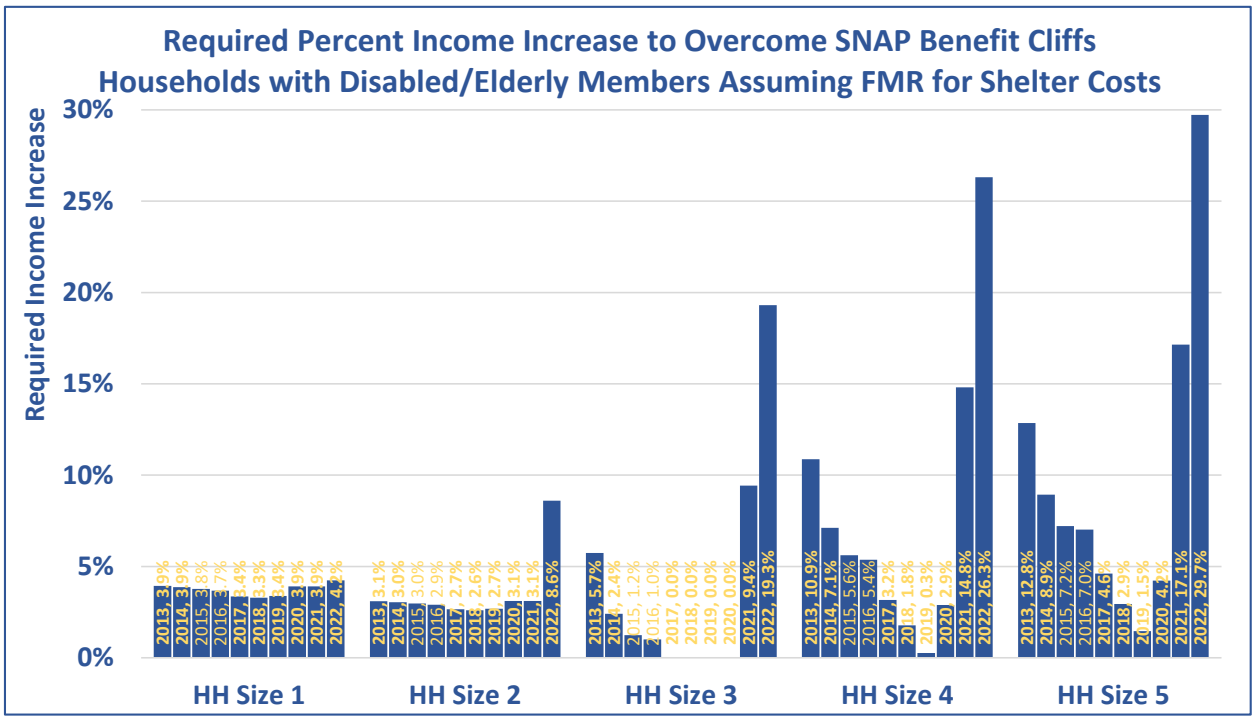


Chart 6

Households <u>without</u> a disabled or elderly member in the urban designated areas of Alaska.

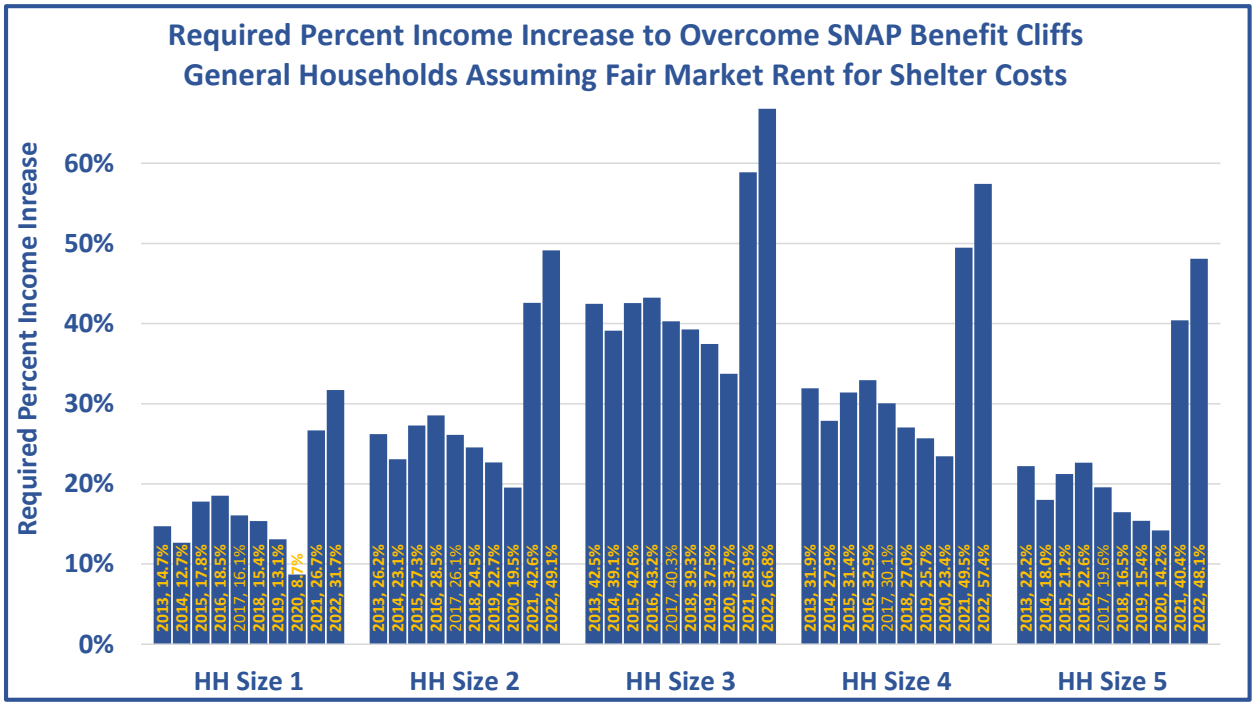


Chart 7

Households with a disabled or elderly member in the urban designated areas of Alaska.

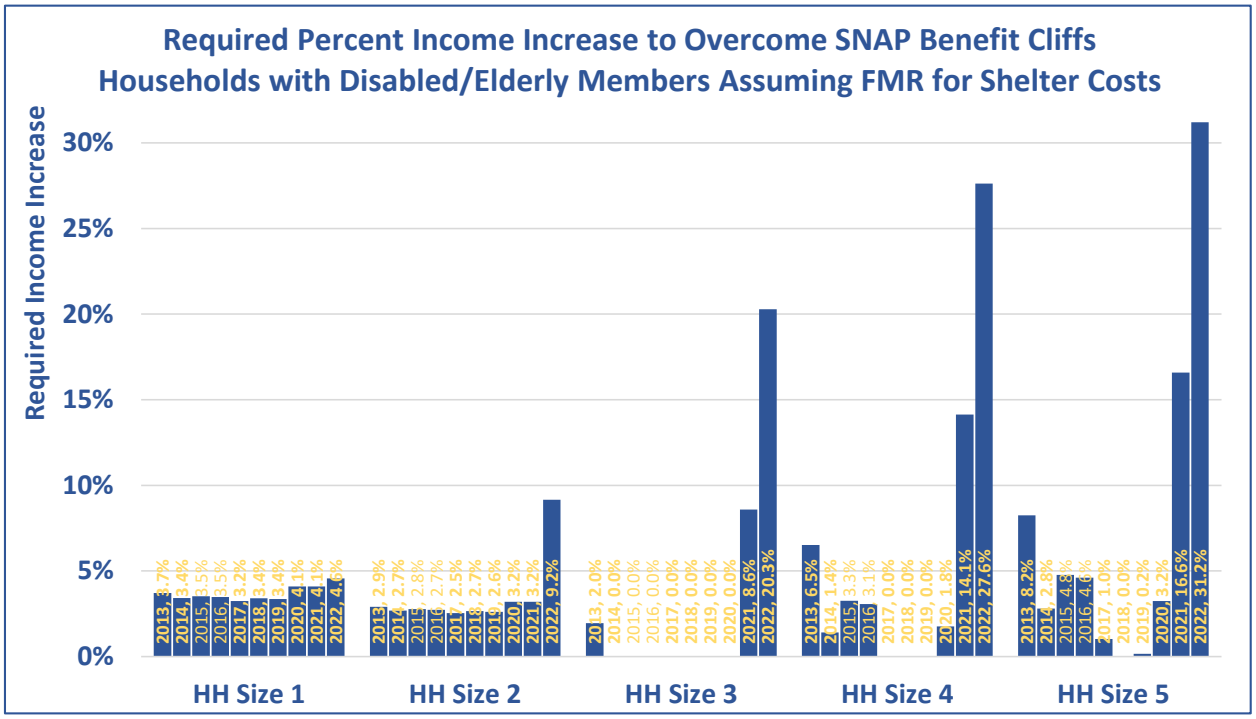


Chart 8

Households without a disabled or elderly member in the rural 1 designated areas of Alaska.

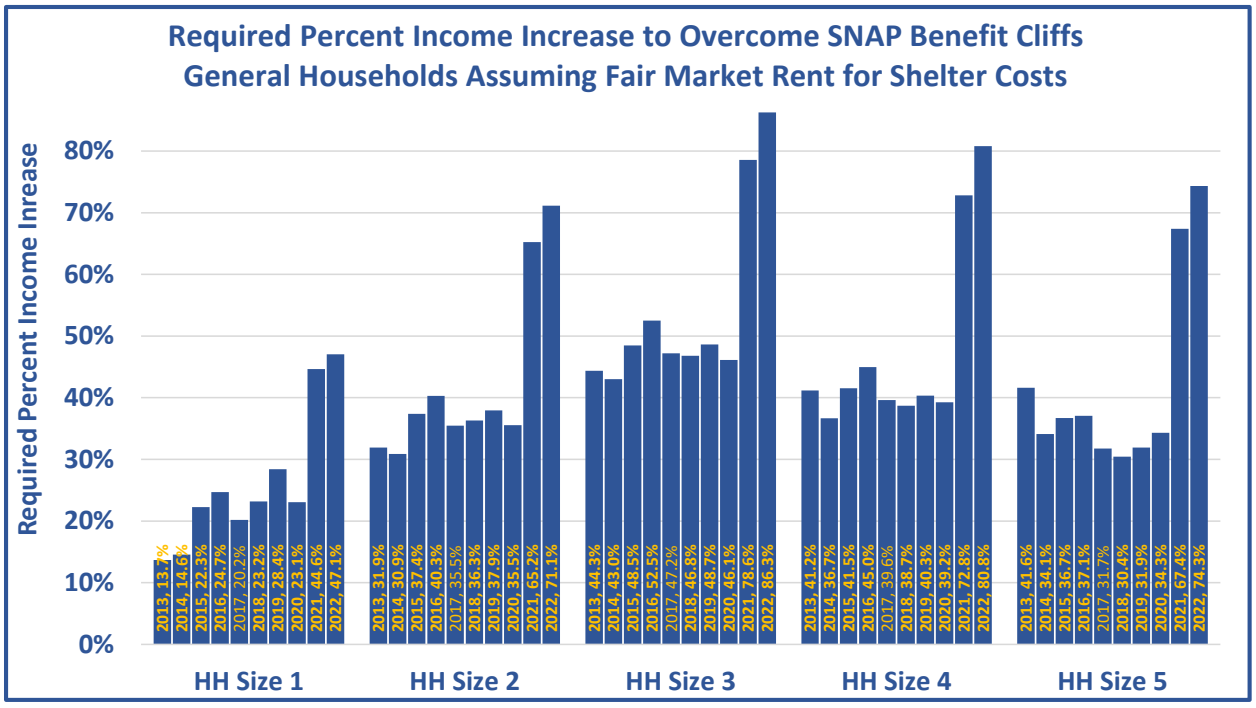


Chart 9

Households with a disabled or elderly member in the rural 1 designated areas of Alaska.

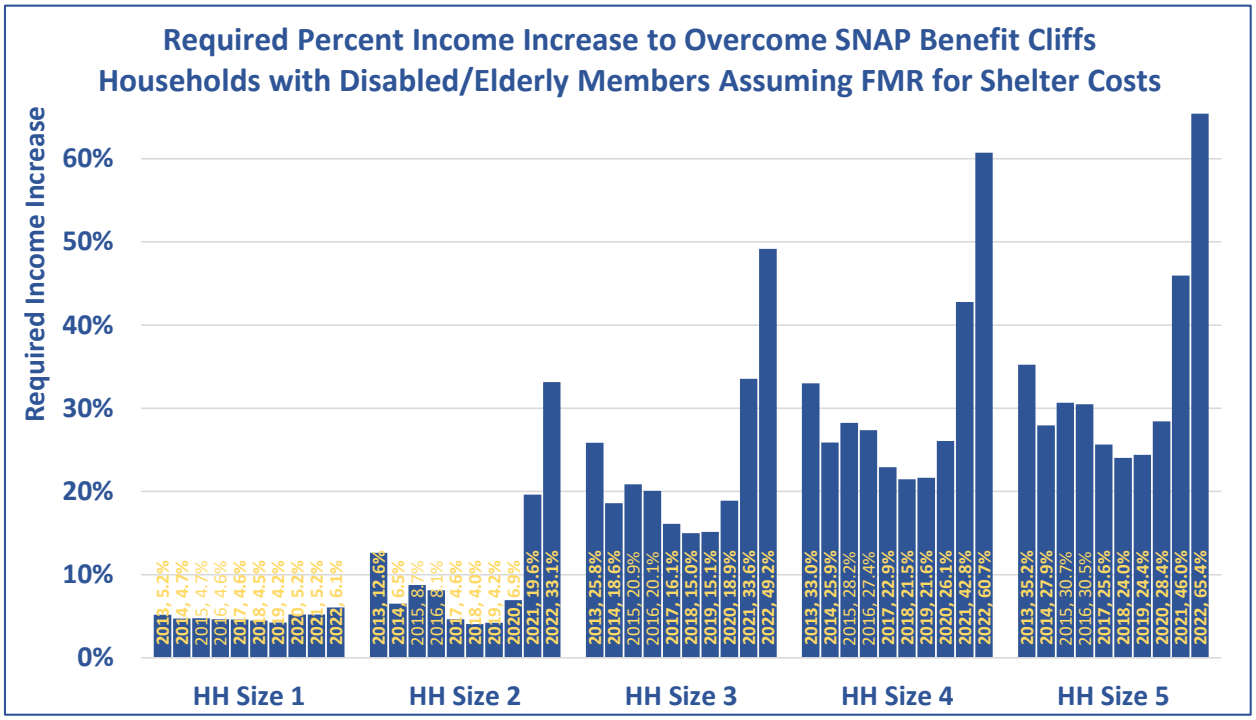


Chart 10

Households without a disabled or elderly member in the rural 2 designated areas of Alaska.

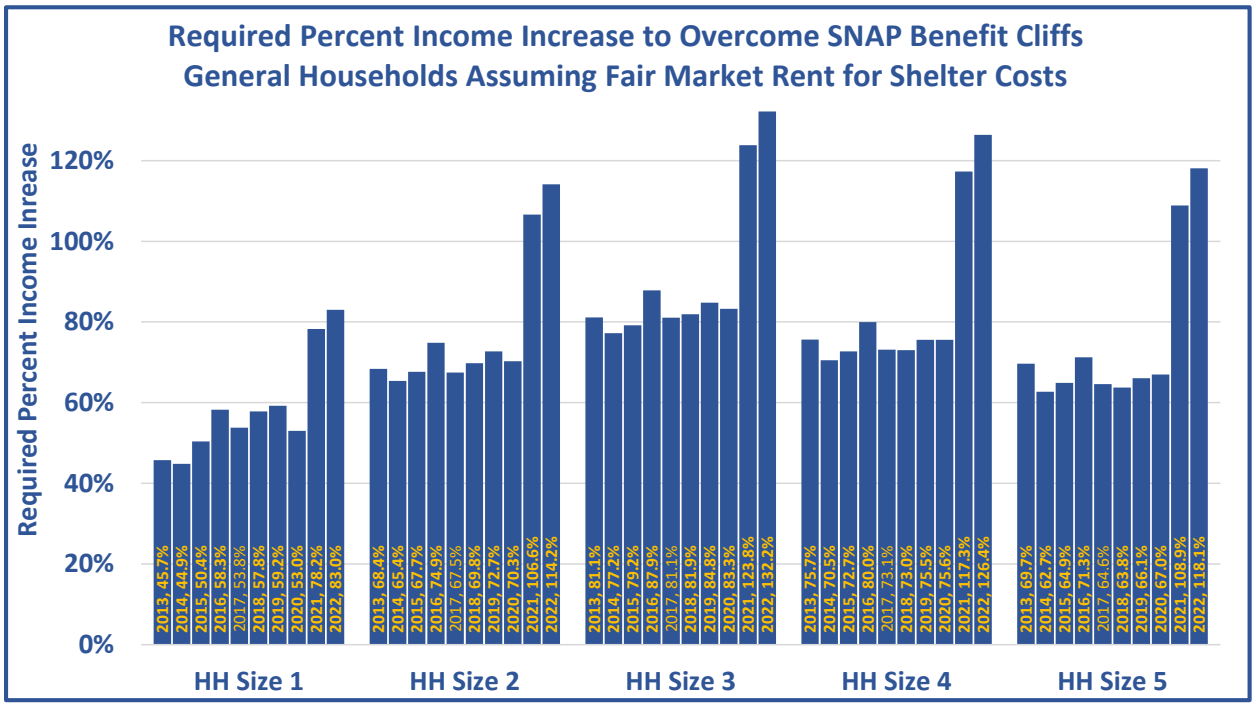


Chart 11

Households with a disabled or elderly member in the rural 2 designated areas of Alaska.

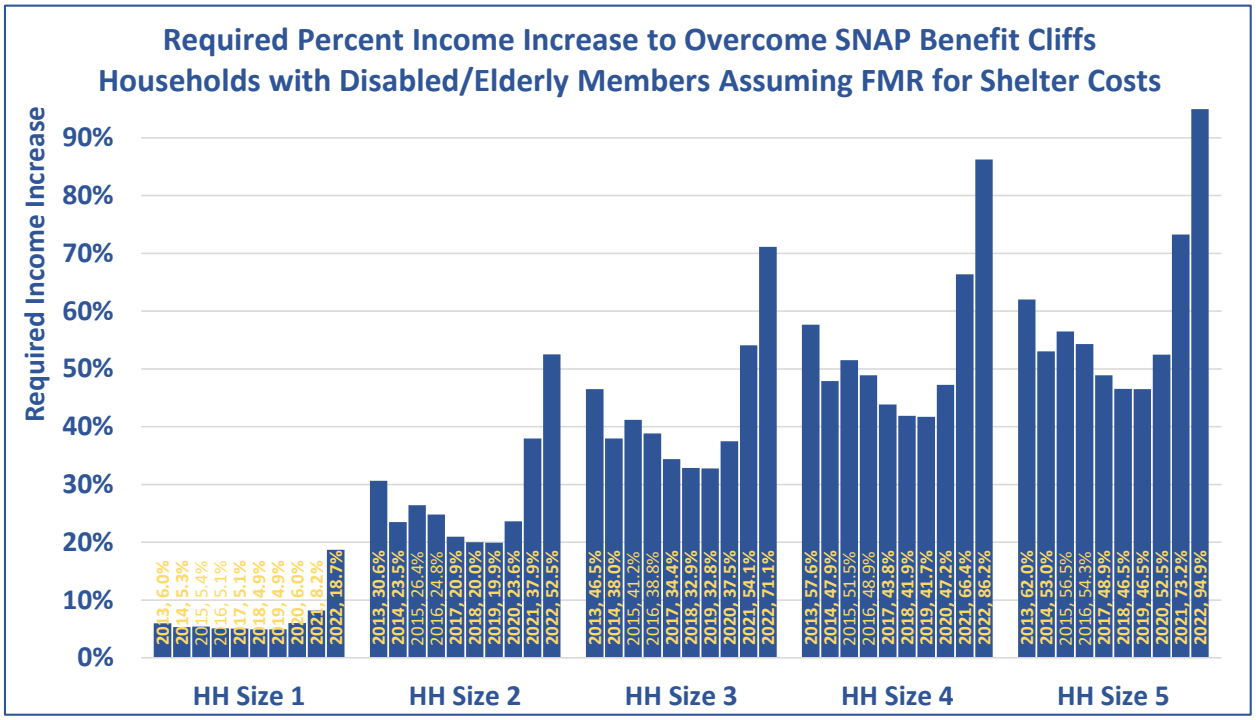


Chart 12

Households without a disabled or elderly member in Hawaii.

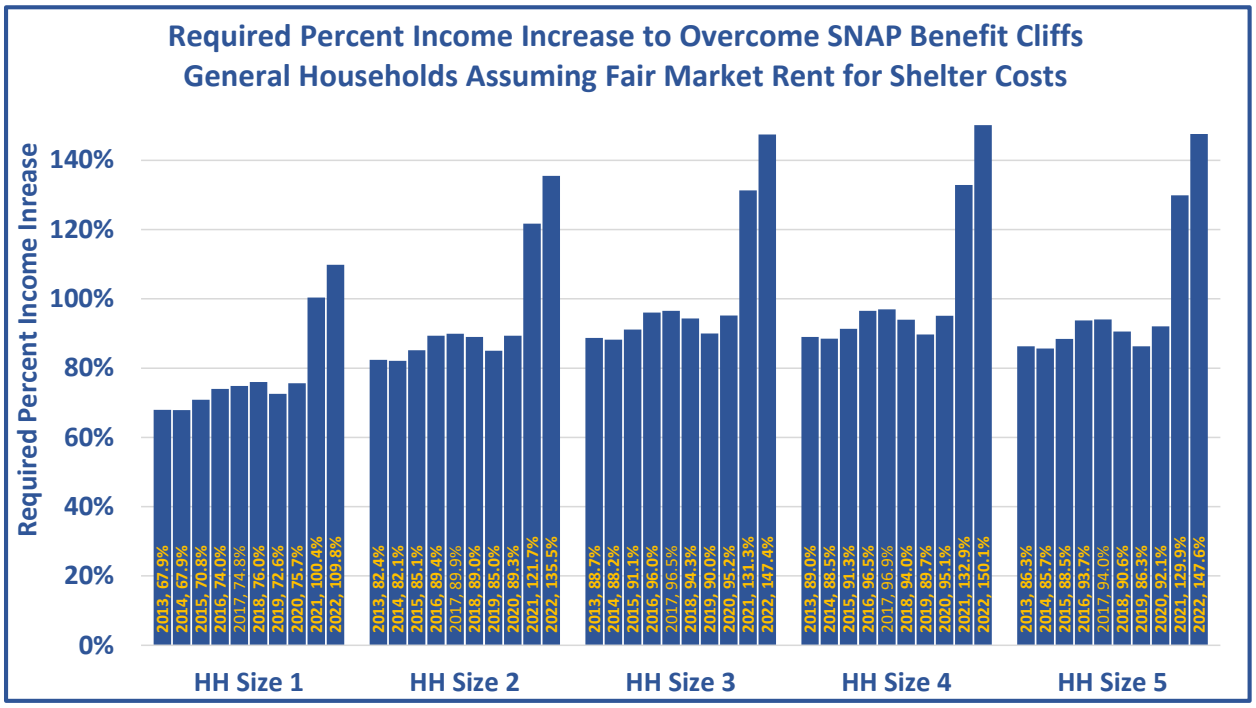
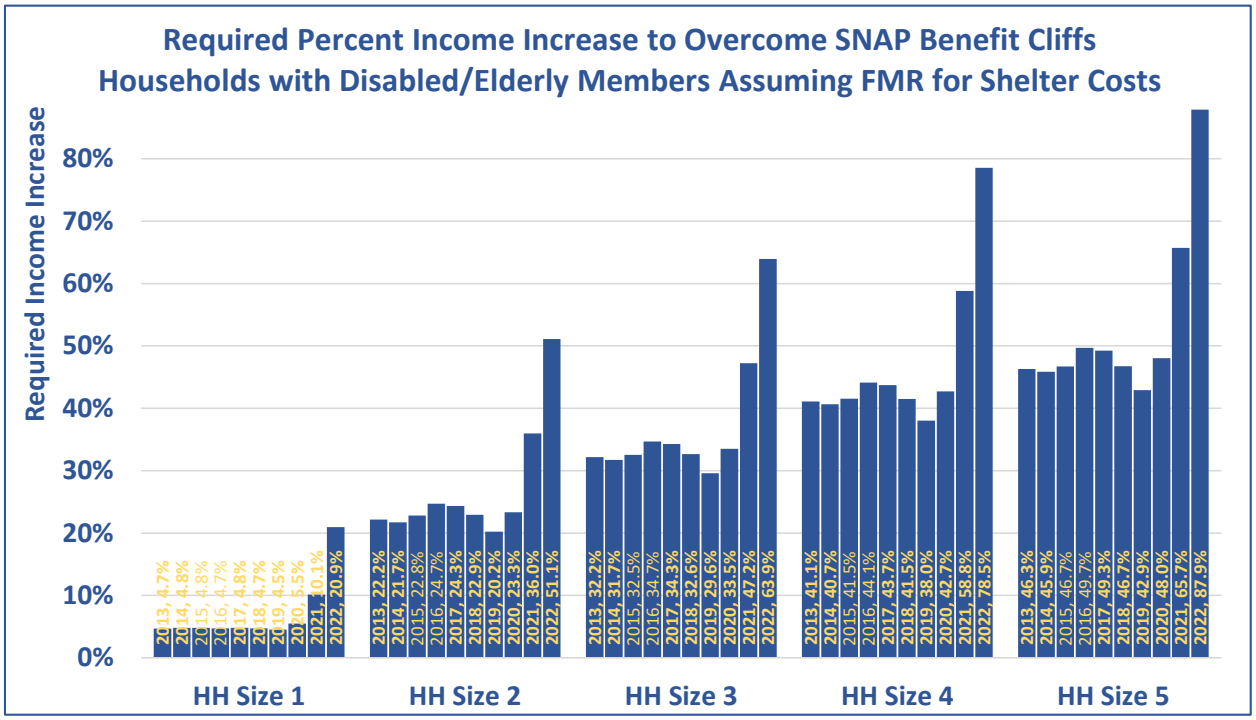


Chart 13

Households with a disabled or elderly member in Hawaii.



Broad Based Categorical Eligibility

SNAP statute provides an unintended loophole allowing states to circumvent SNAP gross income limits for a subset of participants estimated to be 2.4 percent of all SNAP households in FFY 2019.[36]

Known as categorical eligibility, 7 U.S. Code § 2014 allows for persons participating in one of three enumerated safety-net programs—that originally included the expired Aid to Families with Dependent Children (AFDC) program—to automatically be eligible for SNAP. Originally the practice was intended to simplify the administration of determining eligibility because those programs identified as categorically eligible typically had more stringent eligibility requirements than SNAP did.

[36] The estimate is based on the following Congressional Research Service report after adjusting for only the 33 states and D.C with TANF/MOE income limits above 130 percent and the total number of SNAP households using USDA participation data. See Congressional Research Service, *The Supplemental Nutrition Assistance Program (SNAP): Categorical Eligibility: Updated February 25, 2022*, CRS Report R42054, February 25, 2022, Table 3, pp. 13-14: https://crsreports.congress.gov/product/pdf/R/R42054/58 and Food and Nutrition Service, U.S. Department of Agriculture, SNAP Data Tables: https://www.fns.usda.gov/pd/supplemental-nutrition-assistance-program-snap.

The enactment of welfare reform in 1996 replaced AFDC with the Temporary Assistance for Needy Families (TANF) program[37] while retaining categorical eligibility for TANF as it had been with AFDC. However, TANF services extend beyond cash grants to include non-cash services from TANF itself as well as allowable associated programs that fall under "maintenance of effort" (MOE) requirements. As an unintended consequence, non-cash TANF or MOE services received could be made to qualify households for SNAP. With the encouragement from the USDA, states slowly began adopting the practice of allowing in-kind TANF or MOE services to count as qualifying for SNAP,[38] enabling them to circumvent the SNAP gross income limits for those select households that qualified for a TANF or MOE service under a state's program. This practice became known as broad-based categorical eligibility (BBCE).

As of January 2023, 41 states and D.C. allowed for broad-based categorical eligibility.[39] However, only 33 states and D.C. had gross income limits for TANF or MOE programs above 130 percent of the Federal Poverty Income Guidelines that is the basis for the SNAP gross income limit. Nevertheless, the benefit cliffs for the households in these 33 states were lessened but not eliminated. According to scenarios we ran for each of the 33 states and D.C. using the respective TANF or MOE gross income limits, most households would require atypical pay raises to overcome SNAP benefit losses once they would run into the net income limit, or in a few cases, the revised gross income limits. That is, especially smaller household sizes for several states would still exit SNAP due to the higher gross income limit.

Table 17 shows for the 33 states and D.C. the MOE or TANF gross income limits allowable for BBCE along with the required pay raises to overcome the loss in SNAP benefits for household sizes 1 through 5. It also shows the reason why the household would exit SNAP, whether it would be due to the Gross Income Limit (GIL), which is 10 percent of the scenarios for household sizes 1 through 8, or the Net Income Limit (NIL). The computations assume average HUD-published Fair Market Rents for each state and D.C. for shelter expenses, earning loss rates of 25 percent, and all income coming from earnings. The effective date is October 1, 2022, for SNAP factors and January 2023 for BBCE program factors. Table 17 applies to households *without* disabled or elderly members as households *with* disabled or elderly members are not subject to the gross income limit and therefore not impacted by BBCE.

[37] Public Law 104–193—August 22, 1996, Personal Responsibility and Work Opportunity Reconciliation Act of 1996.

[38] U.S. Government Accountability Office, *Supplemental Nutrition Assistance Program: Improved Oversight of State Eligibility Expansions Needed*, Report to Congressional Requesters, GAO-12-670, Reissued August 2, 2012, pp.9-12: Supplemental Nutrition Assistance Program: Improved Oversight of State Eligibility Expansions Needed | U.S. GAO

[39] U.S. Department of Agriculture, *Broad-Based Categorical Eligibility*, January 2023 update: https://www.fns.usda.gov/sites/default/files/resource-files/BBCE-States-Chart-(Jan-2023)-508-1.5.23.pdf.

In addition to the calculations shown in Table 17, we also ran computations assuming no shelter expenses, and assuming no shelter expenses and no earnings. With few exceptions, the benefit cliffs were no better than what are shown in Table 17,[40] and for 100 percent of these scenarios, the households would exit SNAP due to the net income limit.

[40] The exceptions are Hawaii HH Size 1; Illinois HH Size 2, New Jersey HH Size 2, New York-2 HH Sizes 1 through 7, and Texas HH Size 2.

Table 17

BBCE gross income limits, full-time equivalent pay raises required to overcome SNAP benefit losses for Households without disabled or elderly members using an earnings loss rate of 25 percent, and the reason for exiting SNAP, assuming state average fair market rents, October 1, 2022,effective date for SNAP factors, and January 2023 BBCE factors.

State	TANF /	HH Size 1		HH Size 2		HH Size 3		HH Size 4		HH Size 5	
	MOE GIL	Raise	Reason	Raise	Reason	Raise	Reason	Raise	Reason	Raise	Reason
Arizona	185%	4.4%	GIL	8.4%	NIL	19.2%	NIL	25.2%	NIL	28.0%	NIL
California	200%	4.0%	GIL	8.0%	NIL	19.2%	NIL	25.2%	NIL	27.2%	NIL
Colorado	200%	4.0%	GIL	8.0%	NIL	19.2%	NIL	25.2%	NIL	27.6%	NIL
Connecticut	200%	4.0%	GIL	8.0%	NIL	19.2%	NIL	25.2%	NIL	28.4%	NIL
Delaware	200%	4.4%	NIL	8.8%	NIL	20.0%	NIL	27.6%	NIL	30.8%	NIL
District of Columbia	200%	4.0%	GIL	8.0%	NIL	19.2%	NIL	25.2%	NIL	27.2%	NIL
Florida	200%	4.0%	NIL	8.4%	NIL	19.2%	NIL	25.2%	NIL	28.4%	NIL
Hawaii	200%	34.0%	GIL	54.4%	GIL	72.4%	NIL	84.4%	NIL	90.8%	NIL
Illinois	165%	4.8%	GIL	12.0%	GIL	21.6%	GIL	28.0%	NIL	31.2%	NIL
Iowa	160%	5.2%	NIL	10.0%	NIL	22.8%	NIL	30.4%	NIL	33.2%	NIL
Kentucky	200%	5.2%	NIL	10.4%	NIL	22.8%	NIL	30.8%	NIL	33.2%	NIL
Maine	185%	4.4%	NIL	9.2%	NIL	20.4%	NIL	28.0%	NIL	31.2%	NIL
Maryland	200%	4.0%	GIL	8.0%	NIL	19.2%	NIL	25.2%	NIL	28.4%	NIL
Massachusetts	200%	4.0%	GIL	8.0%	NIL	19.2%	NIL	25.2%	NIL	27.2%	NIL
Michigan	200%	4.8%	NIL	9.6%	NIL	21.6%	NIL	29.2%	NIL	32.8%	NIL
Minnesota	200%	4.4%	NIL	9.2%	NIL	20.4%	NIL	27.6%	NIL	30.8%	NIL
Montana	200%	5.2%	NIL	10.0%	NIL	22.0%	NIL	29.6%	NIL	33.2%	NIL
Nebraska	165%	5.2%	NIL	10.0%	NIL	22.4%	NIL	30.0%	NIL	33.2%	NIL
Nevada	200%	4.4%	NIL	8.4%	NIL	19.2%	NIL	25.2%	NIL	28.8%	NIL
New Hampshire	200%	4.4%	NIL	8.4%	NIL	19.2%	NIL	25.6%	NIL	28.8%	NIL
New Jersey	185%	4.4%	GIL	12.0%	GIL	19.2%	NIL	25.2%	NIL	28.0%	NIL
New Mexico	165%	4.8%	GIL	10.0%	NIL	21.6%	NIL	29.2%	NIL	32.8%	NIL
New York-1	200%	4.0%	GIL	8.0%	NIL	19.2%	NIL	25.2%	NIL	27.2%	NIL
New York-2	150%	28.0%	GIL	36.8%	GIL	40.8%	GIL	40.4%	GIL	39.2%	GIL
North Carolina	200%	4.8%	NIL	9.6%	NIL	21.6%	NIL	29.2%	NIL	32.8%	NIL
North Dakota	200%	5.2%	NIL	10.0%	NIL	22.4%	NIL	30.4%	NIL	33.2%	NIL
Oregon	200%	4.0%	NIL	8.4%	NIL	19.2%	NIL	25.2%	NIL	28.0%	NIL
Pennsylvania	200%	4.4%	NIL	9.2%	NIL	21.2%	NIL	28.4%	NIL	32.0%	NIL
Rhode Island	185%	4.4%	GIL	8.4%	NIL	19.6%	NIL	26.8%	NIL	30.4%	NIL
Texas	165%	4.8%	GIL	12.8%	GIL	23.2%	GIL	27.6%	NIL	31.2%	NIL
Vermont	185%	4.4%	NIL	8.8%	NIL	20.4%	NIL	27.6%	NIL	31.2%	NIL
Virginia	200%	4.0%	NIL	8.8%	NIL	19.6%	NIL	26.8%	NIL	30.0%	NIL
Washington	200%	4.0%	GIL	8.0%	NIL	19.2%	NIL	25.2%	NIL	27.2%	NIL
West Virginia	200%	5.2%	NIL	10.4%	NIL	23.6%	NIL	31.2%	NIL	33.2%	NIL
Wisconsin	200%	4.8%	NIL	9.6%	NIL	22.0%	NIL	29.6%	NIL	33.2%	NIL

Notes: New York-1: households with dependent care expenses: New York-2: Households with earned income.

Data Sources: U.S. Department of Agriculture and Georgia Center for Opportunity computational analysis.

SNAP and Marriage Penalties

The Office of Family Assistance of the Administration for Children and Families, which is part of the U.S. Department of Health and Human Services, sponsored a study on marriage penalties. Coauthored by Bradford Wilcox, Chris Gersten, and Jerry Regier and released in 2019, the study examined important policy questions, including whether marriage is associated with better outcomes for children and communities, the impact of government programs on marriage, and what federal and state governments can do about marriage penalties.[41]

Based on the academic research reviewed, the study concluded that "children are more likely to avoid poverty, enjoy better economic outcomes over their life span, and flourish educationally and socially when they are raised by stably married parents" and that "communities experience less poverty, more economic mobility, and greater public safety when they have more married parents."[42] While the research they reviewed suggested that "marriage penalties pay a modest role in discouraging marriage and encouraging cohabitation among low-income families," the research also suggested that "marriage penalties may be more consequential for Americans without a college degree, those with children, and lower-income families."[43]

Therefore, the issue of marriage penalties is a public policy concern, making it an important consideration when redesigning a safety-net assistance program. In other words, examining marriage penalties is important to avoid crafting a benefit cliff solution that worsens marriage penalties. At the very least, the solution should not exacerbate marriage penalties, and ideally it should mitigate them or, better yet, eliminate them.

In the case of SNAP, our analysis shows that there is a marriage penalty problem, but the specifics and extent of the problem depend on which marriage penalty question is asked, household circumstances, and compliance with SNAP rules.

A marriage penalty is when a couple becomes worse off financially, such as paying more in taxes or receiving less in benefits, because they chose to marry or because they are married as opposed to deciding not to marry or staying unmarried. The opposite case—that they are better off financially—is a marriage bonus.

To facilitate the analysis, we have separated the general question of marriage penalties into two specific questions. The first question examines the change in financial circumstances between living together while married versus living apart unmarried. An example of this question would

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[41] Bradford Wilcox, Chris Gersten, and Jerry Regier, *Marriage Penalties in Means-Tested Tax and Transfer Programs: Issues and Options*, OFA Report 2019-01, Washington, DC: Office of Family Assistance, Administration for Children and Families, U.S. Department of Health and Human Services, 2019: https://www.acf.hhs.gov/sites/default/files/documents/ofa/hmrf_marriagepenalties_paper_final50812_6_19.pdf.

[42] Ibid, p. 3.

[43] Ibid, pp. 3 and 4.

be a single mom living alone with her two children, and she is considering marrying her boyfriend who does not live with them. For this first question and according to our computational analysis, as will be shown, there are indeed SNAP marriage penalties in some circumstances. The second question examines the change of financial circumstances between living together while being married versus living together without being married, which will be discussed in greater detail later.

Each of the two specific questions is calculated separately and run through a computational model using the same methodology. The only difference is how the households are configured based on which question is being examined. For the first question, and using the same example of a single mom with two children, the financial circumstances are calculated based on a household of four with a married couple versus a household of three absent the boyfriend. For the second question, it would be two households of four but in one circumstance the couple is married and in the second circumstance they are not.

At the end of the analysis, there are two sets of answers, one for each specific marriage penalty question. It is possible that a tax or safety-net assistance program would have a marriage penalty for one question but not the other question. When addressing marriage penalties for the purpose of public policy, it is our recommendation that both questions are examined and addressed.

The first step in the model is to calculate a baseline for comparison. To this end, the model calculates marriage bonuses and penalties for each combination of income and places those results in a mathematical matrix. This first matrix uses only gross income exclusive of governmental assistance programs. The gross income can come from wages, self-employment income, earned interest, or any source other than a means-tested government assistance program. We call the first matrix the natural state matrix because it excludes the impact of taxation and benefits from safety-net assistance programs. In other words, it shows the financial circumstances without any governmental intervention.

The next step of the analysis is to calculate a new matrix that includes not just gross income but also a selected set of income/payroll taxes and safety-net program benefits. This set can be any combination of taxes and programs, or it can be just a single program or tax to isolate the impact of that specific program or tax from the other programs and taxes. For this paper, we ran the numbers with just SNAP to isolate its impact from the impact of taxes or other safety-net programs.

The final step is to compare and analyze the differences in the natural state matrix and the second matrix showing the impact of the selected set of taxes and programs. This methodology gives a picture—often expressed as matrices—of how the selected set of taxes and programs altered the natural state, which will show the impact on the financial circumstance for each combination of the income of the two adults under consideration (for example, the combination

of the single mom' wage and her boyfriend's wage). In other words, the final analysis will show which combinations have greater financial advantages due to marriage, lesser financial advantages due to marriage, greater financial *dis*advantages due to marriage, and lesser financial *dis*advantages due to marriage. More importantly, the analysis will show which wage combinations flipped from being a financial advantage to become a disadvantage, that is, a marriage penalty, and the reverse, which is a marriage bonus.

Matrix 1

Question 1 Marriage Penalty/Bonus Natural State Matrix: point of view from a single mom with two children.

Boyfriend's Wages	Mom's Wages with Children										
Total	**$0**	**$5,000**	**$10,000**	**$15,000**	**$20,000**	**$25,000**	**$30,000**	**$35,000**	**$40,000**	**$45,000**	**$50,000**
$0	$0	-$1,250	-$2,500	-$3,750	-$5,000	-$6,250	-$7,500	-$8,750	-$10,000	-$11,250	-$12,500
$5,000	$3,750	$2,500	$1,250	$0	-$1,250	-$2,500	-$3,750	-$5,000	-$6,250	-$7,500	-$8,750
$10,000	$7,500	$6,250	$5,000	$3,750	$2,500	$1,250	$0	-$1,250	-$2,500	-$3,750	-$5,000
$15,000	$11,250	$10,000	$8,750	$7,500	$6,250	$5,000	$3,750	$2,500	$1,250	$0	-$1,250
$20,000	$15,000	$13,750	$12,500	$11,250	$10,000	$8,750	$7,500	$6,250	$5,000	$3,750	$2,500
$25,000	$18,750	$17,500	$16,250	$15,000	$13,750	$12,500	$11,250	$10,000	$8,750	$7,500	$6,250
$30,000	$22,500	$21,250	$20,000	$18,750	$17,500	$16,250	$15,000	$13,750	$12,500	$11,250	$10,000
$35,000	$26,250	$25,000	$23,750	$22,500	$21,250	$20,000	$18,750	$17,500	$16,250	$15,000	$13,750
$40,000	$30,000	$28,750	$27,500	$26,250	$25,000	$23,750	$22,500	$21,250	$20,000	$18,750	$17,500
$45,000	$33,750	$32,500	$31,250	$30,000	$28,750	$27,500	$26,250	$25,000	$23,750	$22,500	$21,250
$50,000	$37,500	$36,250	$35,000	$33,750	$32,500	$31,250	$30,000	$28,750	$27,500	$26,250	$25,000

Matrix 1 provides an example of a "question 1" natural state matrix for a single mom with two children, and the calculations are from her point of view.[44] Mom's wages are the first variable and are displayed in the horizontal header on the top of the matrix, and the boyfriend's wages are the second variable and are displayed on the left of the matrix. The matrix data show the financial gain or loss for mom and her children per each combination of wages if she decides to marry her boyfriend, assuming that they are not currently living together. Each data point in a matrix is typically called an element or entry. If the element is positive, then there is a marriage bonus for mom. If the element is negative, there is a marriage penalty.

For example, suppose mom earns $15,000 and her boyfriend earns $10,000. The element at the intersection of those two wages is $3,750, which is the financial bonus for mom marrying her boyfriend. The calculation for this element is as follows. Mom earns $15,000 and she has two children. That means she has $5,000 per person in her family without her boyfriend. When she marries him, her household income increases to $25,000 because her boyfriend earns $10,000, which calculates to $6,250 per person in the expanded household. This means that mom and her two children would gain $1,250 per person for a total of $3,750 for her and her children. Of course, the financial situation will vary based on the specific needs of each family member and

[44] The example shows wages changing by $5,000 increments. For the analysis in this paper, wages were changed by $1,000 increments so the calculations give a more refined result.

other considerations,[45] but this methodology provides an objective and consistent measure across all elements in the matrix.

For another example, suppose mom earns $10,000, and the boyfriend earns nothing. For this case, the element is a negative $2,500, showing a marriage penalty for mom. This makes sense because mom and her children would need to share their income with her boyfriend who has no earnings of his own. In this situation, the boyfriend would pull resources away from her and her children.

Matrix 2

Question 1 Marriage Penalty/Bonus SNAP Only Matrix: point of view from a single mom with two children in Arkansas, 2022.

Boyfriend's Wages	Mom's Wages with Children										
	$0	$5,000	$10,000	$15,000	$20,000	$25,000	$30,000	$35,000	$40,000	$45,000	$50,000
$0	-$381	-$253	$79	$379	$679	$979	$2,612	$0	$0	$0	$0
$5,000	-$514	-$1,424	-$822	-$522	-$222	$78	$0	$0	$0	$0	$0
$10,000	-$1,685	-$2,324	-$1,722	-$1,422	-$1,122	-$2,533	$0	$0	$0	$0	$0
$15,000	-$2,585	-$3,224	-$2,622	-$2,322	-$3,733	-$2,533	$0	$0	$0	$0	$0
$20,000	-$3,485	-$4,124	-$3,522	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$25,000	-$4,385	-$5,024	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$30,000	-$5,285	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$35,000	-$7,896	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$40,000	-$7,896	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$45,000	-$7,896	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$50,000	-$7,896	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0

The next step in the analysis is to determine the impact of taxes and safety-net programs on marriage. Here new matrices are generated for whatever tax and safety-net programs are selected for analysis using our safety-net benefit cliff modeling. Matrix 2 shows the marriage penalty/bonus matrix for SNAP benefits using 2022 SNAP factors for Arkansas assuming that the mom participates with Arkansas's child care assistance program and receives a Section 8 voucher. Those assumptions are important because different assumptions will change SNAP benefits used to calculate the elements of the matrix.

[45] Other considerations would include potential future earnings of each couple and estimated expenses of the boyfriend that potentially could pull resources away from her and her children.

Matrix 3

Question 1 Marriage Penalty/Bonus SNAP Only Matrix: point of view from a single mom with two children in North Carolina, 2022.

Boyfriend's Wages	Mom's Wages with Children: $0	$5,000	$10,000	$15,000	$20,000	$25,000	$30,000	$35,000	$40,000	$45,000	$50,000
$0	-$381	-$271	$7	$266	$529	$791	$3,287	$0	$0	$0	$0
$5,000	-$515	-$1,212	-$784	-$522	-$259	$4	$0	$0	$0	$0	$0
$10,000	-$1,456	-$2,003	-$1,572	-$1,309	-$1,047	-$3,283	$0	$0	$0	$0	$0
$15,000	-$2,247	-$2,791	-$2,359	-$2,097	-$4,333	-$3,283	$0	$0	$0	$0	$0
$20,000	-$3,035	-$3,578	-$3,147	-$5,383	-$4,333	-$3,283	$0	$0	$0	$0	$0
$25,000	-$3,822	-$4,366	-$6,433	-$5,383	-$4,333	-$3,283	$0	$0	$0	$0	$0
$30,000	-$4,610	-$7,652	-$6,433	-$5,383	-$4,333	-$3,283	$0	$0	$0	$0	$0
$35,000	-$7,896	-$7,652	-$6,433	-$5,383	-$4,333	-$3,283	$0	$0	$0	$0	$0
$40,000	-$7,896	-$7,652	-$6,433	-$5,383	-$4,333	-$3,283	$0	$0	$0	$0	$0
$45,000	-$7,896	-$7,652	-$6,433	-$5,383	-$4,333	-$3,283	$0	$0	$0	$0	$0
$50,000	-$7,896	-$7,652	-$6,433	-$5,383	-$4,333	-$3,283	$0	$0	$0	$0	$0

Matrix 3 shows the matrix using the same assumptions, except for North Carolina. The reason for the higher marriage penalties is that North Carolina participated in the Pandemic's emergency allotment program throughout 2022, and Arkansas did not.

For the results to be meaningful for this analysis, it is necessary to combine taxes and safety net benefit programs with gross income and then compare that matrix to the natural state matrix. This comparison will show what income combinations flipped from being a marriage bonus to a marriage penalty, and the reverse cases. It also will show the degree to which penalties change, that is, becoming more or less severe, and the degree to which bonuses change, that is, enhancing or diminishing the size of the bonus.

Matrix 4

Question 1 Marriage Penalty/Bonus Gross Income + SNAP Matrix: point of view from a single mom with two children in Arkansas, 2022.

Boyfriend's Wages	Mom's Wages with Children: $0	$5,000	$10,000	$15,000	$20,000	$25,000	$30,000	$35,000	$40,000	$45,000	$50,000
$0	-$381	-$1,503	-$2,422	-$3,372	-$4,322	-$5,272	-$4,889	-$8,750	-$10,000	-$11,250	-$12,500
$5,000	$3,236	$1,077	$428	-$521	-$1,472	-$2,422	-$3,750	-$5,000	-$6,250	-$7,500	-$8,750
$10,000	$5,816	$3,927	$3,279	$2,329	$1,379	-$1,283	$0	-$1,250	-$2,500	-$3,750	-$5,000
$15,000	$8,666	$6,777	$6,129	$5,179	$2,517	$2,467	$3,750	$2,500	$1,250	$0	-$1,250
$20,000	$11,516	$9,627	$8,979	$6,317	$6,267	$6,217	$7,500	$6,250	$5,000	$3,750	$2,500
$25,000	$14,366	$12,477	$10,117	$10,067	$10,017	$9,967	$11,250	$10,000	$8,750	$7,500	$6,250
$30,000	$17,216	$13,615	$13,867	$13,817	$13,767	$13,717	$15,000	$13,750	$12,500	$11,250	$10,000
$35,000	$18,354	$17,365	$17,617	$17,567	$17,517	$17,467	$18,750	$17,500	$16,250	$15,000	$13,750
$40,000	$22,104	$21,115	$21,367	$21,317	$21,267	$21,217	$22,500	$21,250	$20,000	$18,750	$17,500
$45,000	$25,854	$24,865	$25,117	$25,067	$25,017	$24,967	$26,250	$25,000	$23,750	$22,500	$21,250
$50,000	$29,604	$28,615	$28,867	$28,817	$28,767	$28,717	$30,000	$28,750	$27,500	$26,250	$25,000

Matrix 5

Question 1 Marriage Penalty/Bonus Matrix comparison between natural state and gross income + SNAP: the point of view is from a single mom with two children in Arkansas, 2022.

Codes: **Flipped to penalty** | Greater Penalty | Lesser Penalty | Smaller Bonus | No Change

Boyfriend's Wages \ Mom's Wages with Children	$0	$5,000	$10,000	$15,000	$20,000	$25,000	$30,000	$35,000	$40,000	$45,000	$50,000
$0	**-$381**	-$253	$78	$378	$678	$978	$2,611	$0	$0	$0	$0
$5,000	-$514	-$1,423	-$822	**-$521**	-$222	$78	$0	$0	$0	$0	$0
$10,000	-$1,684	-$2,323	-$1,721	-$1,421	-$1,121	**-$2,533**	$0	$0	$0	$0	$0
$15,000	-$2,584	-$3,223	-$2,621	-$2,321	-$3,733	-$2,533	$0	$0	$0	$0	$0
$20,000	-$3,484	-$4,123	-$3,521	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$25,000	-$4,384	-$5,023	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$30,000	-$5,284	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$35,000	-$7,896	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$40,000	-$7,896	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$45,000	-$7,896	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0
$50,000	-$7,896	-$7,635	-$6,133	-$4,933	-$3,733	-$2,533	$0	$0	$0	$0	$0

Matrix 4 shows the combination of gross income and SNAP for the same Matrix 2 scenario for a single mom in Arkansas, 2022, which is an example of a state that did not participate in the emergency allotment program. Matrix 4 will be compared to the natural state displayed in Matrix 1 to understand the impact of SNAP on marriage penalties and bonuses. Matrix 5 shows that comparison, and it is color coded. Three of the wage combinations displayed flipped from having a bonus—or no penalty—to having a penalty. All other bonuses had smaller bonuses. The penalties became worse for two elements, but less severe for six elements. All other elements did not change because SNAP no longer was a factor due to ineligibility.

The Arkansas scenario provides but one example of the computational analysis for marriage penalties, and the matrices were abridged for illustration purposes. They show how SNAP can make marriage penalties worse and also creates new penalties for certain wage combinations when there had been a bonus (or neutral, meaning no penalty or bonus) before the impact of adding SNAP benefits to the household. Running the analysis for other scenarios using large matrices with more granular income combinations shows the same pattern, and some scenarios showed even more severe impact than illustrated with the abridged matrices. Moreover, results vary based on household size, households with or without disabled or elderly members, and changes in expense deductions.

In this case, the SNAP marriage penalties for question 1 extend themselves to couples choosing to live together, meaning it is not just a marriage penalty but also a penalty on couples who want to live together assuming compliance with SNAP rules on how to count members of a household. The comparison in this example is still mom living with her children by themselves versus having her boyfriend move in with her. Because SNAP defines a household as a "group of individuals who live together and customarily purchase food and prepare meals together for home

consumption,"[46] the impact on married couples would be the same for couples who choose to live together (versus not living together), making the penalties even a greater public policy concern. Non-married couples could be encouraged to report their living at odds with their true circumstances to avoid the penalties, but this noncompliance tactic is unavailable to marriage couples who are automatically deemed legally within the same household.

The second way to measure marriage penalties is to examine question 2: whether the couple should marry and live together versus simply living together without marriage. Question 2 uses essentially the same computational procedure as question 1. The difference comes in the configuration of the households. Instead of using two different households living apart and comparing them to living together, it calculates two households with exactly the same number of members, comparing the difference between being married or unmarried.

The computations for question 2 show no marriage penalties across the board, which should be unsurprising because SNAP benefits are issued to households that purchase and prepare meals together, regardless of the interrelationship of the members of the household. However, the conclusion comes with an important caveat. The computations assume compliance with SNAP reporting requirements. Without compliance, there will be a marriage penalty every time. Married couples are assumed to be in the same household, but unmarried couples have an incentive to game the system by reporting their circumstance at variance to their true circumstances.

An easy way to skirt the household rule would be that the unmarried couple do not purchase and prepare meals together, and that the live-in boyfriend does not have any parental role with the children. Consider the following two cases. For the first case, suppose an unmarried couple applies for SNAP and they qualify either together or separately. Because of the structure of the maximum allotment table, they can increase their benefits by applying as separate SNAP households. For example, the monthly maximum allotment effective October 1, 2022, for a household of size 4 is $939 for the 48 contiguous states plus the District of Columbia. This also would be the amount that they would receive as a married couple. However, if they apply as separate households and are eligible, their combined monthly maximum allotment would be $1,021, which is $82 more, which annualizes to $984 more in benefits. Of course, the maximum allotments would be reduced after net income is determined and applied to the allotments. However, as already shown, the tapering of benefits is often truncated.

The following summarizes the example of a household size 4 reporting separate SNAP households despite living together for each of the five SNAP areas examined in this paper using SNAP factors effective October 1, 2022. The numbers are monthly maximum allotments unless stated otherwise.

[46] 7 U.S. Code § 2012 (m)(1)(B).

- 48 states + D.C.: $1,021 versus $939 for a gain of $82 or $984 annually
- Alaska Urban: $1,274 versus $1,172 for a gain of $102 or $1,224 annually
- Alaska Rural 1: $1,625 versus $1,494 for a gain of $131 or $1,572 annually
- Alaska Rural 2: $1,977 versus $1,819 for a gain of $158 or $1,896 annually
- Hawaii: $1,951 versus $1,794 versus for a gain of $157 or $1,884 annually

For the second case of noncompliance, suppose again a couple with two children but now one partner's income would make the household ineligible for SNAP benefits and that partner would be ineligible by himself or herself. In this case, there is an incentive to claim they do not purchase and prepare meals together (and there is no relationship or parental role to the children). They can simply report just the income of the SNAP eligible partner with the children as a single household. The financial gain for misreporting now becomes the entire benefit received for the one partner and the children, and, in this case, it would be a household with three members. Their maximum allotments—based on the effective date of October 1, 2022—would be as follows:

48 States: $740 monthly or $8,880 annually

- Alaska Urban: $923 monthly or $11,076 annually
- Alaska Rural 1: $1,177 monthly or $14,124 annually
- Alaska Rural 2: $1,432 monthly or $17,184 annually
- Hawaii: $1,413 monthly or $16,956 annually

The second case clearly has higher incentives for noncompliance favoring unmarried couples. However, preventing intentional noncompliance under current rules is more difficult. Well-designed eligibility procedures should minimize unintentional noncompliance, and in this case, a rule change in how SNAP counts households could help as well, which will be explored later in this paper.

Part 2: Evaluating SNAP Benefit Cliffs

Introduction

In one specific way, the program design of SNAP is good. It has a feature that could allow benefits to taper so that when participating households exit the program, they can easily overcome the loss of SNAP benefits. However, other program features interfere with the tapering that prevent this from happening. In essence, the critical factors necessary for the proper tapering to acceptable exit levels are severely out of alignment.

This part of the paper will provide:

- General principles to avoid safety-net benefit cliffs,
- Applying those principles to SNAP,
- Solving SNAP benefit cliffs in a fiscally responsible manner, and
- Strategies to address marriage penalties.

General Principles to Avoid Safety-Net Benefit Cliffs

There are four critical factors for safety-net programs that are defined as follows:

- The starting point: sets the countable income level when benefits begin along with the initial benefit amount;
- The tapering point: determines the income level when the maximum benefit amount begins to taper;
- The benefit reduction rate (BRR): determines the tapering rate at which benefits are diminished per increased countable income; and
- The exit point: the last income level and benefit amount before benefits end.

To avoid a benefit cliff, there must be a proper alignment of the four factors. If not, then the loss in benefits at program exit will be difficult to overcome with typical increases in income. All of the design factors play a role. The higher the maximum benefit, the longer it will require the benefit reduction rate to taper benefits to a preferred exit point, meaning that benefits will continue into higher income levels. Tapering points further away from the starting point have the same impact by delaying when the tapering will begin that pushes the exit point into higher income levels.

The benefit reduction rate determines how much benefits are reduced, or tapered, as income increases. The BRR balances a tradeoff between incentivizing earnings and minimizing fiscal costs. BRR rates that are too high increase the earnings loss rate that diminishes incentives to earn more money. This diminishment is a concern for public policy. Safety-net programs need to be designed to encourage financial self-improvement and avoid having individuals accepting lifestyles of low expectations and low income. On the other hand, BRR rates that are too low will

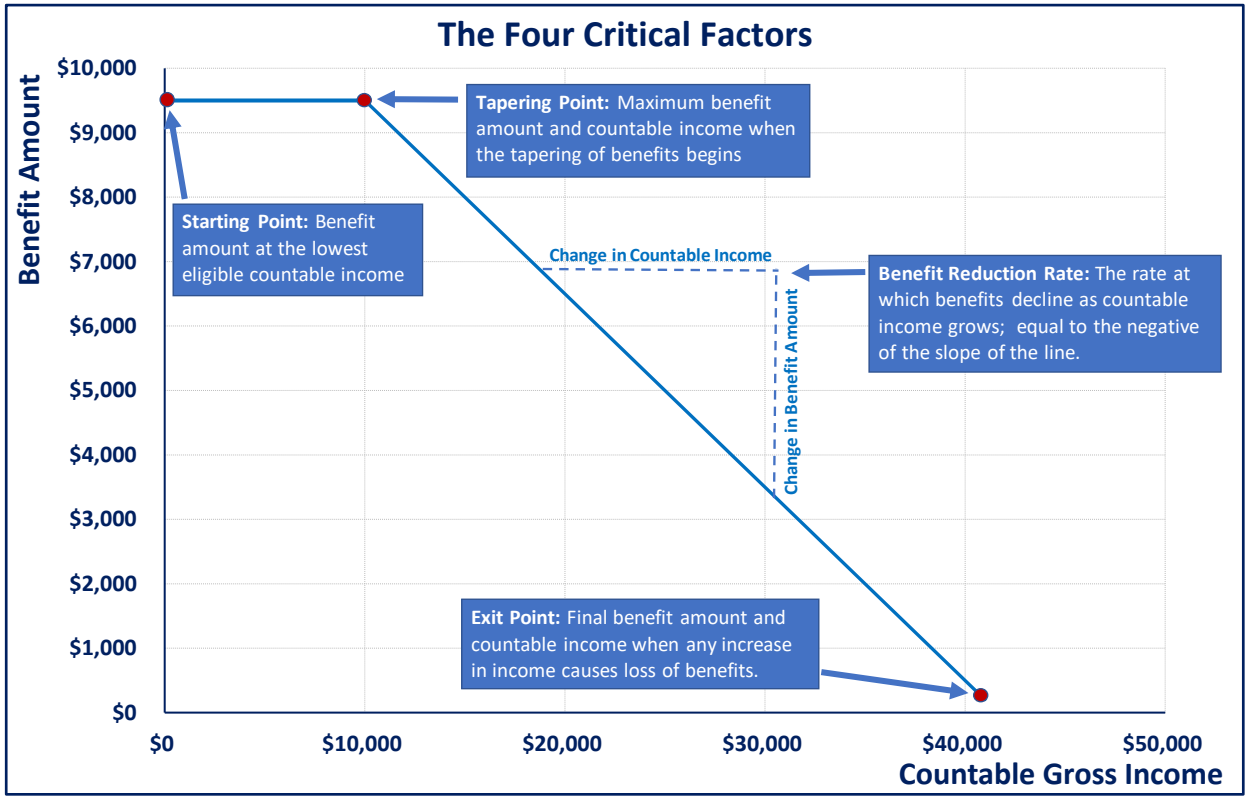
drastically increase program fiscal costs with benefits extending into higher income levels not normally associated with requiring government assistance.

The exit point is the last income level when program participants are eligible for benefits. Any income above that point means the participants are ineligible for benefits, and their benefits drop to zero. The exit benefit is the last benefit amount at the exit point.

If the tapering point and benefit reduction rate are calibrated properly, the benefits will taper to the exit point with an exit benefit that can be easily overcome with an increase in earnings. We have used a 2 percent income increase as a benchmark that would allow most households to overcome the loss in the exit benefit. Per Part 1 of this paper, we calculate the percent loss of benefits to income at the exit point to be equal to 0.5 percent using an ideal earnings loss rate of 25 percent per the Earnings Loss Rate Severity Scale Policy Guide.

Chart 14

The Four Critical Factors.



However, if the exit point is determined by another factor other than allowing the tapering of benefit to a predetermined exit amount, then there can be benefit losses beyond the ability of most program participants to overcome. This can happen in a number of different ways, such as imposing a gross income or net income limit based on criteria other than the normal tapering of benefits. To do it correctly, income limits could—and should—be calculated using the tapering

point, the benefit reduction rate, and the predetermined exit point.[47] This method would guarantee that no program participant will encounter a benefit cliff. Chart 14 illustrates a proper alignment of the four critical factors.

[47] For the calculation, let the tapering point be (x_1, y_1), where x_1 is countable income and y_1 is the maximum benefit level, the benefit reduction rate be $-m$ **(because the BRR is negative of the slope)**, and the exit point be (x_2, y_2) where x_2 is exit income and y_2 is the exit benefit. By selecting the exit point where the exit benefit equals 0.5% of the exit income gives $y_2 = 0.5\% * x_2$.

Because the benefit reduction rate is the negative of the slope of the benefit line, we know that $m = \frac{y_2 - y_1}{x_2 - x_1}$, which gives us the following formula for the **exit income:** $x_2 = \frac{mx_1 - y_1}{m - 0.5\%}$.

Applying the General Principles to SNAP

The starting point

For SNAP, the starting point is always the maximum allotment at zero countable income for the obvious reason of providing food to those without means.[48]

The more difficult question is determining the initial level of benefit. SNAP relies on the concept of a Thrifty Food Plan where it is assumed that the participating household adopts a thrifty food budget to meet its nutritional needs. Especially because food budgets vary greatly among households due to income, preferences, availability and prices of food, accessibility, shopping savvy, and choices made, the U.S. Department of Agriculture (USDA) has created a Thrifty Food Plan as a benchmark budget for households requiring assistance in acquiring food.

Thriftiness is a criterion when it comes to safety-net program design for important reasons. If benefit levels start higher than necessary, it makes it more difficult to solve benefit cliffs and marriage penalties for several reasons. Starting with higher benefit levels causes more households to become eligible for benefits if benefits are allowed to taper properly to an exit point that can be easily overcome with a typical pay raise. Not only can these households have income not associated with requiring assistance, but higher income comes with higher tax rates under progressive tax systems, like that of the United States, which means higher earnings loss rates.

Higher than necessary benefit levels also add significantly to the program's fiscal cost, which can bring us to the point where we were in 1981. In attempts to bring down the overall cost of the Food Stamp program, Congress created the gross income limit on households *without* disabled or elderly members.[49] An unfortunate byproduct of that strategy is that it can—and does—disrupt the tapering of benefits before the benefit level becomes low enough that can be overcome with increased earnings.

An alternative strategy would be to increase the benefit reduction rate, but this comes with a tradeoff. Higher BRRs can help control fiscal costs, but they also increase the earnings loss rate, meaning reduced incentives to earn more income. Moreover, the SNAP BRR combines with the earnings loss rates of payroll taxes, income taxes, and all other safety net programs a household might have. Monitoring program cost is especially important for SNAP because it is one of the

[48] The starting point is not always when countable income equals zero. For example, the Earned Income Tax Credit requires earnings before benefits can be attained and ramp up as earnings increase until it hits a maximum. Child care assistance programs often have conditions, such as requiring hours worked, before applicants are eligible for benefits.

[49] Public Law 97–35—August 13, 1981, Omnibus Budget Reconciliation Act of 1981, Title I, Subtitle A, Part 1, Sec. 104

three largest means-tested assistance programs in terms of participation and cost. Federal Fiscal Year 2022 closed at a cost of $119 billion serving a monthly average of 41.2 million people.[50]

For these reasons, a thrifty food plan that truly meets nutritional needs through smart shopping for food is crucial to the design of SNAP. This is also why nutritional education programs are an essential component of SNAP. All states and D.C.[51] have educational programs to help SNAP recipients know how to efficiently budget for and select nutritious food. Moreover, the Food and Nutrition Service assists states with their educational programs, providing tools and curricula, and has a website dedicated to better nutrition and "stretching food dollars."[52]

However, in its most recent redetermination of the value of the Thrifty Food Plan, the U.S. Department of Agriculture reset its value that not only completely offset the loss of the temporary 15 percent increase due to the pandemic for the first nine months of 2021, but also allowed the cost to grow by an additional 9 percent to 14 percent above that level, depending on the SNAP area. This action immediately made the benefit cliffs worse, and the prospect for overcoming them more difficult. Even if the redeterminations were accurate, the impact was the same. Nevertheless, the manner, circumstances, and timing of the administrative action raised suspicions among many that the USDA did not conduct the redetermination in good faith, as if it went into the process knowing that it wanted to increase the cost instead of evaluating the plan objectively.[53] A report by the U.S. Government Accountability Office[54] did nothing to alleviate these concerns, finding that the U.S. Department of Agriculture failed to follow proper quality assurances that resulted in the likely historically high increases in 2021.[55] Because of the crucial role the Thrifty Food Plan plays in the design of SNAP, Congress should consider ordering the

[50] Food and Nutrition Service, U.S. Department of Agriculture, SNAP Data Table: National Level Annual Summary, Supplemental Nutrition Assistance Program Participation and Costs, Data as of March 10, 2023: https://www.fns.usda.gov/sites/default/files/resource-files/SNAPsummary-3.pdf.

[51] The Food and Nutrition Service, U.S. Department of Agriculture, dedicates a webpage to *State SNAP-Ed Programs* with links to all state and other area programs: https://snaped.fns.usda.gov/state-snap-ed-programs.

[52] Food and Nutrition Service, U.S. Department of Agriculture, *SNAP-Ed Connection* website: https://snaped.fns.usda.gov.

[53] For an example of one such criticism, see the Wall Street Journal editorial, "The Democratic Food-Stamp Boom: The average family of four will get more than they spend on food," August 17, 2021 (print version August 18, 2021): https://www.wsj.com/articles/the-democratic-food-stamp-boom-joe-biden-usda-welfare-state-11629225286.

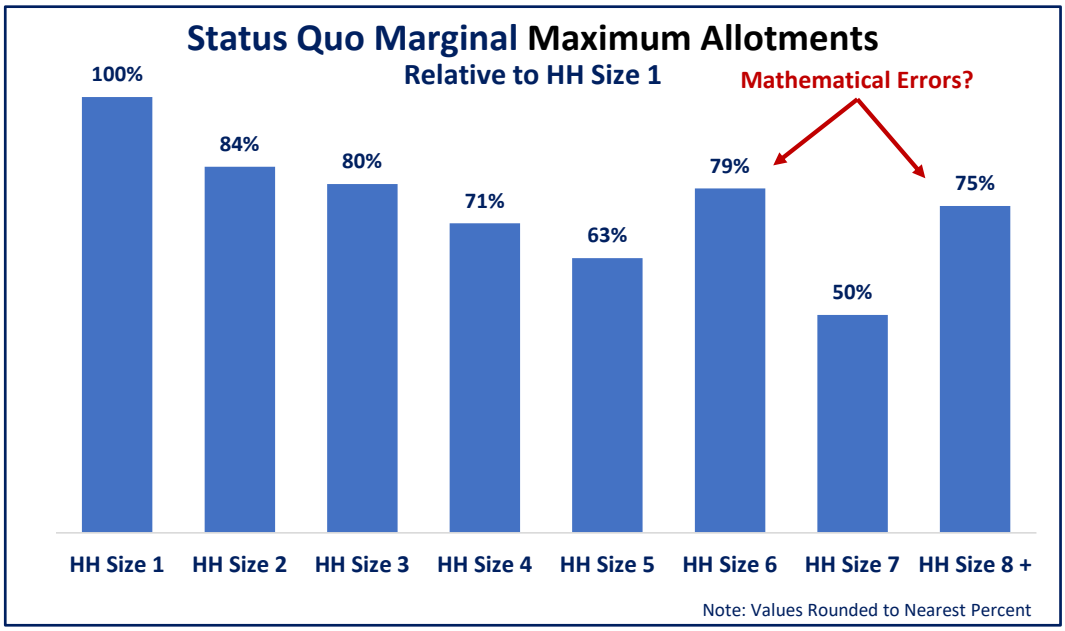
[54] U.S. Government Accountability Office, *Thrifty Food Plan: Better Planning and Accountability Could Help Ensure Quality of Future Reevaluations*, GAO-23-105450, December 14, 2022: https://www.gao.gov/products/gao-23-105450.

[55] We say "likely" because the increases evaluated in this paper were based on available data starting in 2003. Therefore, it is technically possible that there were pre-2003 increases that exceeded the increases in 2021.

USDA to redo its determination but in a way that can restore public trust that it acted in good faith and followed best practices.

Chart 15

Current SNAP marginal maximum allotments. The marginal maximum allotments for household sizes 6, 8, and above appear to be mathematical errors.



The Thrifty Food Plan is based on a family of four, which is the basis for the SNAP maximum allotments used in determining the benefits, and the USDA adjusts for the other household sizes. However, there is a problem with how the USDA made those adjustments. Chart 15 highlights the problem by calculating the marginal maximum allotments for each household size as a percentage of the marginal maximum allotment for a household with just one member. Consistent with how economists define "marginal," the marginal maximum allotment is the additional amount that a household receives by adding one more member to its household size. For example, the monthly maximum allotment for a household with four members in Hawaii is $1,794. The monthly maximum allotment increases to $2,131 if the household adds a member. The monthly marginal maximum allotment for adding a fifth member to the households is $337, which is simply the difference between the maximum allotments for household size 5 and household size 4. These numbers are based on an effective date of October 1, 2022.

Using the same effective date, we find that the monthly maximum allotment for household size 1 is $538, which, because it is the lowest size, is equal to the marginal maximum allotment for household size 1.[56] The marginal maximum allotment for household size 5 is 63 percent of the

[56] Technically, household size 0 has no benefits. Adding one member to get the household would have a marginal maximum allotment of $538, which then would become the maximum allotment for household size 1.

marginal allotment for household size 1. This is an example of how the percentages in Chart 15 were calculated.

Because of the financial advantage of buying food in bulk, it makes sense that the marginal maximum allotments will diminish as household size grows. However, the marginal maximum allotments for household sizes 6 and 8 (and thereafter) are out of alignment with the others. They do not diminish by the same pattern, suggesting a mathematical error. These errors are found in data over the last twenty years for all fifty states and the District of Columbia. Therefore, the errors were introduced before 2003.

Chart 16

A mathematical way to correct the marginal maximum allotments.

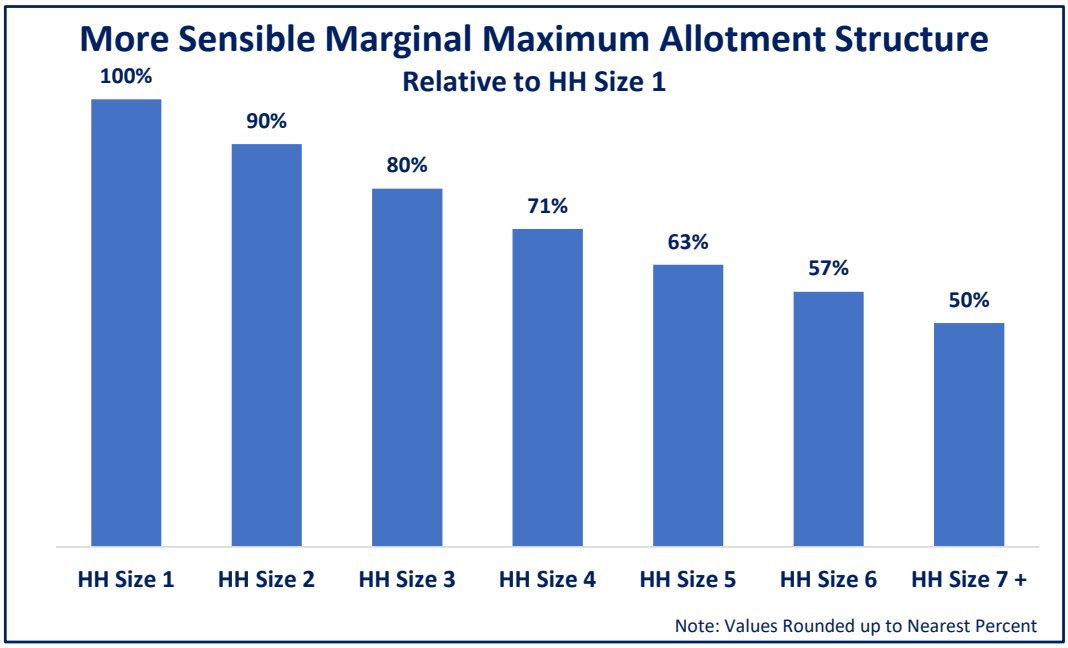


Chart 16 presents a way to correct the mathematical errors with the marginal maximum allotments. Using the same basis where household size 7 is 50 percent of household size 1, the percentages are calculated using a geometrical average so that they decrease proportionally.[57]

The tapering point

The tapering point can be the starting point, meaning that the tapering can begin as soon as a household has income. When it is not, it is because there are deductions that postpone the tapering of benefits until a higher income is reached. The primary reason for the deductions is to allow households and individuals to hold onto income for essential living costs. This is clearly

[57] Geometric averages are a common feature in economics because inflation, compounding of interest, population, and other phenomena grow geometrically, not arithmetically. For Chart 16, it was calculated by taking 50 percent to the sixth root, which yields 0.8909, applying that rate to the prior marginal maximum allotment, and rounding up to the next percentage point.

the rationale for standard deductions with the U.S. individual income tax system. They allow taxpayers to have all their income for those basic living costs before they become liable for paying taxes.

This rationale does not necessarily extend to safety-net programs. Food is one of the most essential living costs without which life cannot be sustained. It makes sense for income taxes to have deductions so that households have more money to spend on things like food, but when it comes to SNAP that helps with the purchase of food, it makes less sense. It suggests that there are higher budget priorities than food.

Nevertheless, SNAP has three basic types of income deductions that push the tapering point away from the starting point, creating the flat line—or plateau—in Chart 17 below. All households have a standard deduction that all households get. These standard deductions do not change for each household size, but vary irregularly based on area. For the 48 states and the District of Columbia, household sizes 1 through 4 have the same standard deduction of $193 monthly ($2,316 annually), household size 5 has its own at $225 monthly (or $2,700 annually), and all other households have yet another at $258 monthly (or $3,096 annually). Alaska has but one standard deduction for all household sizes, which is $330 or $3,960 annually. Hawaii has two standard deductions: $272 monthly, or $3,264 annually, for household sizes 1 through 5 and $296 monthly, or $3,552 annually, for household sizes 6 and above. All dollar amounts are for the effective date of October 1, 2022.

SNAP also has expense deductions without limit for child support payments made, dependent care expenses, and medical expenses above $35 monthly allowable only for households *with* a disabled or elderly member. SNAP also has an earnings deduction equal to 20 percent of a household's income derived from earnings, which is intended to encourage recipients to seek higher paying jobs or work more hours. However, the incentive is easily overridden if and when those additional earnings cause the household to exceed an income limit, causing the household to lose all benefits beyond what an expected pay raise can overcome.

SNAP has an excess shelter expense deduction for shelter costs—defined as housing costs, such as rent, plus utility costs—that exceed half of its net income after applying the other income deductions. The excess shelter expense deduction has a maximum for households *without* a disabled or elderly member but not for households *with* a disabled or elderly member.[58]

All these deductions—most without limit—shift the tapering point further away from the starting point. Because of the variance in the make-up and amount of those deductions, each household will have a unique tapering point. Obviously, the rationale for these deductions is to allow households to purchase all their food—based on the Thrifty Food Plan—using SNAP benefits so that they can have more income for those other expenses plus a standard deduction for other

[58] There is also a homeless deduction where all household members are homeless and are not receiving free shelter.

unnamed expenses. However, it lacks a rationale for why those other expenses are more important than food that they override the personal responsibility to share in the cost of purchasing one's food per the thrifty food budget.

It might be worth noting that some of the deductions are the focus of other safety-net programs. Child care assistance programs—although participation is rationed by many states—and special tax deductions address dependent care expenses. Medicaid and other medical assistance programs address medical expenses. And various housing programs, including Section 8 housing choice vouchers (although participation is rationed due to exorbitant costs if funded fully), and energy programs, such as Low Income Home Energy Assistance Program, address housing and utility costs. These other safety net programs interact with SNAP, making the modeling and understanding of benefit cliffs more complicated, but also can reduce the size of SNAP benefit cliffs, but not to the extent to negate the findings in the first part of this paper that intentionally excluded all expense deductions other than the excess shelter expense deductions in the analyses.

The benefit reduction rate

The SNAP benefit reduction rate is not a constant 30 percent as the statutory requirement might lead some to believe. The SNAP statute establishes that 30 percent of a household's net income is applied to the maximum allotment[59] as the responsibility of a household to share in the cost of its maximum allotment. However, the actual BRR fluctuates between 24 percent and 45 percent, depending on (1) the percentage of household countable income that comes from earnings and (2) shelter costs.

Earnings change the benefit reduction rate because of the earnings deduction. Households receive a deduction equal to 20 percent of their earnings. Mathematically, it changes the 30 percent rate down and equal to 24 percent, depending on the percentage of countable income that is earnings. If 100 percent of gross countable income is earnings, then the tapering rate is 24 percent. If the household has no earnings, then the tapering rate is 30 percent.[60]

However, another factor alters the outcome even more. The excess shelter expense deduction also impacts the BRR, and it is more complicated than the earnings deduction. The excess shelter expense deduction can create three separate BRR zones. If the household's excess shelter cost is above the maximum and it is a household *without* a disabled or elderly member subject to the maximum for the excess shelter expense deduction, then the BRR will range between 24 percent and 30 percent immediately after the tapering point until the excess shelter costs are below that maximum. Once countable income hits that point, the BRR will range between 36 percent and

[59] 7 U.S. Code § 2017(a).

[60] The formula for the SNAP tapering rate absent shelter costs is $0.24z + 0.3(1-z)$ where z = earnings as a percent of countable income. More generally, the formula is $r_1((1-r_2)z + (1-z))$ where r_1 is the general reduction in net income, r_2 is the earnings deduction, and z is earnings as a percent of countable income.

45 percent. The reason is that the calculation of the excess shelter expense deduction changes the BRR because the formula changes net income and the benefit amount.

The BRR can change yet again. Once countable income grows high enough where the household is no longer eligible for the excess shelter cost, the BRR reverts to a range between 24 percent and 30 percent because only the earnings deduction remains in play. Depending on shelter costs and earnings, a household *with* a disabled or elderly member can encounter two different BRR line segments as countable income increases.

Therefore, households *with* disabled or elderly members can have one kink point and two distinct segments with the SNAP tapering line.[61] However, for a household *without* a disabled or elderly member, it can have two kink points and three distinct tapering line segments.

Absent taxes and other safety-net programs, BRRs of 24 percent to 30 percent—and referring to the Earnings Loss Rate Severity Scale Policy Guide—ramp down benefits in a way that encourages earnings. When SNAP BRRs reach 45 percent, the earnings loss rate will be above 50 percent once taxes and other programs are added to the household's budget.[62] If the rates are too high, it causes disincentives to earn more money. A 100 percent benefit reduction rate means that for each dollar gained in countable income, one benefit dollar is taken away. There is no point in earning an additional dollar, especially since payroll and income taxes will take away some of that additional earnings that will set the household even further behind.

It gets more complicated. Households with just one or two members have a minimum allotment. If the household has little to no deductions, and if the law would allow, its benefits can taper to zero before its income reaches the net income limit, or, alternatively, the gross limit income for the households *without* a disabled or elderly member, whichever limit the household hits first. Instead, these household would receive the minimum allotment until such time its income runs up against one of the income limits, creating a range of income where the benefit stays static despite increased earnings.

The exit point

For the eligibility design of SNAP to function properly, the exit point needs to be aligned in such a way that it occurs when a household can easily overcome the benefit loss with increased earnings. For example, suppose a household earning $30,000 is at the SNAP exit point, and that it will lose $150 in SNAP benefits if it earns anything more. Suppose payroll and income taxes will take 20 percent away from a pay raise. If the household received a 2 percent pay raise that calculates to $600 annually, it would lose $120 in taxes and $150 in SNAP benefits, leaving the household with a gain of $330. This hypothetical scenario would still provide the household with

[61] The kinked SNAP BRR line is similar to the kinked demand theory for oligopolies in microeconomics, where the demand curve has a kink point where the slope pivots.
[62] The National School Lunch Program is an example of a program that steps down in benefits at threshold incomes as opposed to tapering off smoothly.

an incentive to accept—or pursue—the pay raise. However, as has been shown in Part 1 of this paper, this illustration is hardly ever the case. The tapering of benefits gets truncated by either the gross income limit or the net income limit before the benefits level can reach levels easily overcome by a typical pay raise.

Chart 17

SNAP benefit example using SNAP factors effective October 1, 2022, for a three member household without disabled or elderly members with annual shelter costs of $13,428 within the 48 states plus the District of Columbia, and all income coming from earnings.

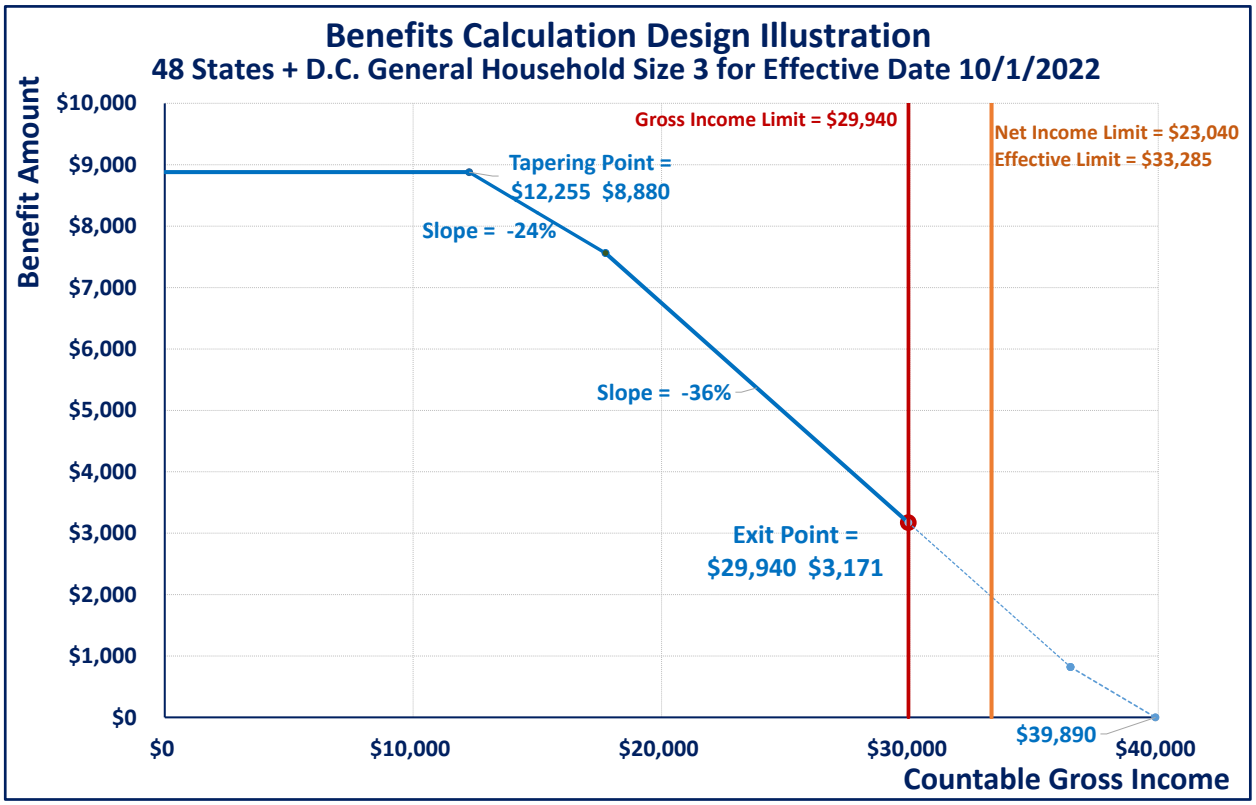


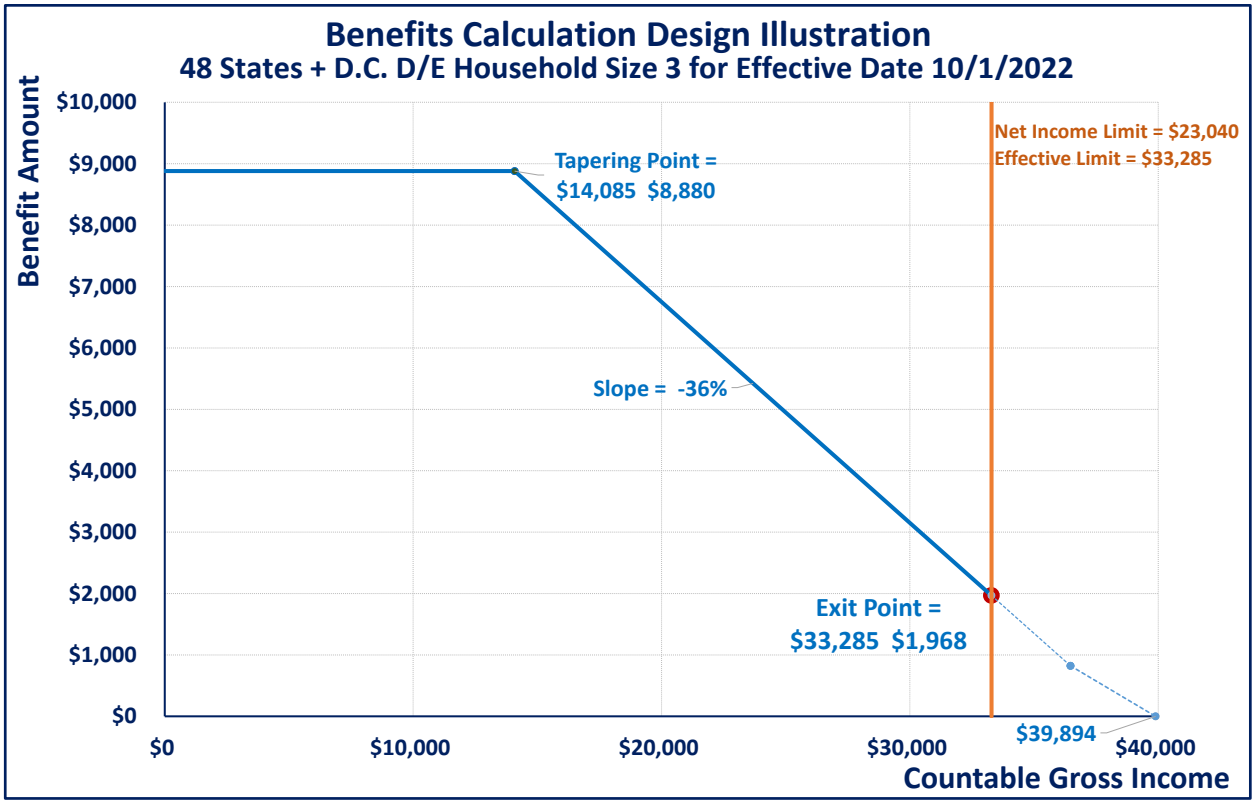
Chart 17 provides an example of the four critical factors for SNAP for a household with three members, where no one is disabled or elderly, in the 48 states or D.C. given shelter costs of $13,428, no other income deductions, all income coming from earnings, and using SNAP factors effective October 1, 2022. An illustration for a household *with* a disabled or elderly member will be addressed next in another chart. In the meantime, the starting point is the maximum allotment of $8,880 with no countable income. Because of the $2,316 standard deduction, the 20 percent income disregard due to earnings, and the maximum excess shelter expense deduction of $7,488, the tapering point moves from zero to $12,255 of countable income. Because of the formula for the excess shelter expense deduction,[63] shelter costs of $13,428

[63] 7 U.S. Code § 2014(e)(6) sets the excess shelter expense deduction to be equal to the shelter cost—consisting of both housing and utility costs with specified restrictions—that exceeds half of countable income after all other income deductions have been made.

would provide a higher excess shelter expense deduction had it not been for the $7,488 cap. The tapering line has three distinct segments each with their own benefit reduction rates. The first segment runs from the tapering point to the first kink point at $17,745 countable income and $7,562 in SNAP benefits with a BRR of 24 percent. The second segment runs from that first kink point to the second kink point at $36,465 countable income and what would be $822 in SNAP benefits with a BRR of 36 percent. The last segment runs from the second kink point to $39.890 countable income when SNAP benefits would disappear with a BRR of 24 percent. Because this household is subject to both a gross income limit and a net income limit, its exit point would be $29,940 in countable income with $3,171 in SNAP benefits, which is 11.6 percent of countable income. It would require a 42.4percent increase in income for the household to overcome the loss in SNAP benefits assuming an earnings loss rate of 25 percent.

Chart 18

Same SNAP benefit example as Chart 17 except for a household with a disabled or elderly member. It assumes SNAP factors effective October 1, 2022, for a three member household with annual shelter costs of $13,428 within the 48 states plus the District of Columbia, and all income comes from earnings.



If the household includes a disabled or elderly member, Chart 17 would change into Chart 18. There would be no maximum excess shelter expense deduction, which would move the tapering point to $14,085 in countable income, and the maximum allotment stays the same at $8,880. The first kink point would disappear, creating just two segments of the tapering line instead of three. The first segment would run from the tapering point straight through the old kink point

in Chart 17 to the same kink point at $36,465 in countable income and what would be $822 in SNAP benefits with a BRR of 36 percent. The first kink point no longer exists in Chart 18, and what was the second kink point in Chart 17 becomes the first kink point in Chart 18. The second segment in Chart 18 runs the same as the third segment in Chart 17 to $39,894 countable income when SNAP benefits would disappear with a BRR of 24 percent. The gross income limit is no longer a factor for this household, but the net income limit is what determines the exit point. SNAP benefits end at $1,968 with $33,285 in countable income, which is a 5.9 percent loss compared to countable income. It would take a 23.7 percent increase in income to overcome the SNAP benefit loss, assuming an earnings loss rate of 25 percent.

Chart 19

Same as Chart 17 except no income comes from earnings. It assumes SNAP factors effective October 1, 2022, for a three member household without disabled or elderly members with annual shelter costs of $13,428 within the 48 states plus the District of Columbia.

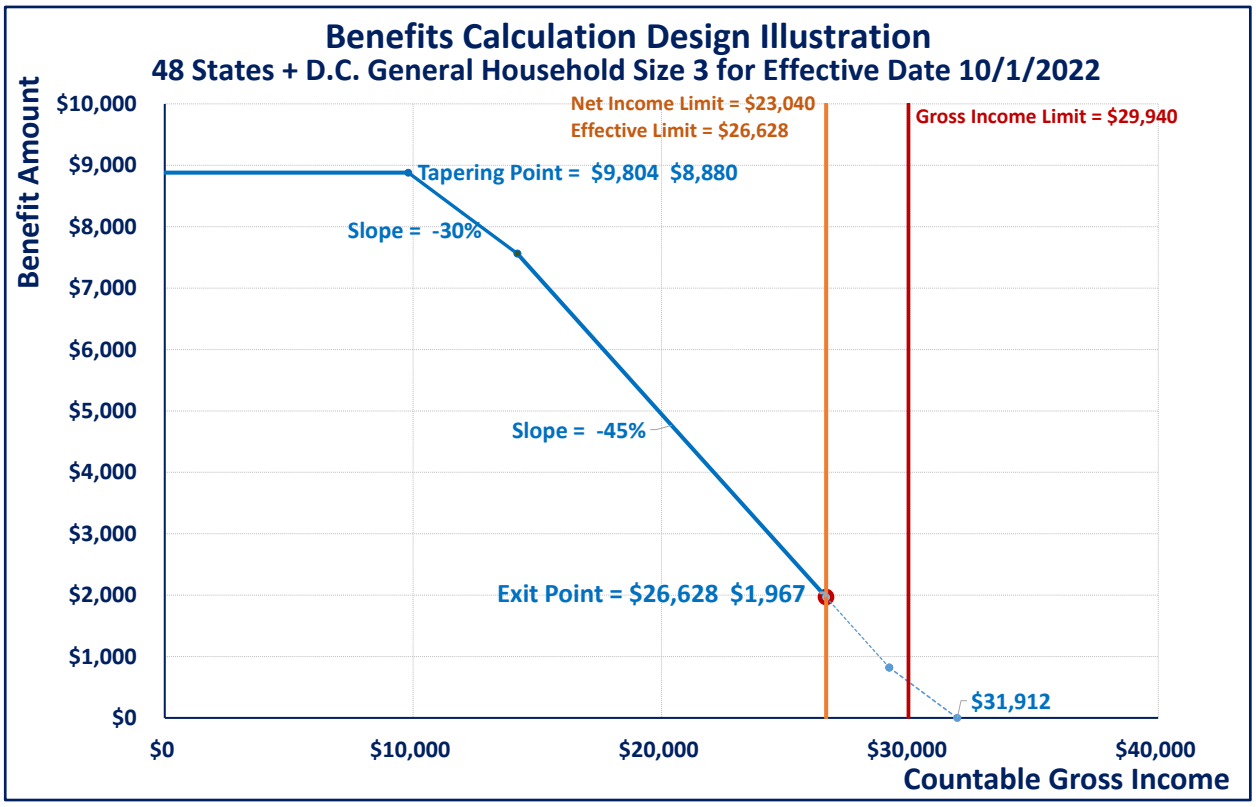


Chart 19 has the same assumptions as Chart 17, except it assumes no income comes from earnings.[64] The tapering point starts at $9,804 in countable income, nearly $2,500 less than

[64] Especially for households without disabled or elderly members, higher income without earnings would be rare. Such income could come from numerous sources, such as unemployment insurance, other safety-net programs, investment returns, or early retirement money. Nevertheless, the point of these computations is to examine the impact on benefit cliffs from these less likely scenarios that would have

assuming all earned income. The maximum allotment of $8,880 stays the same. The tapering line also has three segments, but the BRRs, the kink points, and exit point change. The first segment runs from the tapering point to the first kink point at $14,196 in countable income with $7,562 in SNAP benefits with a BRR of 30 percent. The second segment runs from the first kink point to the second kink point at $29,172 in countable income and what would be $822 in SNAP benefits with a BRR of 45 percent. The last segment runs from the second kink point to $31,912 in countable when benefits disappear with a BRR of 30 percent. In this case, the exit point is determined by the net income limit because of the lack of deductions with only excess shelter costs. Countable income at exit is $26,628 with SNAP benefits of $1,967. The loss in benefits is 7.4 percent of countable income, which would require a 29.5 percent increase in income to overcome the loss, assuming a 25 percent earnings loss rate.

Chart 20

Same SNAP benefit example as Chart 18 except assuming no income comes from earnings. It assumes SNAP factors effective October 1, 2022, for a three member household with a disabled or elderly member with annual shelter costs of $13,428 within the 48 states plus the District of Columbia

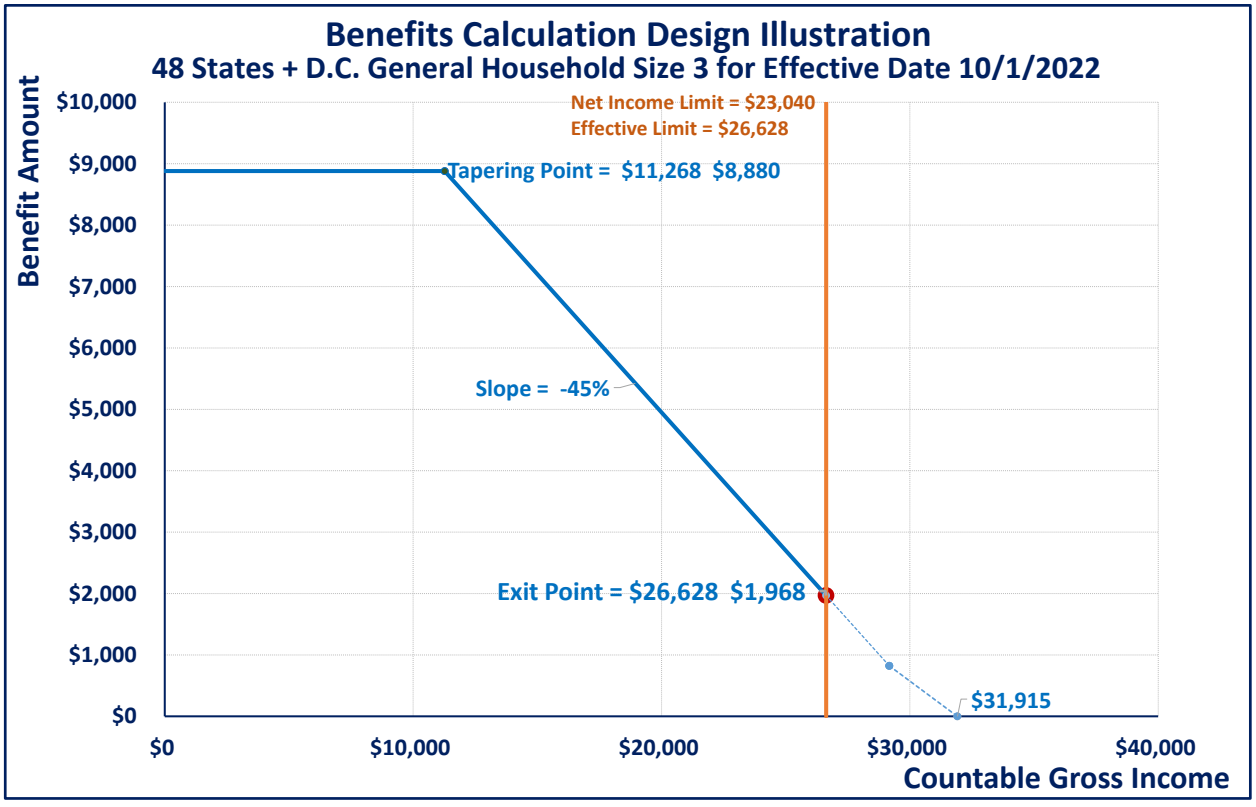


Chart 20 illustrates the last variation of the prior three charts. This time it assumes no income from earnings for a household *with* a disabled or elderly member. The other assumptions are

lower benefit cliffs to overcome. If there are insurmountable benefit cliffs for these rare cases, then there are indeed insurmountable benefit cliffs for all the other cases.

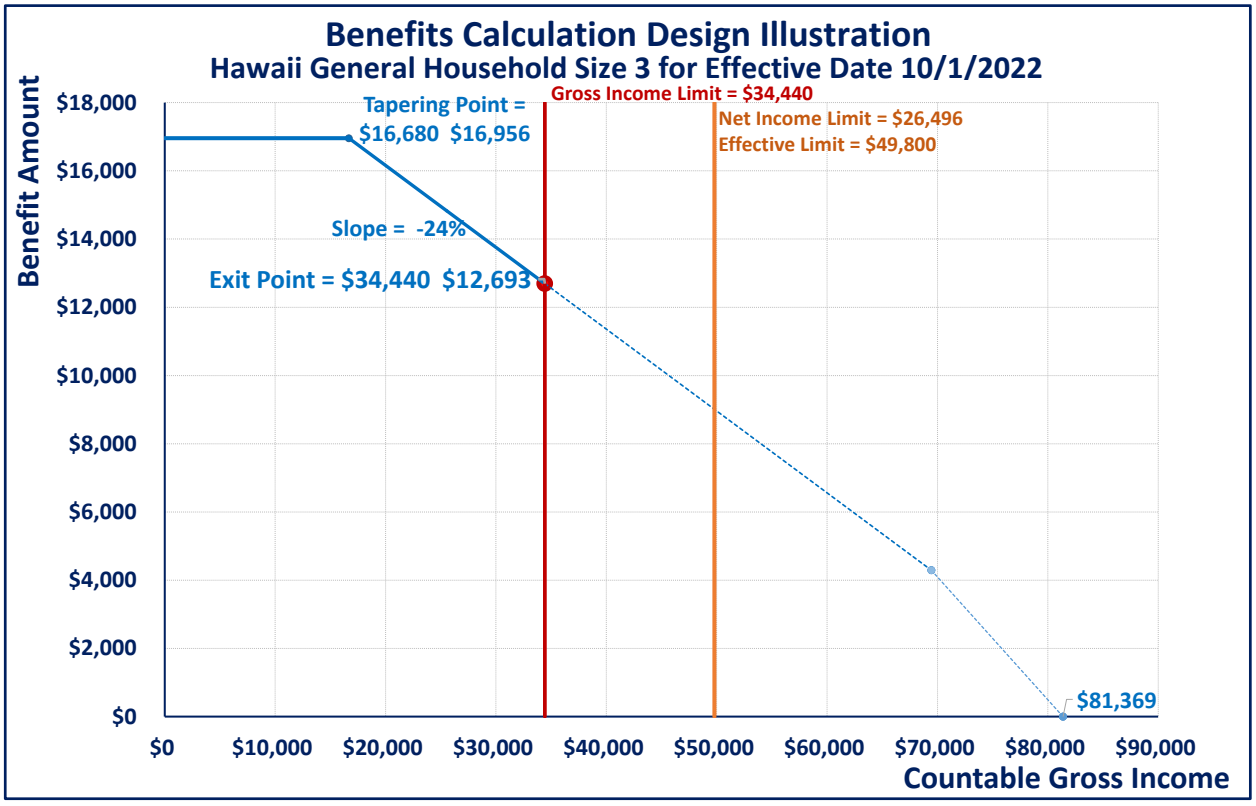
the same: SNAP factors effective October 1, 2022, three member household, annual shelter costs of $13,428, and no other expense deductions. The tapering point now is $11,268 in countable income with $8,880, and the tapering line has two segments. The first segment runs from the tapering point to the kink point of $29,172 in countable income with what would be $823 in SNAP benefits with a BRR of 45 percent. The second and last segment runs from the second kink point to $31,915 in countable income where benefits would end with a BRR of 30 percent. The loss of SNAP benefits is 7.4 percent of countable income, requiring an income increase of 29 percent to overcome the loss, assuming an earnings loss rate of 25 percent.

It should be kept in mind that the illustrations in Charts 17 through Chart 20 will change given other circumstances. The only two deductions considered were the earnings and excess shelter expense deductions. If other expense deductions are considered, then it would shift the tapering point out even further with higher countable income. Different shelter costs will also change the tapering point. For households *without* disabled or elderly members, and if the shelter costs are low enough so the maximum deduction is not reached—like with households *with* disabled or elderly members—the tapering line would have only up to two segments. The reason for the first kink with the three-segmented line is the maximum excess shelter expense deduction kicks in (that is, without the maximum the deduction would have been higher), and it changes the BRR due to the mathematics that determines the slope of the line. Once that maximum is no longer in effect, the tapering line assumes the BRR as impacted by the excess shelter expense deduction formula. The last kink point occurs when the excess shelter expense deduction reaches zero. From that point on, only the 30 percent statutory benefit rate deduction and the 20 percent earnings deduction determine the BRR. Again, if all income comes from earnings, then the BRR equals 24 percent. If none of the countable income comes from earnings, then it remains at 30 percent.

There is an additional complication. Although there are distinct tapering line segments with different BRRs, the BRRs can still change within a segment based on how shelter costs and earnings as a percentage of overall income changes for the household over time. For example, many households will have a combination of earnings and non-earnings countable income, meaning the BRR will vary as the proportion of earnings to countable income changes. Likewise, when shelter costs change, it also changes the calculation of the tapering point and benefit amount.

Chart 21

Same SNAP benefit example as Chart 17 except for Hawaii. It assumes SNAP factors effective October 1, 2022, for a three member household with a disabled or elderly member with annual shelter costs of $36,228, which is equal to the fair market rent, and all income coming from earnings.



Of course, the illustrations for Charts 17 through Chart 20 are for a household of three within the 48 states and D.C. While the same principles apply, other household sizes and areas will alter the scenarios in curious ways. Chart 21 shows what happens to Chart 17, using the same assumptions, for the case of Hawaii and using Hawaii's Fair Market Rent of $36,228. The $16,956 maximum allotment is ninety percent higher than in the 48 contiguous states, and the high shelter costs push the first kink point all the way to $69,450 in countable income—way beyond the gross and net income limits. The second kink point is literally off the chart, and if plotted using a straight line, would be at a negative benefit amount. However, negative benefit amounts obviously do not apply to this circumstance despite the pure mathematics of the calculations.

The case of Hawaii is remarkably different from the other 48 states and Alaska Urban that it begs further inquiry. The Hawaiian SNAP factors are so severely out of alignment that it presents itself as golden opportunity for economic researchers to examine other facets, such as impact on work incentives.

Chart 22

SNAP benefit example assuming SNAP factors effective October 1, 2022, for a single member household, who is disabled or elderly, with fair market rent shelter costs of $12,372 for Alaska Urban, and all income comes from earnings.

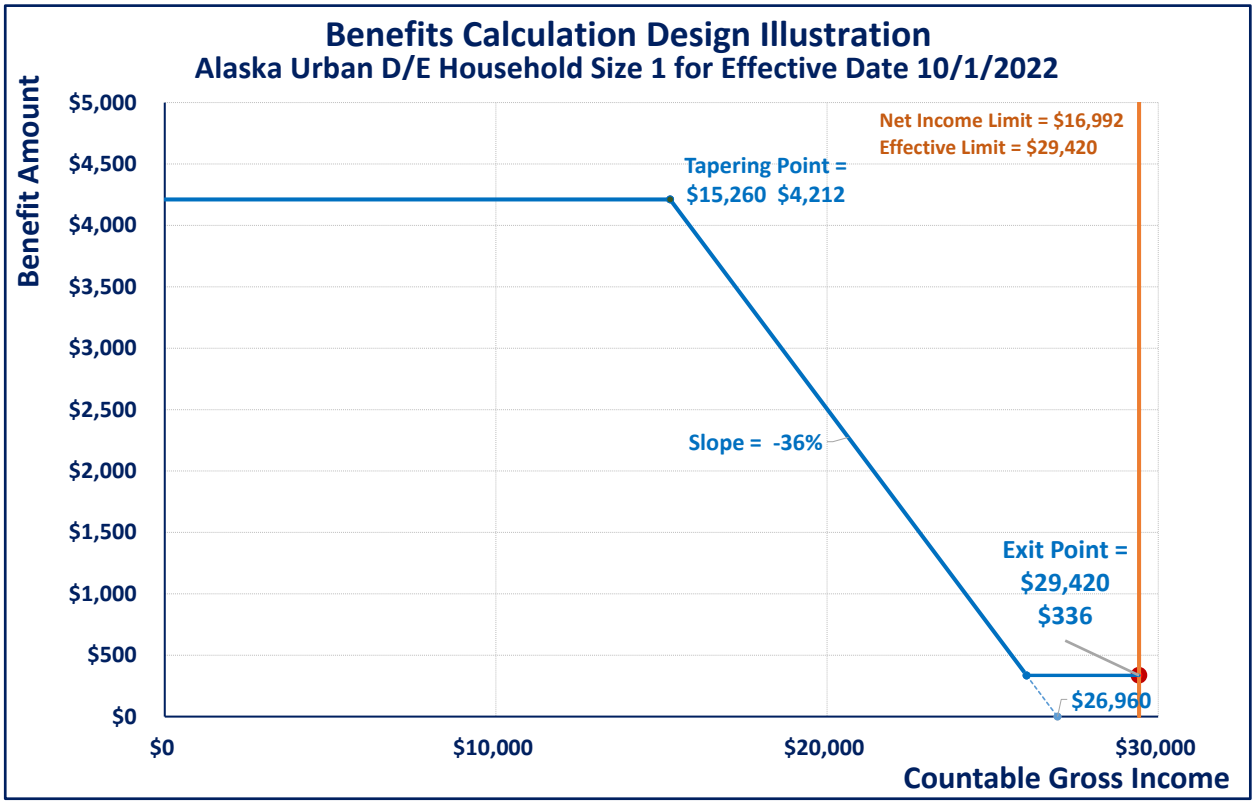


Chart 22 shows the impact of the minimum allotment when benefits would have tapered to zero. This example is for a household with just one member who is disabled or elderly in Urban Alaska, assuming Urban Alaska's fair market rent of $12,372, all countable income comes from earnings, and no other expense deductions. The maximum allotment is $4,212, and there is no maximum excess shelter expense deduction. The excess shelter expense deduction is in play for the entire tapering line and never reaches the kink point due to the high shelter costs relative to the other factors. Had the tapering line been allowed to run its full course to zero, it would exit at $26,960 in countable income. However, there is a $336 minimum allotment that kicks in at income of $26,027 and runs for about $3,400 more in income until it hits the net income limit at $29,420. At the exit point, the loss in SNAP benefits is 1.1 percent of countable income, which would require a 4.6 percent increase in income to overcome the loss easily, assuming an earnings loss rate of 25 percent.

Table 18

SNAP benefit cliffs for households without disabled or elderly members if expense deductions are low enough that they receive the minimum allotment, assuming an earnings loss rate of 25 percent, and SNAP factors effective October 1, 2022.

Household Size	Description	48 States	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
Household Size 1	Gross Income Limit	$17,676	$22,092	$22,092	$22,092	$20,328
	Minimum Allotment	$276	$336	$432	$528	$516
	Minimum Allotment to Exit Income	1.6%	1.5%	2.0%	2.4%	2.5%
	Income Increase to Overcome Benefit Loss	6.2%	6.1%	7.8%	9.6%	10.2%
Household Size 2	Gross Income Limit	$23,808	$29,760	$29,760	$29,760	$27,384
	Minimum Allotment	$276	$336	$432	$528	$516
	Minimum Allotment to Exit Income	1.2%	1.1%	1.5%	1.8%	1.9%
	Income Increase to Overcome Benefit Loss	4.6%	4.5%	5.8%	7.1%	7.5%

As already indicated, the minimum allotment is available for only household sizes one and two, and it is calculated to be 8 percent of the thrifty food plan of a one-member household.[65] Chart 22 shows an example of a household *with* a disabled or elderly member subject to the net income limit. Table 18 shows the impact on households *without* a disabled or elderly member assuming income deductions are low enough to trigger the minimum allotment but not so low that the net income limit determines the exit point.[66] For these cases, the SNAP benefit losses to income range from 1.1 percent to 2.5 percent, requiring income increases of 4.5 percent to 10.2 percent for the household to overcome the loss in benefits, assuming an earnings loss rate of 25 percent.

The misalignment of SNAP factors

The four critical factors need to be aligned to avoid benefit cliffs. In the case of SNAP, they are grossly misaligned. At the root of the problem is that they are set by disparate processes. The Thrifty Food Plan—and the USDA's conversion of the plan for all household sizes—sets the maximum allotments[67] used to determine the benefit amounts at the starting point and tapering point. Because of the assortment of income deductions and the lack of caps on most of the deductions, the countable income at the tapering point varies tremendously, making it unknown for all practical purposes. The benefit reduction rate varies from 24 percent to 45 percent, depending on shelter costs and the amount of countable income that comes from earnings. The exit points are not determined by the BRR to some predetermined exit point that is easily overcome with an increase in earnings. Rather, the tapering of benefits is almost always

[65] 7 U.S. Code § 2017(a) – Value of allotment.
[66] If income deductions are less than the difference between the gross income limit and the net income limit for a household *without* disabled or elderly members, then the net income limit determines the exit point. Otherwise, the gross income limit determines the exit point for household sizes 1 or 2.
[67] 7 U.S. Code § 2012(u).

truncated by the net income limit or by the gross income limit, which are pegged to poverty levels determined by the U.S. Department of Health and Human Services.[68]

Broad-based categorical eligibility has not been a successful strategy to solve SNAP benefit cliffs because it does not realign the critical factors for a successful tapering of benefits. As shown in Part 1, the net income limit determines when a household exits SNAP under state BBCE provisions in most cases, but the net income limit is already misaligned. Besides, BBCE provisions have applied historically to only a small subset of all households, comprising just 2.4 percent of all SNAP households, and cannot be used for households *with* disabled or elderly members because the circumvention of the SNAP gross income limit would not impact them. Therefore, the approach to solving SNAP benefit cliffs cannot rely on BBCE. Rather, it must rely on the permanent solution of realigning the critical factors.

Chart 23

Comparison of net income limit exit points based on hypothetical calculations using the statutory 30 percent benefit reduction rate and the maximum allotments with the ideal exit points, for the 48 contiguous states and the District of Columbia.

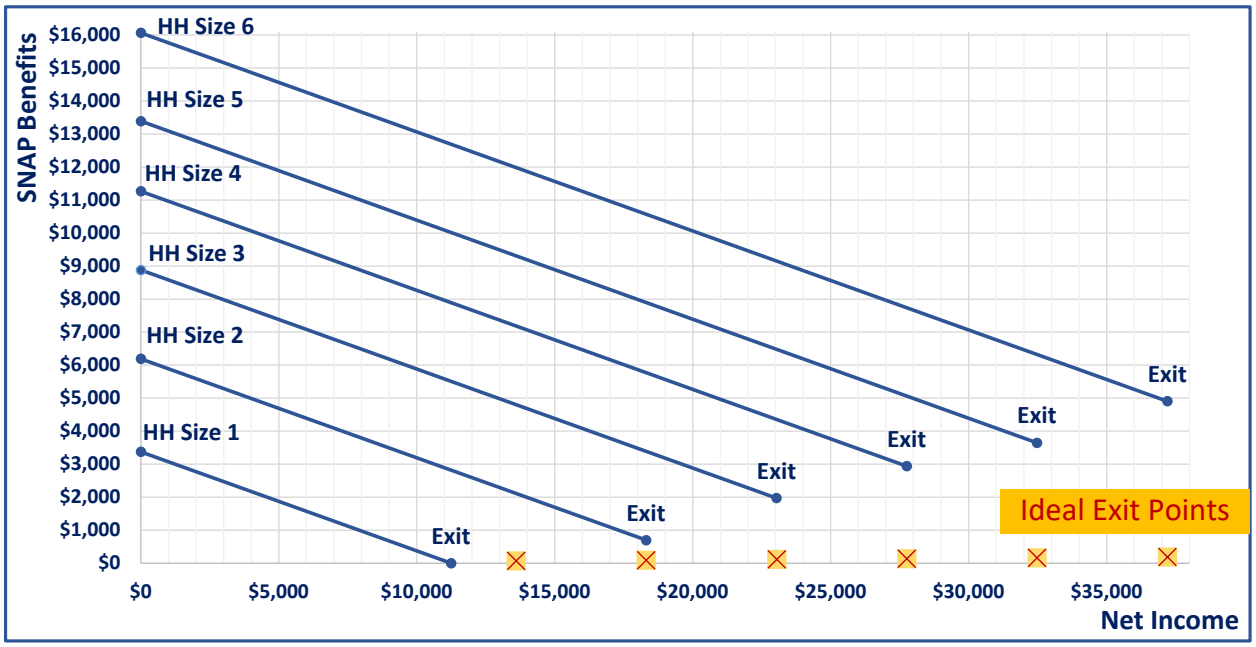


Chart 23 demonstrates the misalignment of factors relative to the net income limit for the 48 contiguous states and the District of Columbia. If the net income limit were aligned with the maximum allotments and the benefit reduction rate, a household would exit SNAP with a benefit loss that would be easily overcome with a typical pay raise. The calculations for Chart 23 start with the maximum allotments and apply the statutory benefit reduction rate of 30 percent found in 7 U.S. Code § 2017 to determine the final SNAP benefit amount at exit point. The horizontal

[68] 7 U.S. Code § 2014(c) sets the net income limit to be equal to the HHS poverty level and the gross income limit to be equal to 130% of the poverty level.

axis is not countable income but net income, which is important to note when compared to most other charts in this paper. The countable income at the exit point would depend on the total amount of income deductions that determines the tapering point. However, the net income limit still needs to be aligned relative to the tapering point, and that is what the horizontal axis shows. The ideal exit points—shown with yellow highlighted red x's –are calculated using 0.5 percent SNAP loss against net income at exit. Once the unknown deductions are applied, the ideal exit points would increase proportionally with the size of the deductions. Nevertheless, the x's show the approximate ideal exit points, and the chart still illustrates how the exit points diverge widely from the ideal, which worsens as household size increases.

Chart 24

Comparison of net income limit exit points based on hypothetical calculations using the statutory 30 percent benefit reduction rate and the maximum allotments with the ideal exit points, for Hawaii.

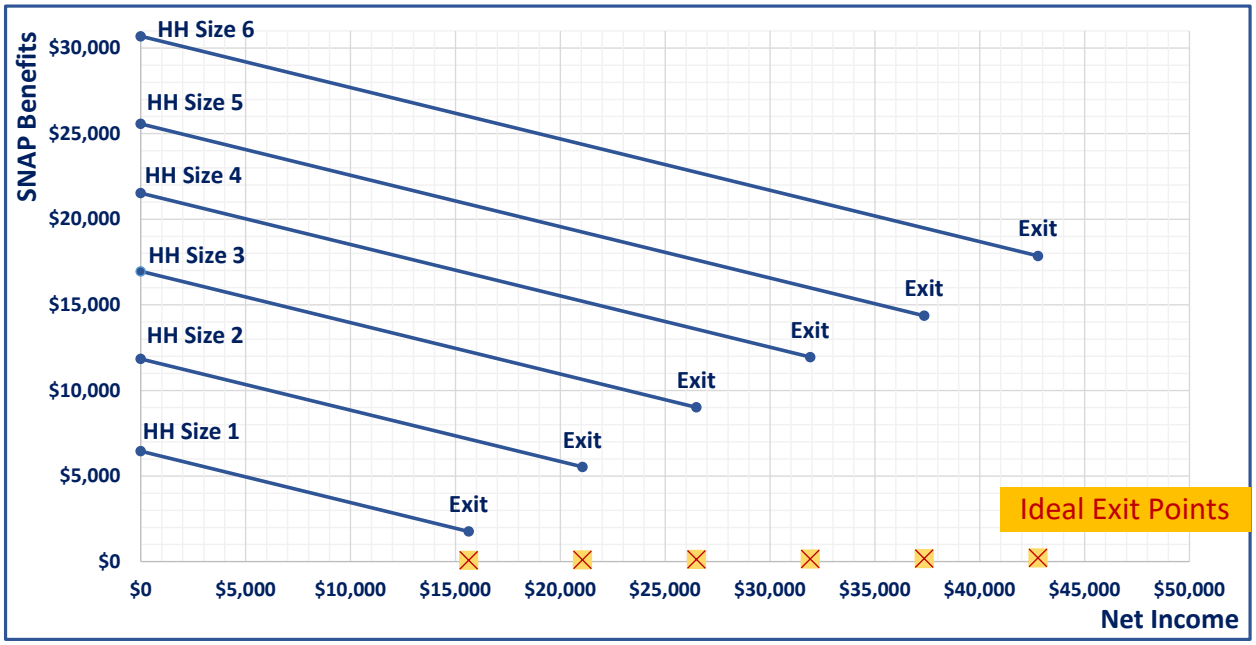


Chart 24 is the same as Chart 23 for the special case of Hawaii. The misalignment is much more severe for Hawaii than for the 48 contiguous states, and by an order of magnitude up to 800. Note the difference in scales of the vertical axes of the charts, with Chart 23 reaching $16,000 and Chart 24 exceeding $30,000. The misalignment for Alaska Urban is similar to the 48 contiguous states, and Alaska Rural 2 is closer to Hawaii with Alaska Rural 1 coming in somewhere between.

Solving SNAP Benefit Cliffs in a Fiscally Responsible Manner

This section of the paper summarizes many points already made but in a way that outlines the types of decisions necessary to solve benefit cliffs in a fiscally responsible manner with its rationale.

Congress is in the best position to solve the SNAP benefit cliff problem permanently by realigning and redefining the critical factors. States that run the agencies administering SNAP at the ground level also have opportunities to conduct demonstration projects allowed by federal law that can solve the problem for at least a portion of SNAP participants in their states. Moreover, these demonstrations can provide evidence for a more holistic change at the federal level.

There are many different ways to devise a solution, but it would be helpful to outline criteria of what the solution should accomplish that can be used to not only develop a solution but also to evaluate its potential effectiveness. The following six criteria are recommended.

1. The starting benefit level must be adequate to fulfill the household's nutritional needs at zero income and be based on the concept of thriftiness.
2. Benefits must taper with increased countable income.
3. The benefit reduction rate—and in combination with taxes and other safety-net programs—must be low enough to incentivize earnings but not too low that it extends benefits into high income levels not associated with requiring assistance.
4. The SNAP exit point must be set at a SNAP benefit level that is easily overcome by a typical increase in income.
5. SNAP associated marriage penalties should be mitigated or eliminated.
6. Without compromising adequate assistance for those in need, the SNAP fiscal impact from the revenue should be better than cost neutral.

The importance of the starting benefit level cannot be overstated. It sets the level whereby households can purchase enough food to meet their nutritional needs. At the same time, the concept of thriftiness is a necessary component. It encourages participants to be wise when purchasing food in a way that maximizes the purchasing power of the dollar and enables the household to stretch its food budget. It encourages not only responsible behavior but also keeps program costs down and enables the other critical factors of safety-net design to work better. Therefore, considering the controversy over how the U.S. Department of Agriculture recalculated the Thrifty Food Plan, the Department should recalculate again but it in a way that can instill public trust that the research was conducted in good faith using best practices.

A necessary component of a solution is that benefits must taper. Otherwise, there will always be steep benefit cliffs when exiting the program. The tapering of benefits also encourages personal responsibility by having households increasingly share in the cost of the thrifty food budget in proportion to increases in its countable income. It also helps to contain the cost of the program.

The benefit reduction rate must balance the tradeoff between incentivizing households to earn more income and not extending benefits into income levels not associated with requiring assistance. In this regard, the BRR must consider how it might impact the earnings loss rate when combined with BRRs from other safety net programs and the earnings loss rates of income and payroll taxes.

Currently, the SNAP BRR varies between 24 percent and 45 percent depending on earnings as a percent of countable income and shelter costs. Instead, there needs to be a single uniform rate applicable to all households. There seems to be many advantages, and no apparent disadvantages, to setting a uniform rate. A constant BRR could be easily explained to program participants and applicants. It would facilitate government transparency. It would enable the USDA and SNAP administering agencies at the state level to calculate exactly the exit income, benefit level at exit, and the required income increase to overcome the loss in benefits for all participants.

The optimal BRR is unknown and will vary depending on the number of benefit programs for which a family qualifies. The more programs that a household participates in, the lower each individual program's BRR needs to be. Using the Earnings Loss Rate Severity Scale Policy Guide as an evaluation basis, the rate should probably be between 20 percent and 30 percent. However, more evidence is needed, and knowing the exact parameters is a ripe area for economic research.

The SNAP exit point should be based on foreknowledge where the exact income level and benefit amount are calculated. Along with a known tapering point, a constant BRR makes this possible, but it also requires controlling deductions. The earnings deduction and the excess shelter expense deduction are the reasons why the statutory 30 percent BRR fluctuates between 24 percent and 45 percent. Therefore, they need to be eliminated, or in the very least, altered in some way where they do not impact the BRR.

The exit point also needs to be predetermined to assure that the final SNAP benefit is at a level that is easily overcome with a typical increase in income. Normal pay raises depend on a number of factors, but often they are only a few percentage points. Selecting a 2 percent pay raise as the benchmark—that is, anyone with a 2 percent pay raise would be able to easily overcome the loss in SNAP benefits—means that the percent of the SNAP benefit loss to countable income should be 0.5 percent. This calculation assumes an earnings loss rate of 25 percent. As explained earlier in Part 1 of this paper, a SNAP benefit loss equal to 2 percent of countable income would not be overcome by a pay raise of 2 percent. Assuming the unlikely scenario of no other benefit losses and no taxes, there would be no incentive to accept the pay raise—the household would be indifferent, to use an economic term—because the household finances would stay the same. However, the assumption of no taxes and other safety net benefits is simply not realistic. Payroll taxes—consisting of Social Security, Medicare, and other deductions—alone mean the household would be worse off. This is the reason for using an earnings loss rate of 25 percent that derived the 0.5 percent benefit loss to countable income that can be easily overcome with a 2 percent pay raise.

Given a constant BRR and 0.5 percent benefit loss to countable income at exit, the income at exit could be easily determined if the tapering point was also standardized across all households.

It becomes a matter of simple algebra to calculate the exit point. Therefore, it is important to control the tapering point.

The simplest and easiest way would be to set the rules for the tapering point so it can be calculated ahead of time for each household. This strategy would eliminate the need for a net income limit, and the gross income limit can be calculated to match the predetermined exit point. It would also untether the gross income limit from the poverty level, and the sole determinants would become the known tapering point, the BRR, and the predetermined percent benefit loss to income.

This strategy makes it easier for applicants to know whether or not they qualify. By publishing the gross income limit, applicants can simply compare their monthly income to the gross income limit, and any excess asset requirements, to know whether or not they qualify for benefits. Additionally, they will know precisely when they exit the program, what their exit benefit would be, and what income increase they would be required to receive to overcome the benefit loss. Furthermore, It simplifies the complexity for households *without* a disabled or elderly member by having a single income limit.

To achieve this goal, expense deductions need to be eliminated. There are distinct advantages to this approach that have the following rationale. First, food is a necessity required to sustain life, giving it a priority position on a household budget, meaning it is always one of the first things households need to spend their money on. Disallowing expense deductions recognizes this priority along with the personal responsibility that comes with it. Therefore, as a matter of policy, as income increases, households should always share an increasing proportion of the cost of the thrifty food budget.

SNAP, originally called food stamps, is one of the original means-tested government assistance programs. It precedes Medicaid, the Earned Income Tax Credit, Section 8 Housing, Temporary Assistance for Needy Families, and the Child Care and Development Block Grant. The current expense deductions are paid-out child support, dependent care, excess shelter costs, and, for households *with* disabled or elderly members, medical expenses. Except for child support, the new safety-net program landscape that did not exist when the Food Stamp program began addresses these areas. Therefore, it would make sense to question whether these expense deductions still make sense. In the case of child support, it is a parental obligation, but that does not mean it should supplant the personal responsibility to share in one's cost of obtaining enough food for nutritional needs.

The messaging of personal responsibility is another justification for eliminating expense deductions. Expense deductions delay the responsibility for cost sharing of the thrifty food budget, sending the message that there are higher priorities than food.

Setting the BRR low enough, as opposed to allowing it to rise as high as 45 percent under the status quo, should alleviate concerns over starting cost sharing sooner than later.

Allowing standard deductions would also allow for determining a gross income limit to match a predetermined exit point. The SNAP standard deduction was enacted in 1977[69] for the purpose of consolidating multiple deductions. However, it still raises the question as to why there should be a standard deduction in the first place. With income taxes, it makes sense to have standard deductions because it assumes that families need all their income below some threshold to pay for basic living expenses. However, food is one of those basic living expenses, and it is not clear that this rationale for tax standard deductions extends to a food assistance program.

If a standard deduction were allowed, in addition to adding to the fiscal cost of the program, it raises the question of what should be the basis for the standard deduction. Selecting an amount—no matter what it is—will likely seem arbitrary. The current structure for standard deductions does not present any rational basis for them. It combines household sizes together. For example, for the 48 states and D.C., household sizes 1 through 4 have the same standard deductions, size 5 is larger, and then sizes 6 and up are larger still. Alaska has the same standard deduction for all household sizes, and Hawaii has two standard deductions: one for household sizes 1 through 5, and the other for sizes 6 and up. It would be better if there were a sliding scale for the standard deduction that increases with household size.

Therefore, the simplest solution would be to allow for no income deductions. This would provide for a tapering point that will be the same as the starting point, and personal responsibility begins immediately with an increase in income. Along with a constant BRR and a predetermined benefit loss percent to countable income, the gross income limit would match countable income at exit.

If any single expense deduction is retained with a proposed solution, then the gross income limit cannot be calculated to predict the exit. The net income limit would need to be used instead, and it would not allow for calculating the exit income.

In summary, combining these changes would simultaneously better control expenditures, introduce personal responsibility, lend itself for simplification and easier transparency, simplify administration, and have a softer landing when exiting SNAP by diminishing the size of benefit cliffs. Taking steps to control the program costs will also help with mitigating marriage penalties, which will be addressed next.

Addressing Marriage Penalties

The U.S. Office of Family Assistance-sponsored study coauthored by Bradford Wilcox, Chris Gersten, and Jerry Regier cited earlier concluded that Congress has not yet extended its work to reduce marriage penalties for lower income families that come mostly from safety-net assistance programs, including refundable tax credit programs like the Earned Income Tax Credit. In reviewing state actions to address marriage penalties, they noted that several states have looked mainly at ways to leverage funds from the Temporary Assistance for Needy Families program to

[69] Food and Agriculture Act of 1977, Public Law 95–113—September 29, 1977

alleviate penalties by allowing benefits to be extended or providing income disregards not available to non-married couples. The study did not identify any research recommending how to solve marriage penalties specific to SNAP, but it did recommend to "encourage states to apply for applicable waivers that would eliminate or minimize marriage penalties in SNAP by expanding income disregards for spouses and increasing asset limits for married families." [70]

Our prior published work on marriage penalties due to income taxes and safety-net programs concluded that the more benefits a family receives, the greater the marriage penalty in terms of severity and scope, the latter being the proportion of wage combinations that have marriage penalties.[71] We can conclude from that study that controlling the size of safety-net benefits will also help to keep marriage penalties under control, providing yet another reason for the U.S. Department of Agriculture to get the Thrifty Food Plan right. More generally, a high starting benefit not only makes it harder to solve benefit cliffs, it also makes marriage penalties worse.

The reason why can be understood by examining the financial impact on the natural state matrix described in Part 1 of this paper. The natural state is defined as the financial impact of marriage assuming no taxation and no safety-net programs. When safety-net assistance programs are part of the financial picture, they bring benefits that can be reduced or lost when the incomes and other resources are combined due to marriage. The reduction or loss in safety-net benefits must be greater than the natural financial benefit gained by marriage to flip a marriage bonus into a marriage penalty. Therefore, it stands to mathematical reasoning that the higher the total safety-net program benefits, the greater the offset against the natural financial advantage for marriage needs to be. Likewise, the more that safety-net benefits reach into higher income levels, the greater the potential for extending the scope of flipping marriage bonuses to penalties.

Beyond the strategy of controlling benefit levels, addressing marriages thus far has come down to two general approaches: (1) changing program rules or factors in ways to eliminate or mitigate the severity of marriage penalties and (2) giving married couples more favorable treatment to counteract existing penalties. An example of the former for SNAP would be changing how SNAP counts members of a household. Generally, households are defined as "a group of individuals who live together and customarily purchase food and prepare meals together for home consumption."[72] The definition does not end there but also mandates that married couples—as

[70] Bradford Wilcox, Chris Gersten, and Jerry Regier, *Marriage Penalties in Means-Tested Tax and Transfer Programs: Issues and Options*, OFA Report 2019-01, Washington, DC: Office of Family Assistance, Administration for Children and Families, U.S. Department of Health and Human Services, 2019, pp. 27, 33 – 36: https://www.acf.hhs.gov/sites/default/files/documents/ofa/hmrf_marriagepenalties_paper_final50812_6_19.pdf.

[71] Erik Randolph, *Deep Red Valleys*, Georgia Center for Opportunity, February 2017: https://foropportunity.org /wp-content/uploads/2017/02/Deep-Red-Valleys_WEB.pdf.

[72] 7 U.S. Code § 2012 (m) (1)(B).

children 21 and their parents and children under 18 and a person exercising parental control—are always counted as a single household. However, it is difficult to enforce this provision for blended families and non-married couples. In this regard, rule compliance would likely improve if the definition were changed to "those living together" while allowing for specific and limited enumerated exceptions, such as a group of adult persons without biological or sexual relationships sharing a rented apartment or house. The Low Income Home Energy Assistance Program (LIHEAP) and Section 8 Rental Assistance are examples of two safety-net programs that count household size more broadly.[73] Therefore, making this definitional change for SNAP would bring it in closer alignment with those programs.

The second approach could establish an advantage for married couple households. However, it should not undermine the principles outlined in the section on how to solve SNAP benefit cliffs in a fiscally responsible manner. One acceptable exception might be to allow for a standard deduction for married couples with children. Mathematically, this would allow them to have a higher allotment compared to a non-married couple household of the same size. Congress could justify giving married couples favorably treatment by citing the research reviewed in the Wilcox *et al* paper commissioned by the U.S. Office of Family Assistance discussed earlier in this paper. Addressing fiscal concerns, Congress might consider limiting the married-couple standard deduction to those with children, such as children five years of age or younger.[74]

Finally, the principles on solving the SNAP benefit cliffs in a fiscally responsible manner were also tested to make sure that they do not make marriage penalties worse. The Georgia Center for Opportunity pledges to continue to test any benefit cliff solutions it offers in this manner and will continue to develop marriage penalty analytical tools and solutions.

Conclusion

The beginning of the prior subsection listed six criteria to judge benefit cliff solutions, and the parameters of the solution discussed in this paper meet those criteria. They (1) set the initial benefit amount at a level where nutritional needs are met, (2) require benefits to taper, (3) make the benefit reduction rate a uniform low rate, (4) calculate the exit point so that the benefit loss

[73] 42 U.S. Code § 8622 (5) defines a LIHEAP household as "any individual or group of individuals who are living together as one economic unit for whom residential energy is customarily purchased in common or who make undesignated payments for energy in the form of rent." While the definition seems similar to part of the SNAP definition that says "a group of individuals who live together and customarily purchase food and prepare meals together for home consumption," it differs in practice because most utilities are assumed to be shared since everyone in the household benefits. 42 U.S. Code § 1437f(o)(4) defines families eligible for the Section 8 rental housing voucher program and does not have the compliance issues that the SNAP household definition has.

[74] The idea of standard deduction as well as limiting them to married couples with small children belongs to Professor W. Bradford Wilcox of Sociology at the University of Virginia, Director of The National Marriage Project at the university, senior fellow at the Institute for Family Studies, and a nonresident senior fellow at the American Enterprise Institute.

can be easily overcome with a typical pay raise, (5) mitigate marriage penalties, and (6) keep fiscal costs at a minimum while not compromising necessary benefits for the needy.

Part 3: Recommendations for Congress

Congress is in the best position to solve the SNAP benefit cliff problem, and the following six recommendations would get us there. However, it should be noted that there are state policymakers and other prominent individuals who would like to start experimenting now, and two of the recommendations (#5 and #6) deal with cleaning up statutory language to allow those experiments to test strategies more fully than currently allowed by federal law.

We created a tool to give an indication of the cost of these recommendations, and based on that information we believe they will not increase the government cost of SNAP. However, it would be prudent to do a more thorough fiscal analysis based on actual legislation.

Recommendation #1

Restrain any future emergency allotment program with sunset provisions linked to the ability of SNAP administering agencies to process eligibility and benefit determinations due to the emergency. Once an agency is able to return to normal operations for the impacted area, the emergency program should terminate for that agency.

Section 2302 of the Families First Coronavirus Response Act[75] created the emergency allotment program allowing states to opt into a program to give maximum allotments to all SNAP participating households regardless of countable income. As an unintended consequence, this action immediately created record-high SNAP benefit cliffs (See Table 15 and Table 16 in Part 1), requiring 41 percent to 157 percent increases in income to overcome them, depending on the area and household size and assuming an earnings loss rate of 25 percent. By the end of the program, the required income increases grew to 52 percent to well above 200 percent, depending on the area and household size. All states initially participated in the program, and 32 states still participated when the program terminated in February 2023.

Had the emergency allotment program lasted for several months until it was clear that jobs were recoverable and SNAP administering agencies were able to keep up with processing eligibility and benefit determinations for participants and applicants, there would be no issue. The program was created during a time of tremendous uncertainty and poor forecasts of the extent and severity of the forthcoming COVID-19 pandemic. At least by July 2020, it was known that jobs were returning to all 50 states and the District of Columbia,[76] and at various points in time, SNAP administering agencies were able to keep up with operations. However, the program lasted

[75] Public Law 116–127—March 18, 2020.

[76] All states but one (Idaho) and D.C. lost jobs in March 2020, and all 50 states and D.C. lost jobs in April 2020. But by May, 45 states begun their job recoveries, and in June all 51 jurisdictions were on their way to recovery. Analysis based on total nonfarm employee data as published by the U.S. Bureau of Labor Statistics.

nearly three years for most states, which was well beyond when agencies were able to resume normal operations, allowing in the meantime damaging benefit cliffs to remain in effect

If extenuating circumstances arise again and Congress in its judgement believes that an emergency allotment program is the best approach among the options presented to it, then it is advisable that Congress limits the duration of the program to match the ability of SNAP administering agencies to process participant and applicant financial information and determine benefit levels according to normal SNAP procedures. Congress can achieve this limitation by inserting a sunset provision that can explicitly state the program expires once SNAP administering agencies are able to process participant and applicant data and to expressly limit the program to a specific number of months, such as three or four months. This sunset provision would be better than the sunset provision provided by the Families First Coronavirus Response Act that linked it to the duration of the officially-declared emergency.

To help facilitate the drafting of future legislation, Congress may consider asking the Food and Nutrition Service to survey the SNAP administering agencies to determine the time points after the start of the pandemic when they were able to resume processing financial data and determining eligibility. This information will help Congress to craft a sunset provision in the event another extenuating circumstance is encountered.

Recommendation #2

Require the U.S. Department of Agriculture to revise its determination of the Thrifty Food Plan and use that process to create thrifty food plans for all household sizes, thereby fixing the mathematical errors in the maximum allotment tables.

Corroborated by a Government Accountability Office (GAO) report,[77] there are good reasons to doubt the accuracy of the revised Thrifty Food Plan by the U.S. Department of Agriculture in 2021. Because this plan is the basis for the SNAP maximum allotments and the negative impact that benefit cliffs can have on the economic mobility of families and the impact on employment, it is critical that the Department gets the numbers right—and that the public has faith in those numbers. Therefore, Congress should require the U.S. Department of Agriculture to revise the determination with congressional approval while giving it more guidance so the public can have confidence in the results. See Chart 1 in Part 1 for the significant increases ranging from 45 percent to 51 percent in the maximum allotment over a three year period during the pandemic.

The plan must fulfill the dual goals of making sure that households without income can obtain the nutrition they need while being thrifty in managing their household food budget. The Department should be made keenly aware that inflating the value of Thrifty Food Plan makes it

[77] U.S. Government Accountability Office, *Thrifty Food Plan: Better Planning and Accountability Could Help Ensure Quality of Future Reevaluations*, GAO-23-105450, December 14, 2022: https://www.gao.gov/products/gao-23-105450.

more expensive to solve SNAP benefit cliffs and marriage penalties. Therefore, in addition to the recommendations listed by the GAO, Congress should instruct the Department to include in its process the examination of successful methods used by persons with actual experience in putting together thrifty food budgets.

Currently, the Thrifty Food Plan is based on a family of four from which the estimates are made for the other household sizes. However, different household sizes must adopt different strategies to be truly thrifty because of the advantage of purchasing items in bulk. Congress should consider requiring the Department of Agriculture to expand the process to determine thrifty food plans for not just a household size of 4 but for all household sizes so that there is research-based evidence for the maximum allotment tables. If done properly, this would fix the mathematical errors (See Chart 15 in Part 2) in the maximum allotment tables for household sizes 6 and 8, and for the additional amounts for larger households, that become clearly evident when examining the inconsistent pattern with the marginal maximum allotments. In this sense, marginal is defined how economists use the term to describe the increased benefit by adding one more person to the household.

As an alternative to ordering the USDA to expand the process to recalculate the thrifty food plans for each household size, Congress should consider requiring the Department of Agriculture to fix the mathematical errors in the maximum allotment tables.

Recommendation #3

Permanently eliminate SNAP benefit cliffs by following five steps.

Step 1: fix the benefit reduction rate to a constant 30 percent for all households

Step 1: Choosing the best Benefit Reduction Rate (BRR) balances two important tradeoffs. The rate needs to be low enough not to disincentivize earnings, but, if too low, the benefits will extend into higher income ranges not associated with need while increasing program costs.

7 §2017(a) mandates that 30 percent of net income is applied against the maximum allotment under the assumption that households spend approximately 30 percent of their income on food. However, the actual benefit reduction rate varies between 24 percent and 45 percent depending on shelter costs used to calculate the excess shelter expense deduction and earnings used to calculate the earnings deduction. Therefore, to keep the constant 30 percent BRR per §2017(a), the earnings deduction and the excess shelter expense deduction need to be eliminated. Having a uniform BRR is fairer in the sense that all households are treated equally. Moreover, uniform rates are much easier to explain to program participants than the current system where they are unpredictable.

Table 19

SNAP exit incomes of solutions eliminating SNAP benefit cliffs assuming maximum allotments effective October 1, 2022, no deductions and constant benefit reduction rates compared with the gross income limit and effective net income limits using weighted state averages of fair market rents for the 48 contiguous states and the District of Columbia and using the highest cost state average fair market rents

Household Size	Constant BRR with Maximum Allotment Effective 10/1/2022			Gross Income Limit	Effective Net Income Limit	
	30%	24%	20%		Weighted 48+ Average FMR	High Cost State Average FMR
1 member	$11,056	$13,763	$16,449	$17,676	$26,055	$29,652
2 members	$20,302	$25,273	$30,205	$23,808	$32,485	$39,725
3 members	$29,115	$36,245	$43,317	$29,940	$40,785	$50,835
4 members	$36,944	$45,992	$54,966	$36,084	$44,715	$54,765
5 members	$43,908	$54,661	$65,327	$42,216	$49,125	$59,175
6 members	$52,682	$65,584	$78,380	$48,348	$56,540	$67,930
7 members	$58,230	$72,490	$86,634	$54,492	$60,470	$71,860
8 members	$66,531	$82,824	$98,985	$60,624	$64,400	$75,790

Table 19 compares exit incomes for solutions eliminating benefit cliffs with three different BRRs against typical exit incomes using SNAP factors for the 48 contiguous states and D.C. that were effective on October 1, 2022. The hypothetical solutions apply a constant BRR without income deductions, which will be explained in greater detail under Step 2, and the final allotment ends when it reaches 0.5 percent of the exit income, which is explained in greater detail under Step 3. Table 19 demonstrates how the exit incomes of the benefit cliff solutions differ from typical exit incomes of the status quo.

The solutions include SNAP exit incomes using BRRs of 30 percent, 24 percent, and 20 percent. These are compared to the gross income limit—impacting households *without* a disabled or elderly members—and two variations for exit incomes using the net income limit—impacting households *with* a disabled or elderly member. The second to the last column is the calculated exit income using the net income limit assuming a weighted state average of fair market rents, the earnings deduction, and no other deductions, which is also found in Table 10 in Part 1 of this paper. The last column shows the effective exit income using the net income limit, but instead of using a weighted state average, it uses the highest average fair market rents among the 48 contiguous states that happen to be Massachusetts for households of size 1 and California for the remaining household sizes.

As illustrated in the table, although a BRR of 20 percent would provide the greatest incentive for earnings, the exit point can extend much higher into the income ranges, especially for larger size households. One major difference to be considered is that the exit incomes of the constant BRRs were calculated so that the SNAP benefit loss at exit is easily overcome. In contrast, all the exit points of the status quo income limits have significantly steeper benefit cliffs, requiring much

higher income increases to overcome the benefit loss that would be out of reach for most households. (See Table 5 and Table 11 in Part 1.)

Although a BRR of 20 percent would have the greatest incentive for earning more income, Congress should consider opting for the more conservative BRR of 30 percent. The unanswered question is whether the 20 percent BRR would cost more or less than the status quo. Answering this question will require more research using state-level program data and population data. Table 19 indicates that there will necessarily be some savings as well as added costs, but it is unknown which factor would be more dominant. Savings will come from the lower income exit levels for some households, the fact that the tapering of benefits start immediately for all households, from the benefit levels at exit because they are calculated so they can be easily overcome with a 2 percent increase in income as opposed to the steep benefit cliffs that exist now. Savings will also come from anticipated dynamic changes in behavior by incentivizing work and pursuing higher pay. On the other hand, added costs will come from benefits extending into higher income levels for the larger size households, especially among households *without* disabled or elderly members.

Table 20

SNAP exit incomes assuming revise maximum allotments allowing for only inflation, no deductions and constant benefit reduction rates compared with the gross income limit and effective net income limits assuming the weighted state average of fair market rents for the 48 contiguous states and the District of Columbia and using the highest cost state average fair market rents

Household Size	Constant BRR with Revised Maximum Allotment			Gross Income Limit	Effective Net Income Limit	
	30%	24%	20%		Weighted 48+ Average FMR	High Cost State Average FMR
1 member	$9,023	$11,233	$13,424	$17,676	$26,055	$29,652
2 members	$17,161	$21,363	$25,532	$23,808	$32,485	$39,725
3 members	$24,367	$30,335	$36,254	$29,940	$40,785	$50,835
4 members	$30,787	$38,327	$45,805	$36,084	$44,715	$54,765
5 members	$36,459	$45,388	$54,244	$42,216	$49,125	$59,175
6 members	$41,623	$51,816	$61,927	$48,348	$56,540	$67,930
7 members	$46,134	$57,433	$68,639	$54,492	$60,470	$71,860
8 members	$50,643	$63,045	$75,346	$60,624	$64,400	$75,790

However, if the Thrifty Food Plan—that determines the maximum allotments—are found to be too high pursuant to Recommendation #2 and are subsequently adjusted downward, then Congress might consider allowing a BRR lower than 30 percent. Table 20 shows how the numbers change if the maximum allotments are recalculated to remove the non-inflationary changes[78] to the Thrifty Food Plan implemented during the COVID-19 pandemic.

[78] Chart 1 in Part 2 shows that the maximum allotments, which are based on the Thrifty Food Plan, increased 45 percent to 51 percent during the pandemic. Had the increase been based only on food price inflation, it would have increased only 18.2 percent using the Consumer Price Index—All Urban Consumers for food prices from June 2019 to June 2022. Title 7, U.S. Code § 2012(u) instructs the Secretary

As mentioned already, assuming a constant BRR means that the earnings deduction needs to be eliminated because it changes the BRR. The earnings deduction is intended to encourage work, but so is a low uniform BRR, making the earnings deduction redundant. Assuming no excess shelter expense deduction, the earnings deduction changes the 30 percent statutory rate to as low as 24 percent if all income comes from earnings. However, the excess shelter expense deduction, when effective due to shelter costs (and not capped), changes the BRR range from 36 to 45 percent.

A BRR of 20 percent would have the greatest incentive for earnings but will also have the highest costs. The task is to choose that sweet spot to balance earning incentives with fiscal costs. More economic research is needed not just on the best BRR for SNAP in isolation but also on how the SNAP BRR will interact with other safety-net program BRRs, which may change the recommended SNAP BRR. In the meantime, until more evidence is produced, Congress should consider sticking with the statutory 30 percent BRR.

Step 2: eliminate all deductions against income

As already demonstrated in Part 2 of this paper, deductions against countable income cause the tapering point to occur at higher countable incomes, causing both worse benefit cliffs and increased program cost under the current system. (Chart 25 below provides an example of how this happens. It can easily be visualized from the chart that moving the tapering point to the left would also reduce the benefit cliff and program costs.)

Currently, tapering points for each household are virtually unique because deductions taken vary for each household. Eliminating deductions against income would standardize the tapering point for all households.

Starting the tapering of benefits sooner also emphasizes personal responsibility because households would always share in the cost of the thrifty food budget as their incomes grow.

In combination with the other steps in this recommendation, eliminating deductions add to transparency and enable administering agencies to precisely calculate the desired exit point and benefit loss in a way that it can be easily overcome with an income increase.

An alternative option to eliminating all deductions would be to allow for just standard deductions against countable income. If this were the case, the amount of the standard deductions would need to have a reasonable basis to justify postponing a household's cost sharing responsibility. The current standard deductions were established in the 1970s by consolidating various deductions,[79] and it lumps household sizes together without an apparent rational basis for doing so. This alternative would allow for the predetermination of the exit income and exit benefit,

of Agriculture to adjust the Thrifty Food Plan effective every October 1st for inflation from the preceding June.

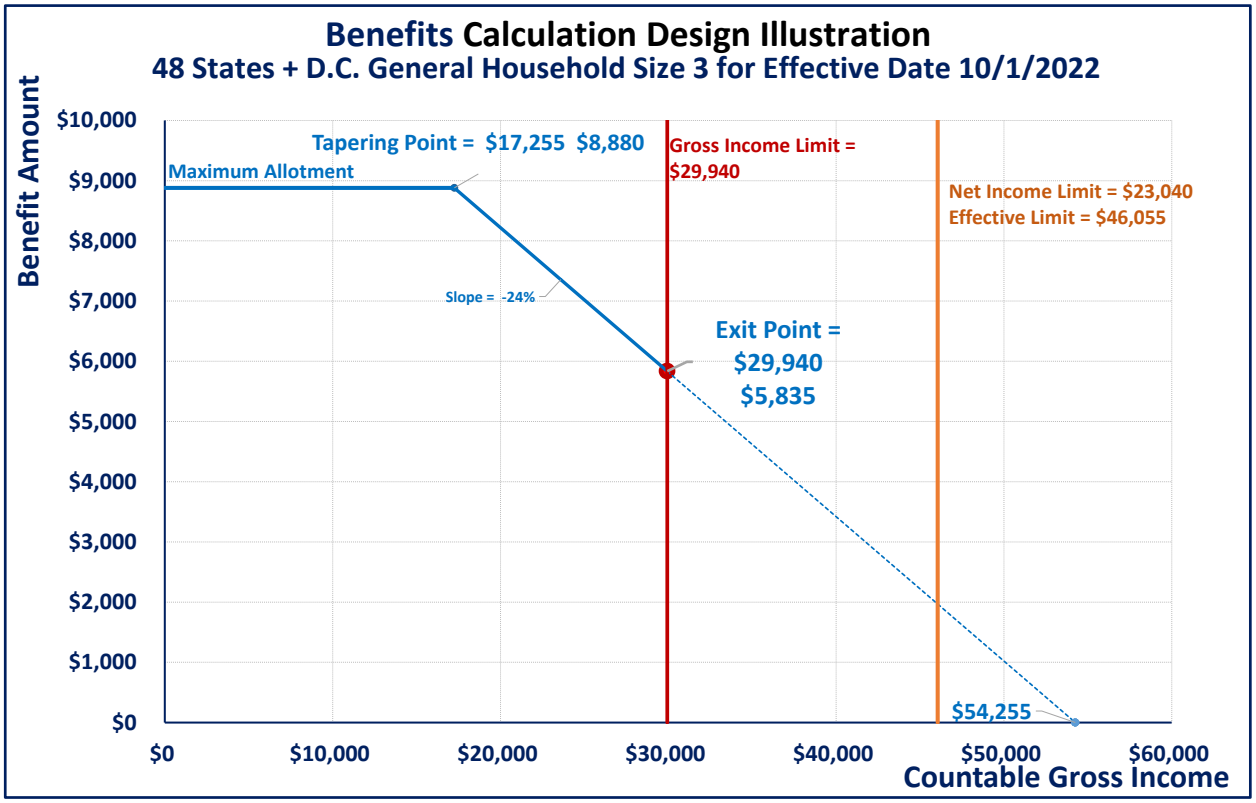
[79] Food and Agriculture Act of 1977, Public Law 95–113—September 29, 1977.

eliminating the need for the net income limit, but it would also increase fiscal costs of the program.

Eliminating Step 2 altogether from the solution would make it more difficult to control the fiscal costs of the program. It also would not be possible to predetermine the exit income and exit benefit. And it would take us back to where we were in 1981 when Congress attempted to control program costs by introducing the gross income limit (applicable for only households *without* disabled or elderly members),[80] which means that difficult-to-overcome benefit cliffs will remain an unsolved problem.

Chart 25

Example of how deductions can shift out the tapering point causing SNAP benefit cliffs. The numbers below are for a three member household without a disabled or elderly member, assuming SNAP factors effective October 1, 2022, fair market rent housing costs in California, which are capped by the maximum excess shelter expense deduction, and $3,500 in other expense deductions. For this scenario, benefits do not begin to taper until $17,255, guaranteeing a severe benefit cliff at the Gross Income Limit consisting of a benefit loss equal to 19.5 percent of income, requiring a 78 percent increase in income assuming an earnings loss rate of 25 percent.



[80] Public Law 97–35—August 13, 1981, Omnibus Budget Reconciliation Act of 1981, Title I, Subtitle A, Part 1, Sec. 104.

Step 3: predetermine the exit SNAP point when the benefit becomes equal to 0.5 percent of countable income.

Congress should define in law that the exit point shall be calculated based on the benefit level at the tapering point, i.e., the maximum allotment, a constant BRR of 30 percent, and when the exit benefit amount becomes equal to 0.5 percent of countable income. Given steps 1 and 2, determining the exit benefit and exit income is a simple calculation using elementary algebra.

An exit benefit amount equaling 0.5 percent of countable income requires a 2 percent increase in countable income to overcome, assuming an earnings loss rate of 25 percent. This income increase is achievable for most households and maintains an adequate incentive to increase earnings despite the SNAP benefit loss.

Step 4: untether the gross income limit from the poverty level, define it to be equal to the income at exit, and eliminate the net income limit.

Having a gross income limit aligned with the tampering of benefits would guarantee that no household will run into a benefit cliff that cannot be easily overcome with a typical increase in income. It would simplify communications and enhance transparency to all households participating in or applying for SNAP, allowing them to know exactly whether they are eligible, exactly the countable income level when they will come off the program, and exactly the amount of the exit benefit. There would be no need for a net income limit, and the gross income limit would become untethered to the official poverty level. It would also simplify the process by requiring less information from applicants: only countable income would be necessary and none of the expense information. The Thrifty Food Plan, the chosen benefit reduction rate, and the predetermined exit benefit amount become the sole determinants.

In contrast, as it now stands, households are unsure if they are eligible until they undergo the net income test. Households *with* disabled or elderly members cannot predict exactly the income level when they will come off the program. Households *without* disabled or elderly members know about the gross income limit, but if their deductions are low enough, they might be surprised and come off sooner than they think because of the net income limit. And for households to know the exit benefit amount requires a series of calculations beyond the ability of most households

Step 5: redefine the minimum allotment as the benefit amount at exit and make it applicable to all household sizes.

The minimum allotment is available for only household sizes one and two, and it is calculated to be 8 percent of the Thrifty Food Plan of a one-member household.[81] For circumstances when the minimum allotment is encountered by a household, it can create benefit cliffs for the households coming off the program. (See Table 18 in Part 2 for an example.) Additionally,

[81] 7 U.S. Code § 2017(a) – Value of allotment.

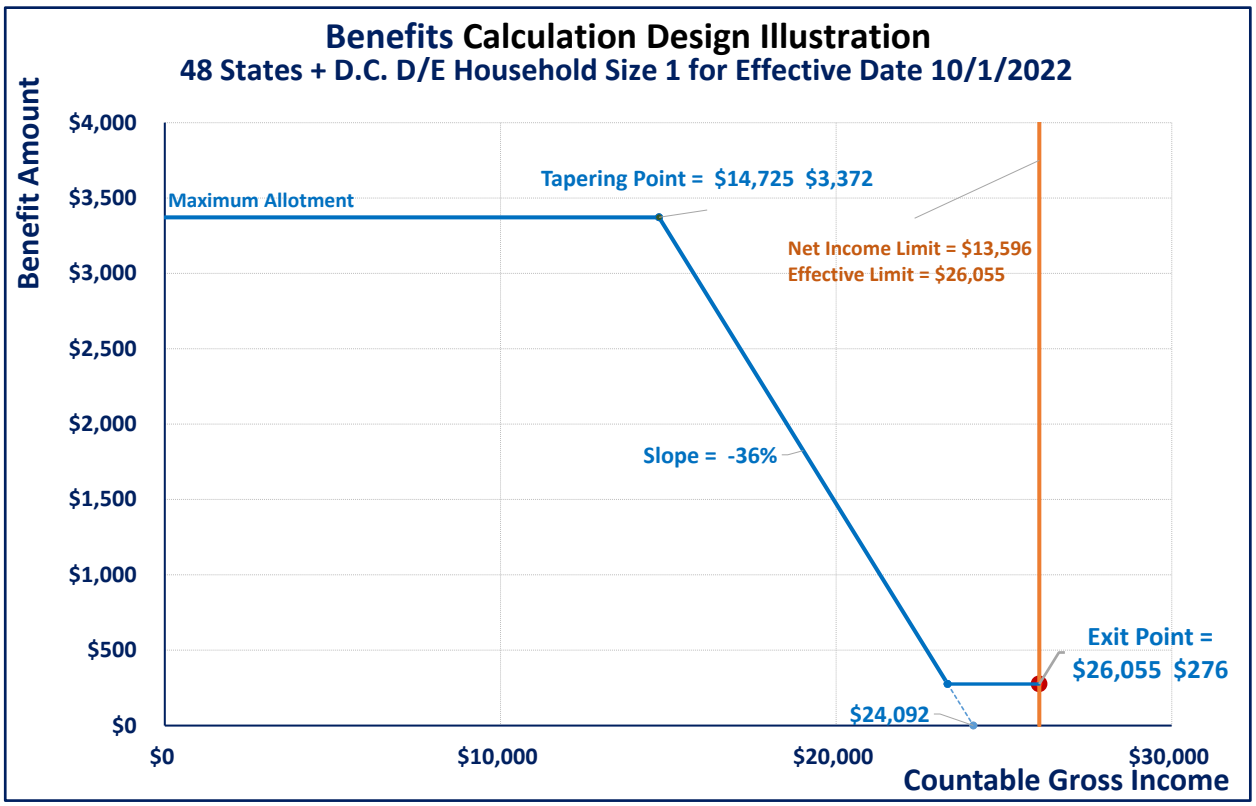
depending on the circumstances and under the status quo, if the tapering naturally would come to the minimum allotment before an income limit is reached, it stays constant—meaning no tapering of benefits—until the household encounters one of the income limits and exits the program. (See Chart 26 below for an example.)

There is an advantage to predetermining the exit income and benefit instead of allowing for a full tapering of benefits to zero. This option would prevent households from receiving a small amount in benefits, which could be just $1 a month due to rounding, using the extreme example. To avoid this situation, and as suggested in Step 3, the minimum allotment could be set equal to a SNAP benefit loss of 0.5 percent of the exit income. This would require an achievable 2 percent pay raise to overcome the loss assuming an earnings loss rate of 25 percent. If the minimum allotment were redefined in this manner, it should be applied to all household sizes.

Another advantage of redefining the minimum allotment in this way is that it would eliminate the current situation where a household could receive the minimum allotment over a range of income—that is, without a tapering of benefits—until the household reaches an income limit.

Chart 26

Example of a household receiving the minimum allotment that becomes constant over a range of income



Summary

These five steps would redefine how SNAP benefits are calculated in a way that guarantees no household would exit the program where their benefit loss is greater than 0.5 percent of countable income, which is easily overcome by a 2 percent increase in income assuming an earnings loss rate of 25 percent. It would enable applicants and participants to know if they are eligible without undergoing the net income calculation, to precisely know the income level and benefit amount when they exit the program, and the income increase they will need to overcome the loss. It would simplify the application process for SNAP administering agencies by eliminating the need to collect expense data and calculate net income, which would reduce the hassle of applicants to submit and document expense information. It would standardize the tapering point for all households, and promote personal responsibility by requiring cost sharing of the cost of the thrifty food budget by setting the starting point to be equal to the tapering point. It would also hold program costs to a minimum while providing adequate SNAP benefits to those in need.

Recommendation #4

Adopt a strategy to mitigate marriage penalties by giving married-couple households a standard deduction not available to non-married-couple households and changing the definition of a SNAP household .

One way to mitigate SNAP marriage penalties would be to give married couples a slight advantage when it comes to the final allotment they would receive. One promising option to this end would be to use a standard deduction strategy. Married couples could receive a married-couple standard deduction that is, as the name implies, not available to non-married households.[82]

[82] The idea of using standard deductions as a solution, including the option of limited them to married couple families with children discussed later, belongs to Professor Bradford Wilcox of Sociology at the University of Virginia, Director of The National Marriage Project at the university, senior fellow at the Institute for Family Studies, and a nonresident senior fellow at the American Enterprise Institute.

Chart 27

Example comparing SNAP benefits between married-couple and non-married-couple households when giving married couples a standard deduction of $885.

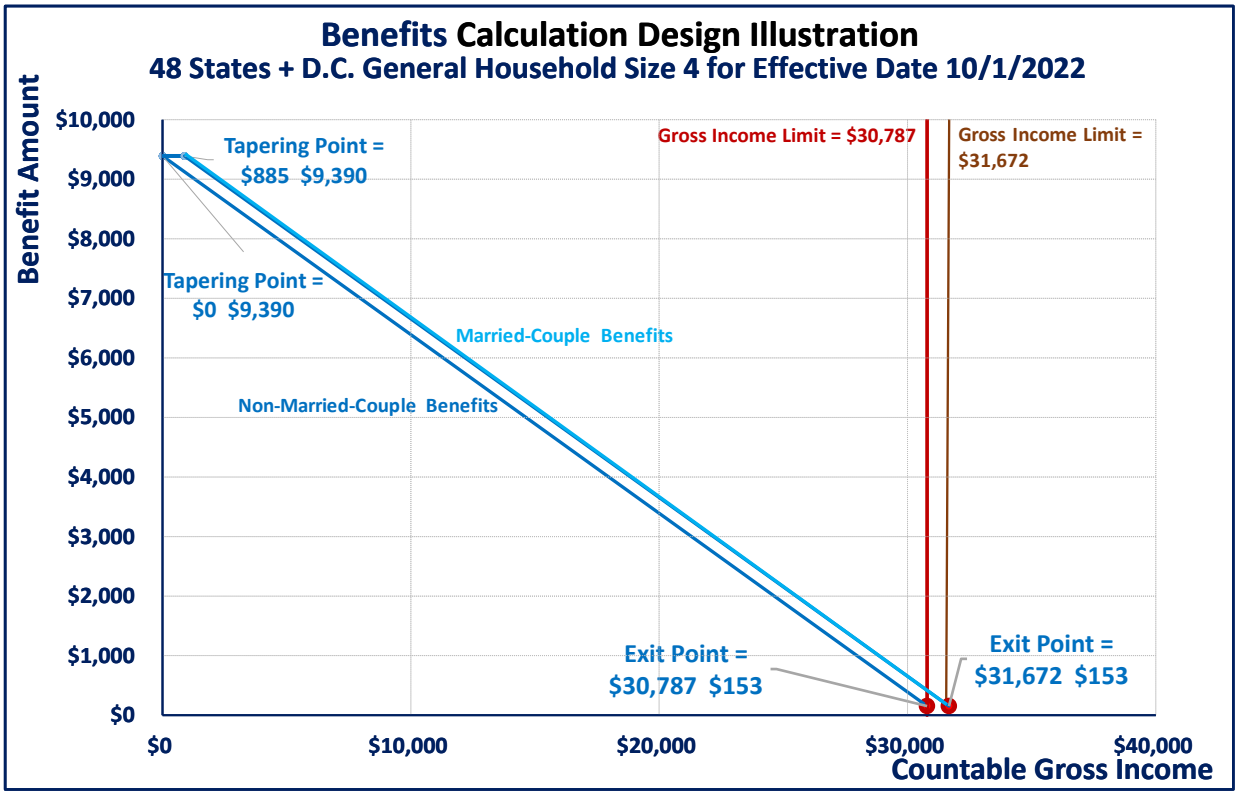


Chart 27 provides an illustration of the impact of an annual $885 married couple standard deduction for a four-member household in the 48 contiguous states and the District of Columbia. The chart displays SNAP benefit amounts over a range of countable gross income assuming Recommendation #3 is adopted. Note that the married-couple household receives a greater SNAP benefit than any other household of its size at the same countable gross income. It also exits the SNAP program at a higher gross income by an amount equal to the standard deduction.[83]

A fiscal analysis would need to be conducted on the cost of a married-couple household standard deduction. If the cost of the deduction becomes a concern, it could be reduced by limiting the standard deduction to married couples with children or even small children, such as if the family has a child less than five years old. After the children become older, then the family would no longer be eligible for the standard deduction.

[83] From an economic point of view, a standard deduction simply shifts the benefit line to the right by the amount of the standard deduction.

Creating a married-couple standard deduction would send a message that could have a psychological effect. Word will get out that married couples are treated better with SNAP, which could become a factor of many factors[84] in encouraging marriage over cohabitation.

A second way to mitigate marriage penalties would be to change a rule that creates or makes marriage penalties worse. One option would be to change the definition of a household. The general definition found in 7 U.S. Code § 2012 (m) centers on the concept of persons who live together and purchase and prepare meals together for home consumption. It further stipulates that "spouses who live together, parents and their children 21 years of age or younger who live together, and children (excluding foster children) under 18 years of age who live with and are under the parental control of a person other than their parent together with the person exercising parental control" are to be counted as a single household.

Although the definition is reasonable, it is hard to enforce for non-married couples, leaving a financial incentive to report living arrangements contrary to actual circumstances. Compliance could be enhanced by simply modifying the definition of a household as a group of individuals who live together, and then providing specific and limited exceptions to that rule to weed out those who are truly not an economic unit. This change would flip the emphasis so that SNAP administering agencies would initially count all household members, and then if there is an individual living in the same dwelling that is not part of the economic unity, they could present evidence to that effect.

Recommendation #5

Clarify how experimental projects in Section 2026 of Title 7 of the U.S. Code shall be construed, remove two constraints to allow states to test strategies more fully, clarify text of the law to match practice, and offer cost sharing for projects to test strategies to remove benefit cliffs and mitigate marriage penalties.

Section 2026 provides states the opportunity to conduct pilot or experimental projects, and permissible projects fall under one of four purposes. An experimental project to test the elimination of benefit cliffs fulfills two of those purposes: to increase self-sufficiency and test innovative welfare reform strategies.

However, there are two provisions that would restrict the scope of the project. Another provision should be clarified to match practice. A fourth provision might be misconstrued to such an extent that allows the Secretary of Agriculture to nix the project altogether. On the last point, considering how administrative interpretations can vary—and have varied—widely from

[84] It is not meant to be implied that a SNAP standard deduction for married-couple households would be the sole or even most important factor to encourage marriage. However, it would align SNAP with an overarching policy goal to promote marriage because of its societal benefits. See the discussion in Addressing Marriage Penalties in part 2 of this paper.

legislative intent, it would help if Congress inserted language giving guidance on how that provision needs to be interpreted. Finally, Congress might consider allowing experiments that are not revenue neutral.

The two provisions that restrict the scope of an experimental project are found in subsections (b)(1)(B)(iii) and (b)(1)(B)(iv)(III)(cc). The first provision states that if the Secretary finds that more than 5 percent of the SNAP participants would have its benefits reduced by more than 20 percent, then the project cannot include more than 15 percent of SNAP households and cannot continue more than 5 years unless approved again. The second provision prevents states from waiving the income limits, making households ineligible for participation if they exceed the gross income or net income limits, or if the household has a disabled or elderly member, just the net income limit.

States would still be able to conduct experimental projects because of the first provision, but because of the gross misalignment of SNAP factors, the scope of the project likely would be limited to 15 percent of SNAP households. By preventing states to experiment with waiving how the income limits are tethered to Federal Poverty Income Guidelines, states could be limited in how they can test different benefit reduction rates. The reasons are explained in greater detail in Part 4 (Recommendation for the States) of this paper. In summary, it is recommended that Congress amends Section 2026 so that those two provisions do not apply to experiments testing the elimination of benefit cliffs or mitigating marriage penalties.

Subsection (b)(1)(C)(i)(II) says that states must pay the cost of any increased allotments. However, the standard should be the overall cost of all allotments that determines the fiscal cost to the federal government, not specific allotments some households might receive. In practice, the Food and Nutrition Service has interpreted the language to mean the overall cost, but the letter of the law needs to comport with the practice. It is recommended that Congress update the language to match practice.

Congress might also want to consider having the Federal government pay a portion of the cost for experiments to eliminate benefit cliffs if the cost happens to exceed the pre-waiver cost. For example, because of the importance of eliminating perverse work incentives, Congress might choose to require state governments to pay 20 percent of cost overruns while the federal government pays the remaining 80 percent. A reason Congress might choose this option is the hope that these reform will help participants advance economically, reduce their time in the system, and cost government less in the long run once the changed incentives have a chance to influence behavior.

The provision in subsection (b)(1)(iv)(III)(bb) could be misconstrued if an administration might want to find a reason, despite being misconstrued, to kill the experiment. This provision says that all eligible households, unless they are sanctioned for failing to comply with SNAP rules, cannot be denied benefits. This is a good provision because it mandates that households in

need of acquiring food must be provided with SNAP benefits. However, given how some administrators can come-up with cunning interpretations to deny or terminate waiver requests, the provision could be misconstrued to mean that a household could not be denied benefits if they meet status quo eligibility rules as opposed to the eligibility rules allowed by the waiver. An interpretation such as this would make experimental projects that modify eligibility meaningless, which runs contrary to the purpose of Section 2026. To prevent such a misinterpretation, Congress might consider clarifying in statute how that provision should be construed. Even if an administration ignores the statutory clarification, it will help states if they might choose to adjudicate an application denial or project termination based on the misconstrued interpretation .

Recommendation #6

Mandate that the Secretary of Agriculture sponsors experiments with states to eliminate benefit cliffs and mitigate marriage penalties.

Congress may choose to require the Secretary of Agriculture to conduct experiments with the states to test ways to eliminate cliffs and mitigate marriage penalties that are fiscally responsible. Here it would make sense for the Secretary to actively solicit states to participate in the experiments, and allow any state that wants to participate to do so.

These new experimental projects could be a new subsection to 7 U.S. Code § 2026, and none of the potentially problematic provisions identified under Recommendation #5 should be made to apply to the new subsection. Because these would be sponsored projects, it would make sense for the federal government to pay for the full cost. The new subsection also may direct the Department to provide administrative financial support for the states, as determined by the Secretary and available funding, and require the Department to provide technical assistance to the states for the demonstration projects.

Part 4: Recommendation for the States

For states who do not want to wait for Congress to act or who would like to experiment with solutions, submit a Section 2026 application for a demonstration project to eliminate SNAP benefit cliffs and reduce marriage penalties.

We have been in contact with numerous states where leading policymakers, administrators, and other prominent individuals do not want to wait for Congress to act to solve the SNAP benefit cliff problem. They cannot be blamed because real people are being harmed by the SNAP benefit cliffs. Rhetorically, why should they wait for Congress when there is something within their power that they can do? Moreover, innovations can bubble up from the states before being adopted at the federal level. A salient example is Wisconsin Works of the 1990s that led to the Temporary Assistance for Needy Families block grant program.

Congress has long recognized the importance of innovation at the state level in what has been described as laboratories of democracy, by enacting statutes that allow states to waive federal rules for the purpose of conducting experimental and demonstration projects. For all these reasons, we are putting forth recommended principles on how states can take advantage of current waiver provisions in federal law to conduct experiments that can improve work incentives and reduce marriage penalties in their states while moving the nation toward a uniform SNAP benefit cliff solution.

Section 2026 of Title 7 of the U.S. Code establishes a waiver program allowing states to conduct experimental projects specifically to increase self-sufficiency of SNAP participants and test innovative welfare reform strategies. With enumerated exceptions, the law allows states to receive waivers to the provisions of the SNAP law to allow for these projects. As explained under Recommendation #5 for Congress in Part 3 of this paper, a few of the provisions would restrict the scope of the experiments. However, states could still apply for and undertake worthwhile experiments—assuming approval of the Secretary of Agriculture—to prove the concept of how to eliminate SNAP benefit cliffs.

Fortunately, the constraints in Section 2026 are easily overcome for Alaska Urban and the other 48 states if the waiver application is designed properly. Unfortunately, it will be more difficult for Hawaii and the rural designated zones of Alaska to undertake an experimental project within the parameters suggested in Recommendation #3 unless Congress acts upon Recommendation #5 or Recommendation #6. As shown below in Table 21, the benefit reduction rates for Hawaii and the rural Alaska are outside the recommended range.

Unless Congress amends Section 2026 per Recommendation #5, states would need to select an area within the state representing 15 percent or less of its total SNAP households. This would avoid the difficult computational and administrative hassle of proving that no more than 5 percent of the households would lose more than 20 percent in benefits. It goes without saying, however, that if a state can prove otherwise using its administrative data, then by all means it

could support a waiver application for more than 15 percent of SNAP households up to and including all SNAP households within the state.

States may consider selecting control groups to monitor the progress and success of the experiment. As much as possible, the control groups should have similar characteristics to the test group. The state should also consider following the households over time on their economic mobility journey by linking them administratively to the state's unemployment insurance program. Both Kansas and Maine successfully used this strategy to evaluate a reinstitution of SNAP work-related provisions for abled-bodied adults without dependents after the Great Recession.[85] States may also consider project designs that include obtaining agreements from participants so that when they exit SNAP, they have already agreed to answer survey questions at periodic intervals post exit to assess program success.

A section 2026 application should seek to waive the requirements for the minimum allotment and deductions to countable income, and depending on the project design, it may also seek to waive the requirements for the maximum allotment and the benefit rate reduction. The combination of modifying these factors can bring SNAP benefit cliffs down to levels that can be easily overcome with typical income increases. Because Section 2026 prevents states from waiving income limits, states may be constrained by the gross income limit in setting a fixed benefit reduction rate, but there is a workaround.

[85] Jonathan Ingram and Nic Horton, The Power of Work: How Kansas' Welfare Reform Is Lifting Americans Out of Poverty (The Foundation for Government Accountability, 2016: https://thefga.org/wp-content/uploads/2016/02/Kansas-study-paper.pdf; and Paul Leparulo and Amanda Rector, "Preliminary analysis of work requirement policy on the wage and employment experiences of ABAWDs in Maine" (Governor's Office of Policy and Management, April 19, 2016), https://digitalmaine.com/ogvn_policy/1/.

Table 21

Benefit reduction rates calculated using exit incomes equal to the gross income limits and exit benefits equal to 0.5 percent of those limits, and starting points equal to the maximum allotment assuming those effective October 1, 2022, as well as revised maximum allotments that backed out the 2021 non-inflationary adjustments.

Maximum Allotment	Household Size	48 States + D.C.	Alaska Urban	Alaska Rural 1	Alaska Rural 2	Hawaii
Effective 10/1/2022	1 member	18.6%	18.6%	23.8%	29.1%	31.3%
	2 members	25.5%	25.5%	32.6%	39.8%	42.8%
	3 members	29.2%	29.1%	37.2%	45.4%	48.7%
	4 members	30.7%	30.7%	39.2%	47.9%	51.4%
	5 members	31.2%	31.1%	39.8%	48.6%	52.2%
	6 members	32.7%	32.7%	41.8%	51.0%	54.7%
	7 members	32.1%	32.0%	41.0%	50.0%	53.6%
	8 members	33.0%	32.9%	42.1%	51.3%	55.1%
Revised	1 member	15.1%	14.8%	19.0%	23.3%	24.3%
	2 members	21.5%	21.0%	27.0%	33.0%	34.5%
	3 members	24.3%	23.8%	30.6%	37.4%	39.1%
	4 members	25.5%	25.0%	32.1%	39.2%	41.0%
	5 members	25.8%	25.3%	32.5%	39.7%	41.5%
	6 members	25.8%	25.2%	32.4%	39.5%	41.3%
	7 members	25.3%	24.8%	31.9%	38.9%	40.7%
	8 members	25.0%	24.5%	31.4%	38.4%	40.1%

Table 21 demonstrates the feasibility of using Section 2021 waivers to test strategies to address benefit cliffs. States have two basic approaches. They can leave the current maximum allotments in place while allowing benefit reduction rates to exceed 30 percent, or they can adjust the maximum allotments and test benefit reduction rate ranging from 26 percent to 30 percent.

The top half of Table 21 has BRRs calculated using two points: a starting point equal to the maximum allotment effective October 1, 2022, and an ending point equal to the gross income limit and a benefit amount that is 0.5 percent of that limit. The calculations assume no deductions against countable income. The 0.5 percent factor was used because those benefit losses would be easily overcome with a 2 percent income increase using a recommended 25 percent earnings loss rate per the Earnings Loss Rate Severity Scale Policy Guide.

The gross income limit was chosen for the exit point because Section 2026 does not allow states to waive the statutory income limits. The net income limit is not a concern because the limit is predicated on deductions, and states using program data will be able to demonstrate to the U.S. Food and Nutrition Service that nearly all effective net income limits exceed their respective gross income limits. The last three columns in Table 19 show that the weighted effective net income limits are always higher than the gross income limits.

With respect to designing benefit cliff demonstration projects, the goal for Table 21 is to have all calculated BRRs less than 30 percent, allowing a state to test a fixed BRR of 30 percent. However, the calculated BRRs in the top half exceed 30 percent for household sizes 5 and above for the

48 states, D.C., and Alaska Urban, for household sizes 2 and above for the designated rural areas of Alaska, and all household sizes of Hawaii. As a workaround, the 48 states, D.C., and Alaska Urban who might choose to use the effective maximum allotments, could design their projects using the higher BRRs that range up to 33 percent. Considering that SNAP BRRs can range up to 45 percent under the status quo—depending on deductions—33 percent will at least be an improvement. However, the BRRs for the designated rural areas of Alaska and Hawaii are still very high, making it inadvisable to undertake demonstration projects with the current maximum allotments as starting points.

The bottom half of Table 21 demonstrates how removing the non-inflationary adjustments to the Thrifty Food Plan in 2021 will allow the 48 contiguous states, D.C., and Alaska Urban to test BRRs ranging from 26 percent to 30 percent, which is within the target range. Had the cost of the Thrifty Food Plan been based solely on food price inflation, it would have increased by 18.2 percent[86] instead of the 45 percent to 51 percent increases shown in Chart 1. These calculations are found in the lower half of Table 21 as "revised" under maximum allotments. All calculated BRRs for the 48 contiguous states, D.C. and Alaska Urban are below 26 percent. The BRRs for Alaska Rural 1 are below 33 percent, which Alaska could consider creating a demonstration project using those BRRs. However, it is still inadvisable for Alaska Rural 2 and Hawaii to apply for a demonstration project considering the high BRRs even after adjusting the maximum allotments.

Some policymakers may have a hesitancy to adjust the maximum allotments down for purposes of Section 2026 demonstration projects. There are several actions that can be included in the experimental design to ameliorate their concerns. First, the project can instruct a state's SNAP administering agency to place increased emphasis on its existing nutritional education program—all states and D.C. have them[87]—to help SNAP recipients know how to efficiently budget for and select nutritious food. In fact, the Food and Nutrition Service assists states with their educational programs, providing tools and curricula, and has a website dedicated to better nutrition and "stretching food dollars."[88]

Second, the projects can include strategies to refer SNAP participants to nearby food banks and pantries run by non-profit organizations that are funded by private donations and grants from the U.S. Department of Agriculture, as well as other commodity food assistance programs. Food

[86] The 18.2 percent inflation rate is based on the change in the Consumer Price Index—All Urban Consumers for food prices from June 2019 to June 2022. Title 7, U.S. Code § 2012(u) instructs the Secretary of Agriculture to adjust the Thrifty Food Plan effective every October 1st for inflation from the preceding June. The Thrifty Food Plan is the basis for the maximum allotments.

[87] The Food and Nutrition Service, U.S. Department of Agriculture, dedicates a webpage to *State SNAP-Ed Programs* with links to all state and other area programs: https://snaped.fns.usda.gov/state-snap-ed-programs.

[88] Food and Nutrition Service, U.S. Department of Agriculture, *SNAP-Ed Connection* website: https://snaped.fns.usda.gov.

received from food banks and pantries do not count as income when determining SNAP eligibility, which makes for good practice for struggling households to take advantage of these opportunities to alleviate their food budgets.

Finally, the selection of the households to participate in the experiment could be based on an area of the state with lower food costs. The price level of the Thrifty Food Plan is just an average, and those living in lower cost areas have the additional advantage of purchasing food at lower costs. According to Consumer Price Index data, there is a significant variation across the country when it comes to prices with Riverside-San Bernardino-Ontario (California), Phoenix-Mesa-Scottsdale (Arizona), Detroit-Warren-Dearborn (Michigan), Urban Alaska, and Houston-The Woodlands-Sugar Land (Texas) coming in as areas with lower prices of the areas where data is released by the U.S. Bureau of Labor Statistics.[89]

An integral part of the experimental design is to use a uniform BRR, which is accomplished by disallowing deductions against countable income. This strategy has distinct advantages. A simplified eligibility process is one of them because it eliminates the need of the SNAP agency to know intrusive details of a household's expenses. The disallowance of deductions also accomplishes the immediate tapering of benefits when countable income increases. From a messaging standpoint, it aligns practice with the established SNAP concept that households have cost-sharing responsibilities in regard to purchasing their food. It also says that households need to prioritize their nutritional needs, which is not only essential to life but also a basic reality common to all humanity since time immemorial.

A fixed BRR will provide consistency for participating households on their journey of economic mobility. It contrasts well against the status quo where BRRs vary from 24 percent to 45 percent, depending on how earnings change as a percentage of countable income and how shelter costs impact the excess shelter cost formula as countable income increases.

Finally, the simplification of the BRR—combined with the known starting point—enables the SNAP agency to tell participants precisely the income level when they will exit the program, what their final allotment would be, and the income increase required to overcome the loss in benefits. This simplification has the added benefit of providing a level of program transparency not possible with the SNAP status quo.

If states do choose to waive the maximum allotment, they may choose to correct the mathematical errors with the maximum allotments evident with household sizes 6 and 8 in line with Recommendation #2 for Congress. In fact, the revised maximum allotments in Table 21 corrected the errors in its calculations.

[89] Consumer Price Index-All Urban Consumers data pulled from the U.S. Bureau of Labor Statistics using its Series Report data tool for the 2022 annual average for both its all items price series and food price series.

States may also choose to modify the benefit at the exit point other than the recommended 0.5 percent of the exit income. Instead of tapering to a predefined exit point that is easily overcome with a pay raise, states could elect to test allowing benefits to taper to zero. There is enough flexibility with the calculated BRRs in Table 21 to allow for such experimentation.

If and when Congress does act to improve Section 2026 per Recommendations #5 and #6, then the states could design better experiments with BRRs below 26 percent, Hawaii would be freed to submit an experiment of its own, and Alaska could pursue experiments in both its rural designated areas.

A preliminary assessment suggests that these waivers for benefit cliff demonstration projects would not violate the cost neutrality rule, that is, the prohibition against costing the federal government more money, which the states would be required to cover. Current income disregards drive up program costs, and these disregards would be eliminated to allow for the fixed benefit reduction rates. Moreover, anticipated restoration of work incentives would help individuals move off dependency in the long run, saving the federal government even more money. Also, administration savings may be realized from the simplification of determining eligibility and associated elimination of requesting and reviewing expense information, lightening the burden for both participants and administrators. However, states should be prepared to conduct and submit a detailed fiscal cost analysis when applying for a Section 2026 demonstration project.

States may also choose to address marriage penalties are part of their demonstration projects. They could include both strategies in Recommendation #4 to Congress, especially if the waiver application adjust the maximum allotments, allowing for room to give married-couple households with children a standard deduction not available to other households. The second strategy would be to alter the definition of a household, making noncompliance on counting who belongs in a SNAP household more difficult. The definitional change of a household could be a stand-alone demonstration project.