TAKING FOOD off THE TABLE: Understanding Who Would Be Affected by Potential SNAP Cuts and How

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Lawmakers are currently considering major reforms to entitlement programs in an effort to reduce spending and deficits. Some in Congress are proposing cuts to the Supplemental Nutrition Assistance Program (SNAP) (formerly known as food stamps), one of the major remaining programs providing material assistance to low-income families with children. Specifics of these cuts are yet to be determined, but could amount to up to 40 percent of the current budget.¹ This policy brief examines the potential impacts of such a cut.

In order to estimate the impacts of a 40% cut, we make the following assumptions: (1) policymakers would start by tightening SNAP work requirements for so-called "able-bodied adults without dependents" (ABAWDs); (2) policymakers would then restrict SNAP eligibility among those currently eligible through Broad-Based Categorical Eligibility (BBCE) criteria; (3) SNAP benefits would be eliminated for other SNAP units until a 40% cut is achieved.² Affected units are randomly selected in the third step because it is not clear from the House budget how the projected 40% savings would be carried out.

Table 1 shows estimates from our simulation using Current Population Survey (CPS) data from 2016 (the most recent year available).³ All estimates are adjusted for under-reporting using data from the Urban Institute's Transfer Income Model (TRIM) model. The Appendix describes the under-reporting adjustment and the three steps outlined above. We calculate poverty effects using the Supplemental Poverty Measure (SPM), the best available measure of income poverty, which counts in-kind benefits like SNAP as income before tabulating poverty rates.

We find that approximately two out of five SNAP families would be affected by the cuts.⁴ Among those who lose benefits, the median benefit lost would be approximately \$2,200. The cuts would reduce total income among those affected by 10%, and these cuts would affect approximately 24 million people, including 7.5 million children and 2.5 million seniors.

⁴ All references to families in this brief refer to SPM units.



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¹ The 10-year budget resolution adopted by Congress in October does not specify the exact nature of program cuts, but it does include a \$653 billion cut to "income security," a category that includes SNAP and other transfer programs. Prior versions of the 10-year budget include specific program cuts, which are an indicator of how lawmakers will likely respond to rising deficits. The 2018 House Republican budget proposed to cut SNAP by \$154 billion over ten years, or roughly 40% of projected spending by 2027.

² Appendix Tables A1 and A2 show the results of a 40% cut assuming that SNAP benefits for all recipients would be reduced (rather than a random selection of units being cut off) until a 40% cut is reached.

³ To see estimates at the state level, see Appendix Table A4.

Metric	Estimate			
Percent of SNAP families affected	40%			
Median annual SNAP benefit lost	\$2,200			
Median percent of income that would be lost for those affected	10%			
Number of people losing SNAP benefits	24 million			
Number of children affected	7.5 million			
Number of elderly (65+) affected	2.5 million			
Number of working-age adults (18-64) affected	14 million			

Table 2 shows the poverty effects of a 40% cut on the overall SNAP recipient population (some of whom lose benefits in the simulation, while some do not).⁵ For those on SNAP prior to the simulated cut, SPM poverty would increase by four percentage points (a 10.9% increase); deep poverty would increase by two percentage points (an 18% increase). Approximately 2.5 million people would fall into SPM poverty. Approximately 1.5 million people would fall into deep SPM poverty (below 50% of the SPM poverty threshold).

 Table 2: Poverty effects of a 40% SNAP cut on SNAP recipient population

	<i>Before the</i> 40% cut	<i>After the</i> 40% cut	Percent increase	Number increase
SPM poverty rate	37.7%	41.8%	10.9%	2.5 million
Deep SPM poverty rate (<50% of SPM poverty)	12.2%	14.4%	18.0%	1.5 million

Some critics of the SNAP program argue that SNAP decreases the incentive to work.⁶ Our main estimates do not include a labor supply response. As a sensitivity check, we carried out supplemental estimates adjusting for a potential labor supply response. To date, the most rigorous study of a labor supply response to federal food assistance is Hoynes and Schanzenbach's 2012 study of the cross-country rollout of the food stamp program in the 1960s and 1970s.⁷ In the Appendix we describe the method we used to estimate a potential labor supply effect, which takes into account structural changes since the time period used in Hoynes and Schanzenbach's study. (Table A3 compares results with and without a labor supply effect.) Even after taking a potential labor supply response into account, we estimate that the net effect of a 40% cut to SNAP would be approximately one million people moving into SPM poverty and a two percentage point (five percent) increase in the SPM poverty rate.

Conclusion

We find that the House budget proposal to cut SNAP by 40% would impact 24 million people -- roughly two out of five SNAP families -- including 2.5 million seniors (65+) and 7.5 million children. Poverty among the vulnerable SNAP population would increase by up to 10.9%; deep poverty would increase by as much as 18%. The median affected household would lose \$2,200 - 10% of their income.

5 The poverty rates in Table 2 represent the share of SNAP recipients who are below the poverty thresholds for the entire year. SNAP recipients in the CPS received SNAP for 10 months out of the year, on average. To the extent that poverty is higher when an SPM unit is receiving SNAP benefits, the rates in Table 2 underestimate poverty for SNAP recipients.

⁶ See "It Pays to Work: Work Incentives and the Safety Net" from the Center on Budget and Policy Priorities for a summary of the counterarguments against this claim.

⁷ Hoynes, Hilary Williamson and Diane Whitmore Schanzenbach. 2012. "Work Incentives and the Food Stamp Program." Journal of Public Economics, 96: 151-162.

Appendix

Primary Data Source

Our primary data source is the 2017 Current Population Survey Annual Social and Economic Supplement (CPS ASEC), which covers the 2016 calendar year. The CPS ASEC is the source of U.S. Census Bureau poverty statistics. We measure poverty using the Supplemental Poverty Measure (SPM). In addition to SNAP, SPM resources include after-tax benefits such as the Earned Income Tax Credit, other in-kind benefits such as the National School Lunch Program, the Women, Infants, and Children Program (WIC), Housing Assistance, and the Low Income Home Energy Assistance Program (LIHEAP) - minus medical out-of-pocket expenses, work-related expenses, and childcare expenses. SPM thresholds reflect contemporary purchasing patterns adjusted for the relative living expenses of metro and non-metro areas within states. See Nolan et al. (2016) for a detailed description of the geographical adjustments and historical trends for each state. The SPM resource-sharing unit includes foster children and cohabiters and their children (all SPM unit members have the same resources). Details about the computation of the SPM can be found in annual Census Bureau SPM reports (e.g., Renwick and Fox, 2016). For a description of how the SPM is calculated over time, see Fox et al. (2015) and Wimer et al. (2016).

Background and Methods

Below we describe the five steps in the simulation. The first step eliminates SNAP eligibility for ABAWDs who work less than 20 hours per week, received SNAP for more than three months in 2016, and live in areas with an ABAWD work requirement waiver as of October 2017. Family SNAP benefits are reduced depending on the number of nonworking ABAWDs in the unit and the number of people covered by the SNAP benefit. The second step removes the total SNAP benefit from resources for those units most likely to be receiving SNAP because of BBCE. In the third step, we randomly select additional SNAP-receiving SPM units and set the SNAP benefits to zero until total SNAP benefits are cut by 40%. Using estimates from TRIM data, the fourth step corrects for SNAP under-reporting in the CPS. The final step applies a labor supply response. All estimates reported are rounded to the nearest half million for popoulation estimates, to the nearest 10,000 for the state population estimates, to the nearest tenth of a percentage point for percentages, and to the nearest \$100 for dollar amounts.

Step 1: Eliminate ABAWD work requirement waivers

Under current law, able-bodied adults ages 18-49 without dependents (ABAWDs) are ineligible for SNAP beyond a period of three months in three years if they do not meet work requirements. ABAWDs receiving SNAP must work at least 80 hours per month or participate in state-approved job training or education programs. Consistent with the definition of ABAWDs in the USDA SNAP QC data, we classify a person as disabled (not able-bodied) if they are 1) receiving SSI and they report having a work-limiting disability, 2) working less than 30 hours per week, earning less than the federal minimum wage, have a work limiting disability, and receive veterans benefits or workman's compensation, or 3) a single person who receives SSI for a disability.

The Personal Responsibility and Work Opportunities Reconciliation Act (PRWORA) of 1996 imposed time limits and work requirements on food stamp receipt. PRWORA restricted food stamp benefits to three out of 36 months for ABAWDs not working at least 20 hours per week or participating in a work program. States can request that USDA waive work requirements for ABAWDs living in areas that have unemployment rates greater than 10% or a lack of sufficient jobs.⁸ In response to the Great Recession, Congress passed the 2009 American Recovery and Reinvestment Act (ARRA). ARRA suspended SNAP time limit for all ABAWDs through 2010. After 2010, in response to high unemployment in some areas, the U.S. Food and Nutrition Service approved statewide and partial-state SNAP time limit waivers. Six states and the District of Columbia currently have a statewide SNAP time

8 SNAP regulations provide a number of ways states can demonstrate an unemployment rate above 10 percent or a lack of sufficient jobs. See the USDA website for a summary of the common criteria state can use to qualify for a waiver.

limit waiver for ABAWDs; 27 states have partial state time limit waivers for select areas with high unemployment. In our CPS simulation, we first identify SPM units that have ABAWDs who 1) are not meeting the work requirement,⁹ 2) received SNAP for more than three months during 2016,¹⁰ and 3) live in a county or metro area covered by an ABAWD time limit waiver as of October 2017.¹¹ If the ABAWD in question meets all three criteria, then we reduce the unit's SNAP benefit under the assumption that the ABAWD would no longer be eligible for SNAP benefits.¹²

For those ABAWDs who meet the first two criteria and have unidentifiable metro area and unidentifiable county information, we randomly assign waivers until the share of geographically unidentifiable ABAWDs with waivers matches the share of SNAP recipients living in waiver counties within a given state.

Step 2: Set the SPM unit's SNAP benefits to zero for SPM units most likely to be receiving SNAP because of Broad-Based Categorical Eligibility (BBCE)

The Center on Budget and Policy Priorities (CBPP) estimates that in an average month, approximately one million households (approximately 2% of the SNAP caseload) receive SNAP as a result of BBCE. BBCE allows households that exceed the SNAP gross income and asset limits to become eligible for SNAP if they receive a non-cash TANF benefit. Depending on the state, non-cash TANF benefits could include child-care subsidies, transportation services, educational or training activities, as well as programs designed to prevent out-of-wedlock pregnancies or maintain two-parent families. Households that have elderly (65+) or disabled members do not have a strict income test for SNAP, but they may be affected by changes to BBCE if they live in a state that has eliminated asset tests through BBCE. Unfortunately we cannot observe assets in the CPS.

The CPS does not identify SNAP recipients that receive their benefit through BBCE, nor does the CPS include the asset information necessary to determine whether applicants exceed the state asset limit. In order to identify predictors of BBCE for SNAP in the CPS, we use the 2015 SNAP Quality Control (QC) data files. We identify BBCE units in the QC data as non-elderly non-disabled units that meet two criteria: 1) everyone in the unit is not receiving pure cash assistance (e.g., everyone in the unit is covered by a TANF, general assistance, or SSI benefit) because in this case the unit would be eligible for SNAP without BBCE, and 2) the unit has a gross income to poverty level ratio greater than 130%. This definition is similar to the definition of BBCE used by Ganong and Liebman (2017) in their study of SNAP enrollment changes over time in the QC data.

Using Bayesian Model Averaging (BMA), we developed a model that predicts the probability of being a BBCE unit within the QC data using predictors that are also observed in the CPS. BMA results indicated that measures of

⁹ According to the USDA, the three-month time limit applies to those ABAWDs not working at least 20 hours per week or participating in educational or training activities at least 80 hours per month. In our simulation, a non-exempt ABAWD can meet the work requirement by reporting 20 hours or more of usual hours worked last week or by being enrolled in school as a full or part-time student. According to USDA guidelines, most able-bodied students ages 18 through 49 who are enrolled in college or other institutions of higher education at least half time are not eligible for SNAP benefits. Students may be able to get SNAP if they work at least 20 hours per week or they meet other qualifying conditions (e.g., caring for a dependent, taking part in a state or federally financed work study program, receiving assistance benefits under a Title IV-A program of the Social Security Act, or placed in a school through designated employment and training programs). For this reason, we assume that non-working ABAWD students receiving SNAP in the CPS are meeting one of the qualifying conditions for students and therefore not at risk of losing SNAP benefits under a no-waiver scenario. Unfortunately the CPS does not ask about participation in SNAP employment and training programs.

10 The CPS indicates the number of people in the unit covered by the SNAP benefit; there is no indicator of which people in the unit are covered by the SNAP benefit. For those units that had more people than SNAP recipients, we assumed that children and disabled were the most likely to be covered by SNAP. We then randomly assigned SNAP receipt within the unit until the number of SNAP recipients equaled the number of people covered by the SNAP benefit.

11 Not all observations in the CPS have identifiable county and metro area information. In the first step of the simulation, we assigned a probability of living in a waiver county for all ABAWDs working less than 20 hours per week who were on SNAP for more than three months and living in counties and metro areas not identified in the CPS. We assigned the likelihood based on the probability of living in a waiver county for SNAP recipients within a given state. For those states that did not have publicly available data on the distribution of SNAP recipients by county, we used 2015 5-year American Community Survey (ACS) data.

12 In our 40% cut simulation, eliminating benefits for non-working ABAWDs generates 2.5% of the total simulated cut. There are two reasons why we may be over-estimating the number of ABAWDs who would be affected in this simulation. First, by using 2016 data (the most recent data available), we are most likely over-estimating the number of ABAWDs who will receive SNAP in 2018. As a result of declining unemployment rates, there has been a decline in both the number of waiver areas and the number of ABAWDs receiving SNAP. CBPP estimates that 500,000 childless adults lost SNAP eligibility in 2016. Second, the CPS does not measure participation in SNAP Employment and Training (E&T) programs that meet the work requirement. Assuming the 40% cut would not affect E&T funding, our simulation over-estimates the number of ABAWDs who would lose SNAP benefits because we assume no E&T participation.

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family composition, the size of the SNAP benefit, and state of residence were all highly predictive of BBCE status in the QC data. Using those measures, we identify those in the CPS that are the most likely to be receiving SNAP because of BBCE. We run this model on SPM units with income greater than 130% of the federal poverty level in states that had a BBCE policy in 2016. Starting with those that have the highest predicted probability of being a BBCE unit, we eliminate the unit's SNAP benefits until we have cut off approximately two percent of SNAP units (consistent with Center on Budget and Policy Priorities estimates).

Step 3: Set SNAP benefits to zero for randomly selected recipients until a 40% cut in benefits is reached.

We estimate that the total SNAP benefit budget would be reduced by less than 5% after the first two steps of the simulation. This is not surprising given that 1) the BBCE population is only 2% of the SNAP caseload size, and 2) the SNAP-eligible ABAWD population has decreased in recent years as more areas have become ineligible for waivers. To model the rest of the projected 40% cut, we eliminated SNAP benefits for additional SPM units selected at random, until we reached a total cut in SNAP benefits of 40%. We select units at random because it is not clear from the House budget proposals how the additional cuts to achieve their projected 40% savings would be carried out. Poverty effects will depend on the method used to achieve the 40% cut. Lowering income limits, for example, would have less of an impact on deep poverty than random selection.

An alternative way of implementing the 40% cut is to cut benefits for all recipients, rather than canceling entire cases. In our simulation, the combined effect of both eliminating ABAWD work requirements and canceling BBCE cases is a 3% cut in total SNAP benefits. Table A1 shows the results of the 40% cut if, after cutting off non-working ABAWDs and BBCE cases, we cut all benefits by the same proportion until we achieve a 40% cut in total SNAP benefits. Cutting off non-working ABAWDs and BBCE cases, we cut all benefits by the same proportion until we achieve a 40% cut in total SNAP benefits. Cutting off non-working ABAWDs and BBCE cases reduces total SNAP benefits to 97% of their original value in the CPS data. To get the total amount of SNAP benefits to 60% of their original value we reduce remaining benefits by 38.1% ((97-60)/97=.381). The estimates in Table A1 are adjusted for under-reporting as described in Step 4 below.

Metric	Estimate
Percent of SNAP families affected	100%
Median annual SNAP benefit lost	\$900
Median percent of income that would be lost for those affected	4%
Number of people losing SNAP benefits	61 million
Number of children affected	21 million
Number of elderly (65+) affected	5 million
Number of working-age adults (18-64) affected	35 million

Table A1: Estimated effects of a 40% SNAP cut with benefit reduction assumption

A smaller share of families would be affected under the caseload elimination scenario (Tables 1 and 2). Table A2 below shows the poverty impact of the 40% cut in the benefit reduction scenario. The choice of benefit reduction versus caseload elimination does not have a large impact on the poverty effects of the 40% cut. Given what happened to cash assistance caseloads and benefit amounts after welfare reform and the introduction of TANF block grants, we believe the caseload elimination scenario is more likely than the benefit reduction scenario. According to CBPP, TANF caseloads have fallen by two-thirds since welfare reform in 1996, while the size of the benefit has fallen by only 20%. (These trends are not surprising given that 1) the intent of welfare reform was to reduce caseloads, and 2) TANF benefit amounts are established using nominal dollars.) What these trends suggest is that under a block grant scenario (such as what was proposed in the House Republican 2018 budget), states will generate more savings by reducing caseloads than by reducing benefit amounts. Obviously the most probable scenario is a combination of reductions in both caseloads and benefits.

	<i>Before the 40% cut</i>	After the 40% cut	Percent increase	Number increase
SPM poverty rate	37.7%	42.3%	4.6%	3 million
Deep SPM poverty rate (<50% of SPM poverty)	12.2%	13.9%	1.7%	1 million

Table A2: Poverty effects of a 40% SNAP cut on SNAP recipient population with benefit reduction assumption

Step 4: Correct for SNAP under-reporting in the CPS

Studies comparing SNAP reporting in the CPS to SNAP administrative records have found that at least 40% of SNAP recipients in the CPS do not report SNAP receipt (Fox et al., 2017; Meyer and Mittag, 2015). The Urban Institute's Transfer Income Model (TRIM) simulates actual program rules in each year to correct for under-reporting of transfer program benefits in the CPS. The most recent TRIM files are for the 2015 CPS (2014 calendar year). Tables 1-2 in the policy brief include rounded estimates of the results after the results are increased or decreased, depending on the percent difference between the CPS and TRIM estimates.

Step 5: Labor supply adjustment

We looked to research by Hoynes and Schanzenbach (2012) to estimate the likelihood of an increase in labor supply in response to a cut in SNAP. Among non-elderly adults receiving SNAP in the 2017 CPS, 52% have positive work hours. We used Hoynes and Schanzenbach's preferred estimates to determine 1) the extent to which the remaining 48% might become employed, and 2) the amount of additional hours employed SNAP recipients might add to their work schedule. Hoynes and Schanzenbach report that heads of household who took up food stamps in the 1960s and 1970s reduced their employment rate by 24 to 27 percentage points (a treatment-on-the-treated reduction of 505 annual hours). Hoynes and Schanzenbach's findings predate an expansion of the Earned Income Tax Credit (EITC), large increases in female labor force participation, a large decline in female wage elasticities during the 1980s, and the introduction of SNAP and TANF work requirements after 1996 welfare reform.¹³ These changes affect both program participation and work incentives. The composition of the food stamp population has also changed since the 1960s and 1970s. During the period of Hoynes and Schanzenbach's study, single mothers – a group that has historically had high wage elasticities – were 40% of the adult food stamp population in the CPS. In the 2016 CPS, single mothers are only 25% of the adult food stamp population. For these reasons, we assume that if there was a labor supply response to a 40% cut in the SNAP program, the response would not exceed 50% of the labor supply effect in Hoynes and Schanzenbach's study. The exact size of the labor supply response would of course depend on the details of any proposed cut and how such cuts would be implemented across states.

	Without a labor supply	
	ejject	ejject
SPM poverty		
Starting SPM rate for SNAP population	37.7%	37.7%
Poverty rate for SNAP pop after policy implemented	41.8%	39.5%
Net increase in the number in poverty	2.5 million	1 million
Deep poverty		
Starting deep poverty rate for SNAP pop	12.2%	12.2%
Deep poverty rate for SNAP pop after policy implemented	14.4%	13.7%
Net increase in the number in deep poverty	1.5 million	1 million

Table A3: Poverty effects of a 40% SNAP cut on SNAP recipient population with and without a labor supply effect

13 Bishop et al. (2009) find that for single women between 1979 and 2003, hours wage elasticities decreased by 82%, participation wage elasticities decreased by 36%, and participation income elasticities decreased by 57%.

Table A4 shows the estimated number of people affected by state (rounded to the nearest 10,000). The estimates in Table A4 are based on the assumption that the 40% cut is evenly distributed across states and that 40% of SNAP recipients in the CPS do not report SNAP receipt (Fox et al., 2017; Meyer and Mittag, 2015). The distribution of the CPS SNAP population by state in Table A4 is roughly similar to the distribution of the SNAP population by state in the USDA SNAP QC data. We recommend caution when interpreting the estimates in Table A4, as the exact number of people affected will depend on how states respond to a cut in the federal SNAP budget.

State	Number of people affected by a 40% cut in SNAP	Percent of state population	State	Number of people affected by a 40% cut in SNAP	Percent of state population
Alabama	460,000	9%	Montana	70,000	7%
Alaska	50,000	7%	Nebraska	110,000	6%
Arizona	610,000	9%	Nevada	180,000	6%
Arkansas	240,000	8%	New Hampshire	50,000	4%
California	2,690,000	7%	New Jersey	430,000	5%
Colorado	200,000	4%	New Mexico	260,000	12%
Connecticut	290,000	8%	New York	1,550,000	8%
Delaware	70,000	7%	North Carolina	880,000	9%
District of Columbia	60,000	9%	North Dakota	40,000	5%
Florida	1,540,000	7%	Ohio	1,050,000	9%
Georgia	860,000	8%	Oklahoma	310,000	8%
Hawaii	90,000	6%	Oregon	380,000	9%
Idaho	120,000	7%	Pennsylvania	980,000	8%
Illinois	1,080,000	8%	Rhode Island	100,000	9%
Indiana	470,000	7%	South Carolina	440,000	9%
lowa	190,000	6%	South Dakota	70,000	8%
Kansas	160,000	5%	Tennessee	690,000	10%
Kentucky	400,000	9%	Texas	2,220,000	8%
Louisiana	540,000	12%	Utah	150,000	5%
Maine	130,000	10%	Vermont	40,000	6%
Maryland	450,000	7%	Virginia	450,000	5%
Massachusetts	350,000	5%	Washington	650,000	9%
Michigan	700,000	7%	West Virginia	190,000	10%
Minnesota	300,000	5%	Wisconsin	400,000	7%
Mississippi	290,000	10%	Wyoming	30,000	5%
Missouri	410,000	7%	Total	23,570,000	9%

Table A4: Estimated number of people affected by state

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