



United States Department of Agriculture

Current Perspectives on SNAP Participation

**Trends in Supplemental
Nutrition Assistance
Program Participation
Rates: Fiscal Year 2016 to
Fiscal Year 2018**

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United States Department of Agriculture

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May 2021

*Trends in Supplemental Nutrition Assistance
Program Participation Rates: Fiscal Year 2016
to Fiscal Year 2018*

Authors:

Sarah Lauffer and Alma Vigil

Submitted by:

Mathematica
1100 1st Street NE, 12th Floor
Washington, DC 20002-4221

Submitted to:

Office of Policy Support
USDA, Food and Nutrition Service
1320 Braddock Place
Alexandria, VA 22314

Project Director: Joshua Leftin

Project Officer: Kameron Burt

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Authors:	Sarah Lauffer and Alma Vigil
Mathematica Project Director:	Joshua Leftin
Mathematica Project Number:	50787.700
FNS Project Officer:	Kameron Burt
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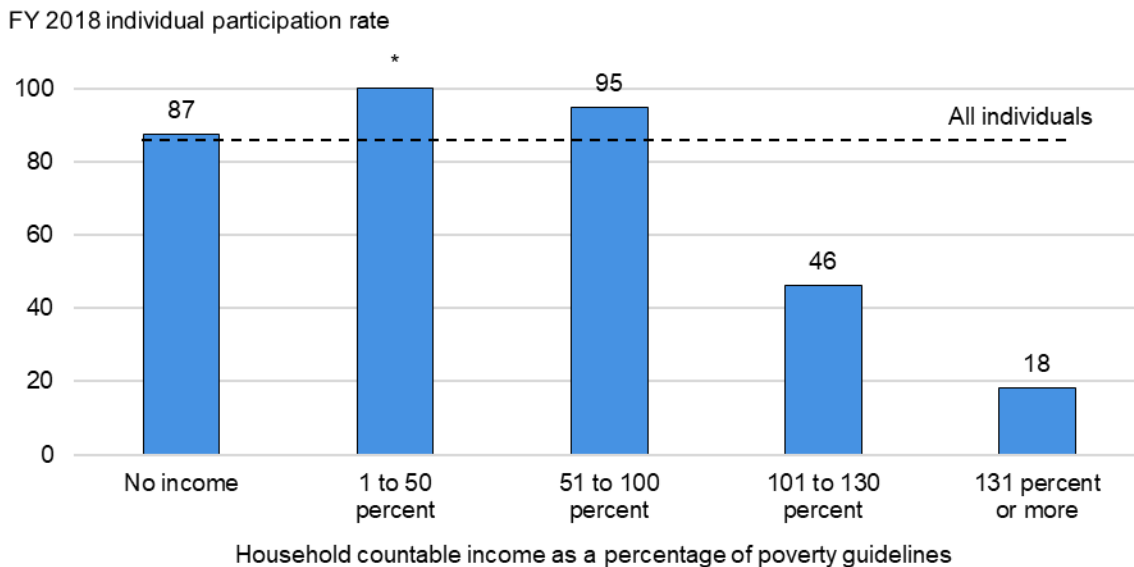
EXECUTIVE SUMMARY

The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to eligible low-income individuals and households in need. SNAP is the largest of the domestic nutrition assistance programs administered by the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture (USDA). In an average month in fiscal year (FY) 2018, SNAP provided benefits to 40.8 million people for a total annual benefit cost of \$60.9 billion.

The participation rates presented in this report are estimates of the percentage of individuals eligible for SNAP benefits under Federal income and resource rules who chose to participate in the program. Of the 44 million individuals eligible for SNAP in an average month in FY 2018, nearly 36 million (82 percent) participated and nearly 8 million did not.¹ The estimated participation rate among individuals stayed the same between FY 2017 and FY 2018.

The neediest individuals participate in SNAP at higher rates than other eligible individuals (Figure ES.1). For example, individuals in households with incomes below 51 percent of the Federal poverty guidelines participated at more than twice the rate of individuals in households with incomes above the poverty guidelines (Figure ES.1). Conversely, eligible individuals in households with incomes over 130 percent of the poverty guidelines had a very low participation rate—just 18 percent in FY 2018.

Figure ES.1. The neediest individuals participate in SNAP at higher rates than other eligible individuals



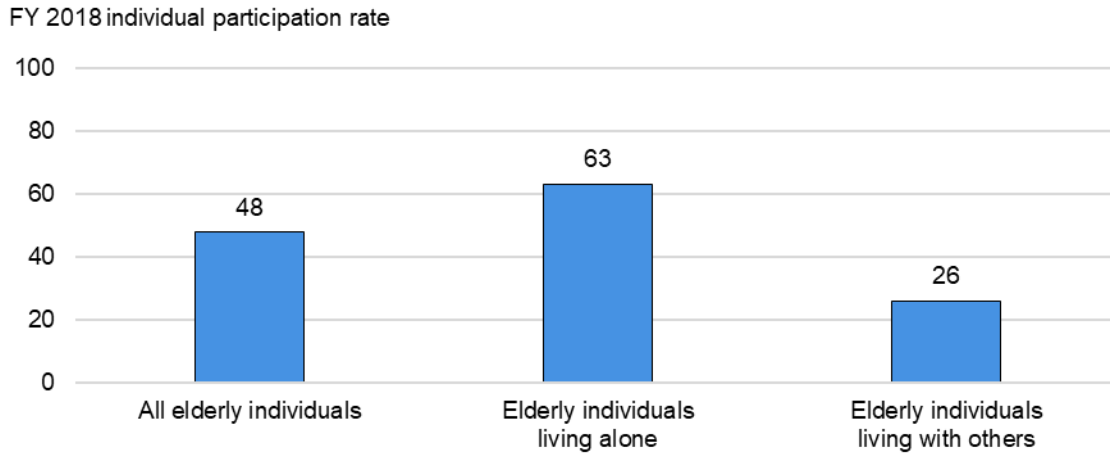
Sources: FY 2018 SNAP Program Operations and SNAP Quality Control data, and 2018 and 2019 Current Population Survey Annual Social and Economic Supplement data.

* In this report, we do not report estimated rates higher than 100 percent. See Appendix D for more information.

¹ The FY 2018 participant total presented in this report differs from the official participation total of 40.8 million because it excludes certain individuals, such as those who lived in Guam and the Virgin Islands; those who were categorically eligible under State policies and did not meet the Federal SNAP income or resource rules; and those who received temporary disaster benefits.

SNAP participation rates vary by demographic subgroup, including age. The participation rate for children has historically been relatively high; that remained true in FY 2018. Conversely, only 48 percent of eligible elderly adults (age 60 or older) participated in FY 2018 (Figure ES.2). The rate for elderly individuals living with others was particularly low—less than half the rate of those living alone.

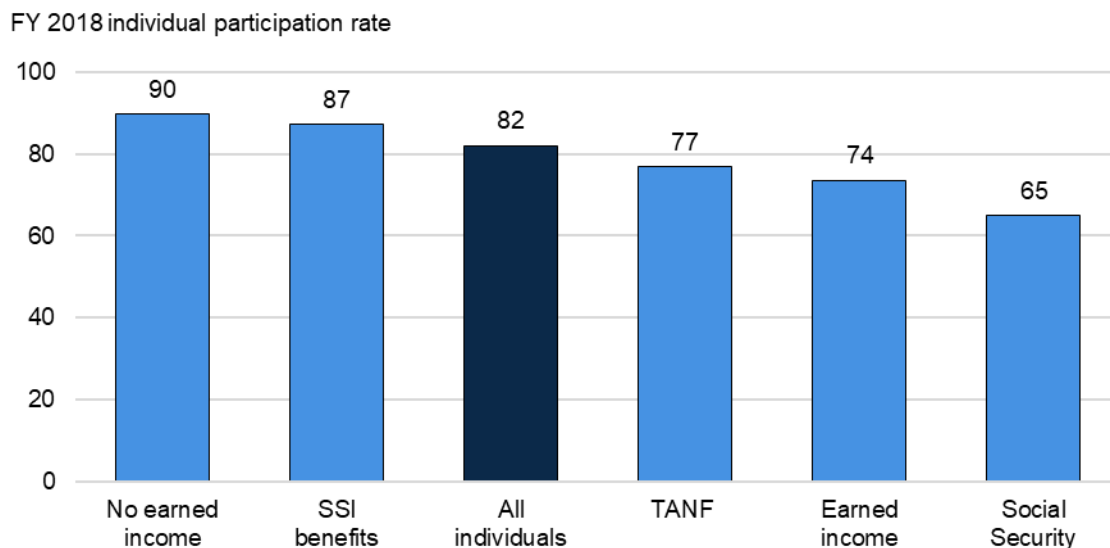
Figure ES.2. Participation rates for elderly individuals vary by living situation



Sources: FY 2018 SNAP Program Operations and SNAP Quality Control data, and 2018 and 2019 Current Population Survey Annual Social and Economic Supplement data.

Participation rates also vary by economic subgroup, with rates below average for individuals in households with Temporary Assistance for Needy Families (TANF) income (77 percent), earned income (74 percent), and Social Security income (65 percent). In contrast, participation rates for individuals in households without earned income or receiving Supplemental Security Income (SSI) benefits are higher than the national rate (Figure ES.3).

Figure ES.3. Participation rates for individuals vary by household income sources



Sources: FY 2018 SNAP Program Operations and SNAP Quality Control data, and 2018 and 2019 Current Population Survey Annual Social and Economic Supplement data.

The FY 2016 through FY 2018 participation rates presented in this report were estimated with methodologically consistent approaches, meaning they can be used to observe and evaluate trends in SNAP participation over that time period. Because of methodological changes from earlier reports in this series, however, the FY 2016 through FY 2018 rates in this report should not be compared to those published previously or presented in its appendices for years before FY 2016. The primary difference from the earlier estimates is the Census Bureau's redesign of the Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC), which we used to estimate eligibility. The Census Bureau implemented a redesigned processing system for the 2019 CPS ASEC file and also released redesigned 2017 and 2018 files. As a result, the FY 2016 and FY 2017 estimates presented in this report differ slightly from those published in the previous report in this series (Vigil 2019). Because SNAP participation is underreported in survey data, we estimated participation from SNAP Quality Control (QC) data. Differences between the two data sources resulted in some estimated participation rates exceeding 100 percent. These differences included details such as who is represented in the data, available data on household composition, when and how income is reported, and reported program participation.

INTRODUCTION

The Supplemental Nutrition Assistance Program (SNAP) provides nutrition assistance to eligible low-income individuals and households in need. In an average month in fiscal year (FY) 2018, SNAP provided benefits to 40.8 million people for a total annual benefit cost of \$60.9 billion.²

Most individuals whose income and resources fall below certain thresholds are eligible for SNAP. Others are categorically eligible because they live in pure public assistance (PA) households. These are households in which each member receives Supplemental Security Income (SSI); Temporary Assistance for Needy Families (TANF) cash benefits; or, in some States, General Assistance (GA) cash benefits. The participation rates for individuals and households presented in this report are estimates of the percentages of those eligible under Federal income and resource rules who chose to participate in SNAP. The benefit receipt rates indicate the amount of benefits received as a proportion of total benefits that would have been paid if every eligible household had participated. Some individuals may be eligible for SNAP because they meet other, broader State criteria for categorical eligibility. However, those eligible solely based on State criteria are not included in these estimates.

We estimated the FY 2016 through FY 2018 participation rates presented in this report with methodologically consistent approaches, meaning they can be used to observe and evaluate trends in SNAP participation over that time period. Because of methodological changes from earlier reports in this series, however, the FY 2016 through FY 2018 rates in this report should not be compared to those published previously or presented in its appendices for years before FY 2016. The primary difference from the earlier estimates is the Census Bureau's redesign of the Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC), which we used to estimate eligibility. The Census Bureau implemented a redesigned processing system for the 2019 CPS ASEC file and also released redesigned 2017 and 2018 files. As a result, the FY 2016 and FY 2017 estimates presented in this report differ slightly from those published in the previous report in this series (Vigil 2019).

Because SNAP participation is underreported in survey data, we estimated participation from SNAP Quality Control (QC) data. Differences between the QC and CPS ASEC data resulted in some estimated participation rates exceeding 100 percent. The differences include who is represented in the data, when and how income is reported, information on household composition, and reported program participation. In this report, we use an asterisk to indicate estimated participation rates that exceed 100 percent and the associated estimates of eligible individuals, households, or potential benefits. Because of these and other estimation challenges, the rates presented in this report are best used to observe trends over time and differences among subgroups.

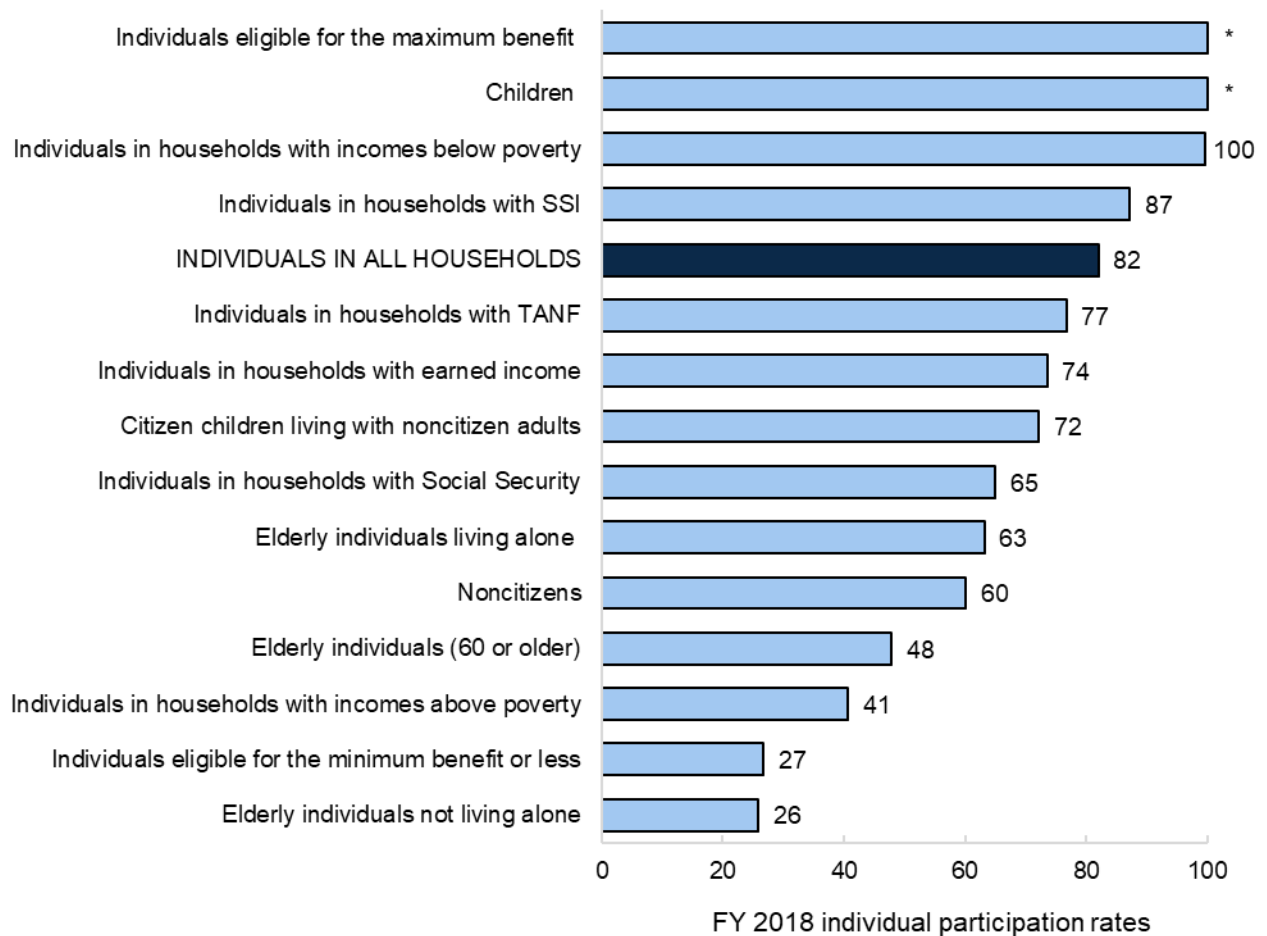
² The FY 2018 participant total presented elsewhere in this report differs from the official participation total of 40.8 million because it excludes certain individuals, such as those who (1) lived in Guam and the Virgin Islands, (2) were categorically eligible under State policies and did not meet the Federal SNAP income or resource rules, or (3) received temporary disaster benefits. See Appendix D for more information.

Appendix A includes detailed tables showing the participation rates for FY 2018. Appendix B includes tables showing subgroup participation rates for FY 2016 through FY 2018—the years examined in this report. Appendix C includes historical SNAP participation rates. Appendices D and E provide detailed explanations of the methodology used to develop the rates and the sampling error of the participation rate estimates, respectively. Appendix F presents historical economic and policy influences on SNAP. Appendix G shows SNAP eligibility policies from 1976 to 2018. Appendix H lists all previous reports in this series.

ESTIMATED PARTICIPATION RATES FOR FY 2018

In an average month of FY 2018, 44 million individuals were eligible for SNAP under Federal rules. Of those, nearly 36 million participated in the program (Table 1).³ The individual participation rate was 82 percent, whereas the household rate was 83 percent—1 percentage point higher. SNAP participation rates varied by demographic and economic subgroup (Table 2, Table 3, and Figure 1). Historically, the neediest individuals have participated at higher rates than other eligible individuals. This pattern continued in FY 2018; an estimated 100 percent of individuals in households with incomes at or below 100 percent of the poverty guidelines participated, compared to only 41 percent in households with incomes greater than 100 percent of the poverty guidelines. Additionally, only 27 percent of individuals eligible for the minimum benefit or less participated in FY 2018.⁴

Figure 1. Individual participation rate estimates, by subgroup, FY 2018



Sources: FY 2018 SNAP Program Operations and SNAP Quality Control data, and 2018 and 2019 Current Population Survey Annual Social and Economic Supplement data.

* In this report, we do not report estimated rates higher than 100 percent. See Appendix D for more information.

³ All tables are presented at the end of the main text.

⁴ The minimum benefit is applicable only to one- and two-person households.

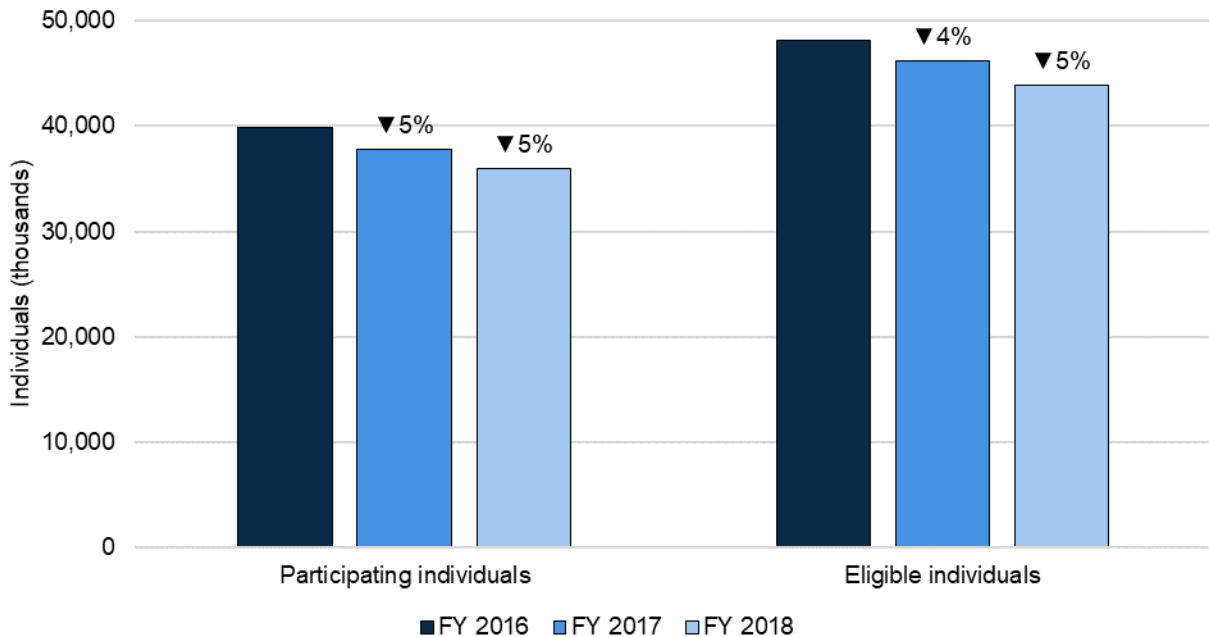
Elderly individuals (age 60 or older) typically participate in SNAP at lower than average rates—48 percent in FY 2018. Among elderly individuals, the FY 2018 participation rate for those living alone (63 percent) was more than twice the rate of those living with others (26 percent) (Figure 1; Table 2). Social Security recipients, a group that typically includes many elderly individuals, also participate at lower than average rates (65 percent). Three other groups with participation rates below the FY 2018 national rate were TANF recipients, noncitizens, and citizen children living with noncitizen adults (77 percent, 60 percent, and 72 percent, respectively) (Figure 1).

TRENDS IN PARTICIPATION RATES FROM FY 2016 TO FY 2018

The participation rate among eligible individuals did not undergo a statistically significant change between FY 2016 and FY 2018, although it did decrease by 1 percentage point, from 83 percent in FY 2016 to 82 percent in FY 2018 (Tables 2 and 3). The number of SNAP participants decreased by 10 percent between FY 2016 and FY 2018—about 5 percent each year (Table 4; Figure 2). This decrease in the number of participants may be partially attributable to improving economic conditions for low-income households as well as State reductions in time limit waivers for adults age 18-49 without disabilities living in childless households; such a decrease in SNAP participation had been seen in previous periods of recovery from economic recession (Figure F.1).

The number of eligible individuals decreased by 4 percent between FY 2016 and FY 2017, and 5 percent between FY 2017 and FY 2018 (Table 4; Figure 2). Overall, the number of eligible individuals decreased by 9 percent between FY 2016 and FY 2018.

Figure 2. Changes from the previous year in participating individuals and eligible individuals, FY 2016 to FY 2018



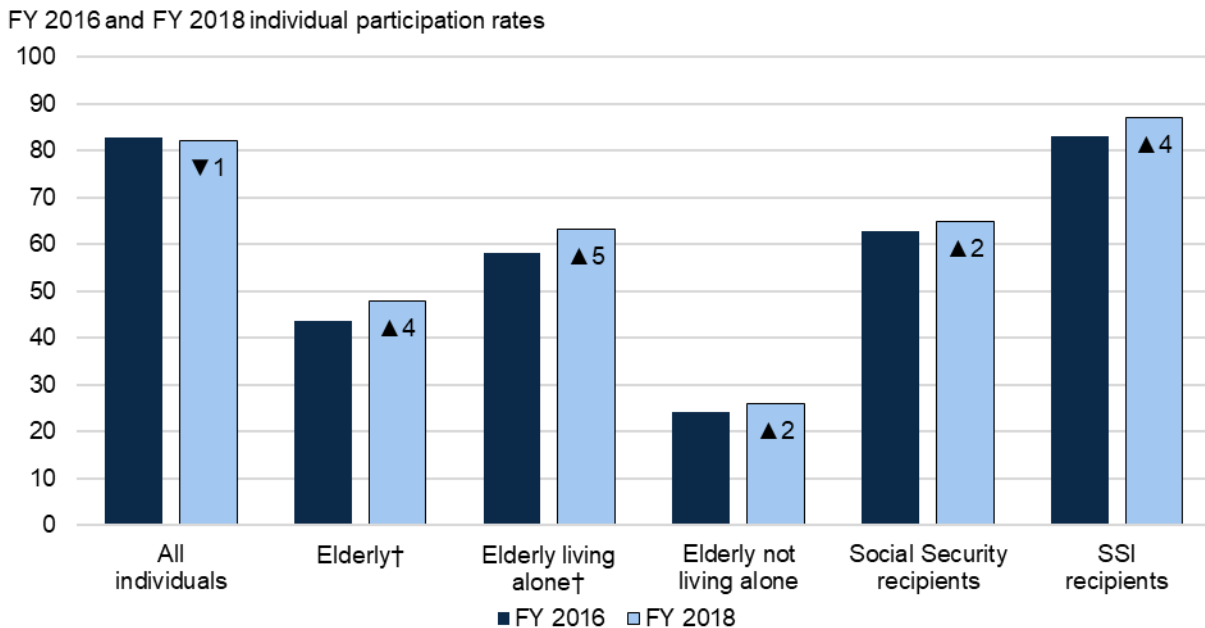
Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

TRENDS IN PARTICIPATION RATES FOR SUBGROUPS

Similar to the overall participation rate, most subgroups did not experience a statistically significant change in their participation rates between FY 2016 and FY 2018. However, SNAP participation rates varied by some demographic and economic subgroups.

Overall, the participation rates among elderly individuals, Social Security recipients, and SSI recipients increased between FY 2016 and FY 2018 (Figure 3). This increase occurred for all elderly individuals, as well as both subgroups of elderly individuals—those not living alone and those living alone. It also occurred for Social Security recipients and SSI recipients—groups that include many elderly individuals. The increase in the participation rate from FY 2016 to FY 2018 was statistically significant for elderly individuals and elderly individuals living alone but not for the other groups.

Figure 3. Changes in participation rates for all individuals, elderly individuals, elderly individuals living alone, elderly individuals not living alone, Social Security recipients, and SSI recipients from FY 2016 to FY 2018



Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

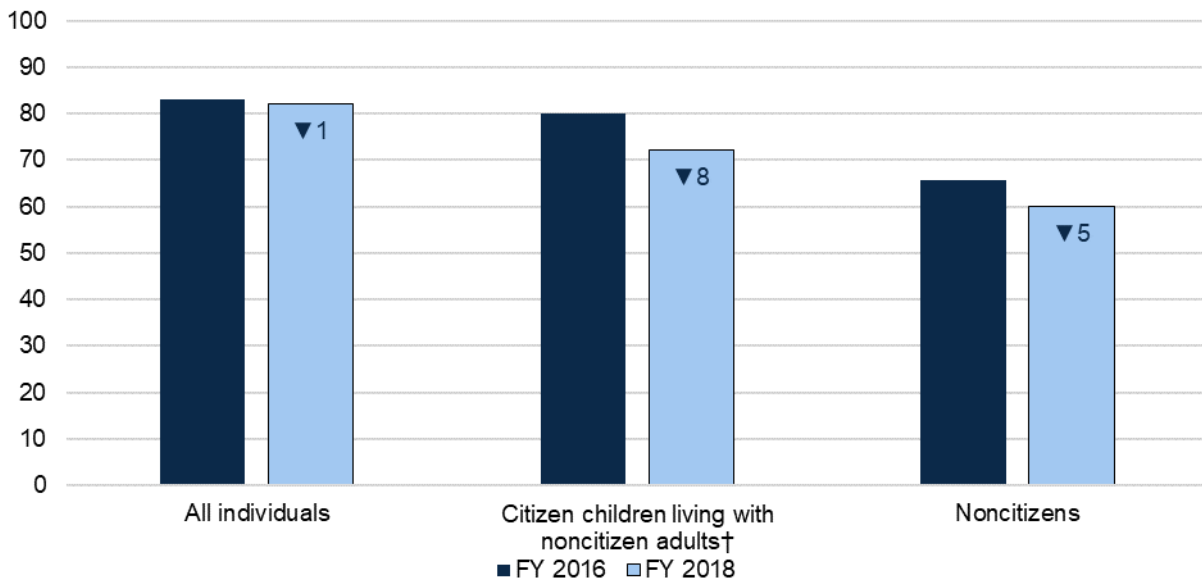
† Indicates significance at the .10 level using a two-tailed t-test.

The participation rates for two related subgroups—noncitizens and citizen children living with noncitizen adults—decreased between FY 2016 and FY 2018 (Figure 4). The rate for citizen children living with noncitizen adults exhibited a statistically significant decrease from FY 2016 to FY 2018. The participation rate for eligible noncitizens also decreased between FY 2016 and FY 2018, although the decrease was not statistically significant.⁵

⁵ SNAP eligibility is limited to certain categories of lawfully present noncitizens. See Appendix D, Section A.2.a for more information.

Figure 4. Change in the participation rate for noncitizens and citizen children living with noncitizen adults from FY 2016 to FY 2018

FY 2016 and FY 2018 individual participation rates

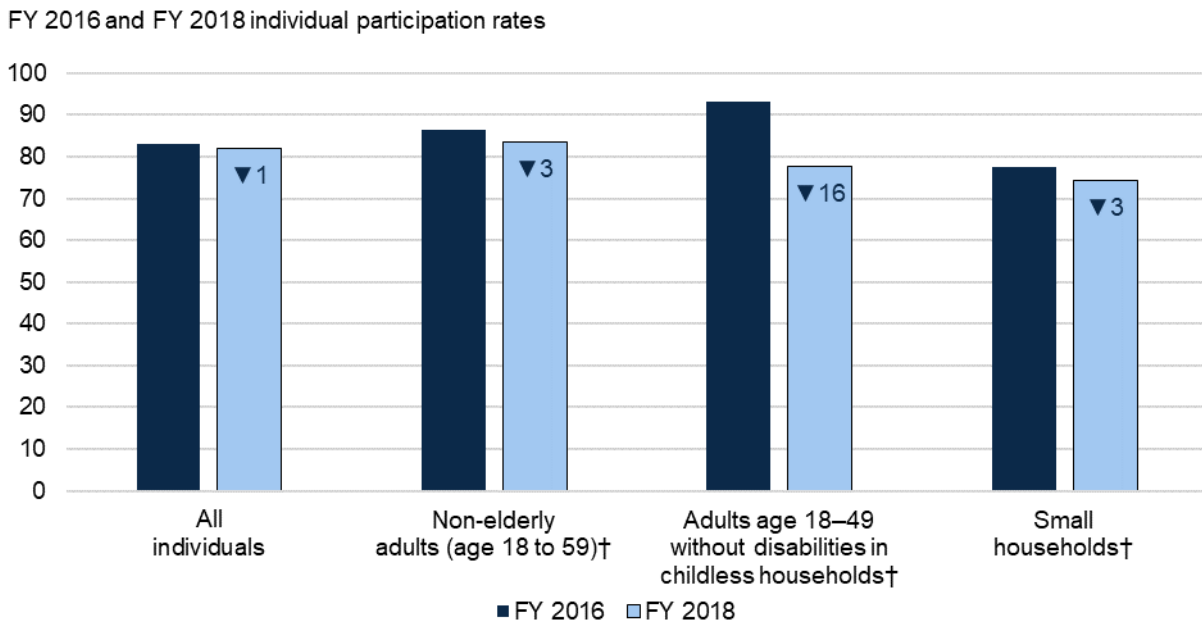


Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

† Indicates significance at the .10 level using a two-tailed t-test.

Three other subgroups examined in this report—non-elderly adults, adults age 18-49 without disabilities living in childless households, and individuals living in small households—experienced statistically significant decreases in participation rates from FY 2016 to FY 2018 (Figure 5). The rates for non-elderly adults (age 18-59) and for individuals living in small households (one or two members) decreased from FY 2016 to FY 2018 by 3 percent. In contrast, the participation rate for adults age 18-49 without disabilities living in childless households fell by a total of 16 percent.

Figure 5. Change in the participation rate for non-elderly adults, adults age 18-49 without disabilities living in childless households, and individuals living in small households from FY 2016 to FY 2018

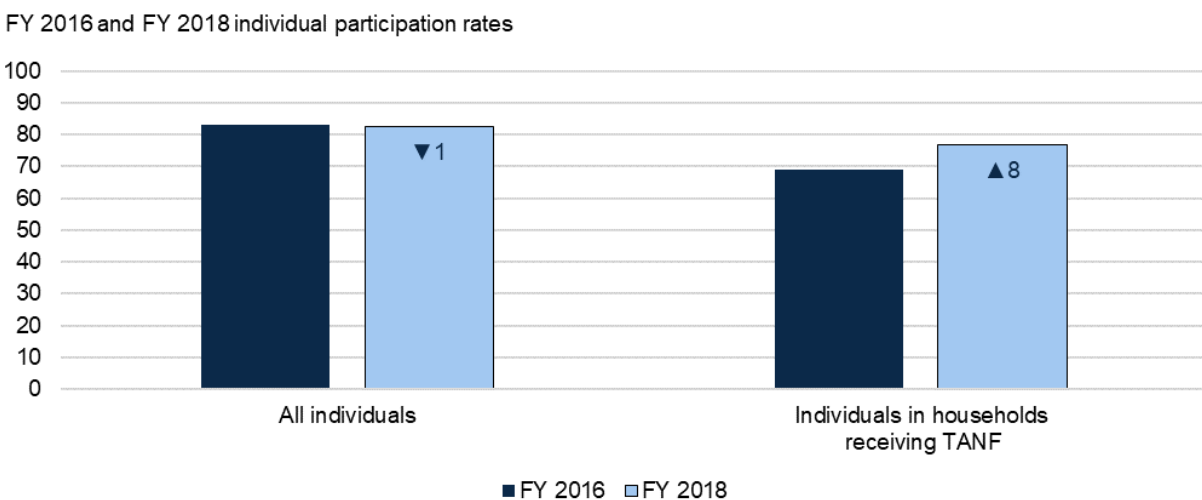


Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

† Indicates significance at the .10 level using a two-tailed t-test.

Participation rates for one subgroup—TANF recipients—increased substantially from FY 2016 to FY 2018 (Figure 6). This subgroup participated at a lower-than-average rate from FY 2016 to FY 2018, with notable increases during that time. The participation rate for TANF recipients was 69 percent in 2016 and increased by 8 percentage points by FY 2018, to 77 percent (Table 2). Although substantial, this change was not statistically significant.

Figure 6. Change in the participation rates among all individuals and individuals receiving TANF from FY 2016 to FY 2018



Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

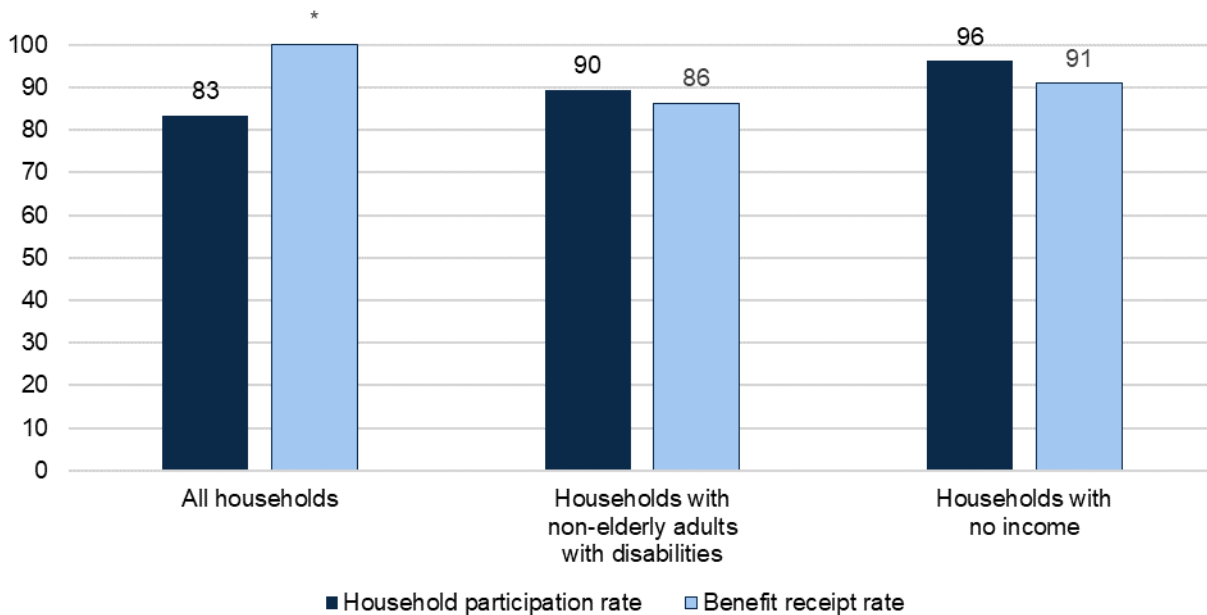
ESTIMATED BENEFIT RECEIPT RATES IN FY 2018

We calculated the benefit receipt rates by dividing benefits received by participating households by potential benefits to eligible households. We calculated prorated benefit receipt rates for individual-level characteristics in a similar manner, using individuals' prorated benefits (the household benefit divided by the number of people in the household). Because individuals eligible for larger benefits tend to participate in SNAP at higher rates than those eligible for smaller benefits, prorated benefit receipt rates are higher than individual participation rates (Table 5).

Among age groups, elderly individuals had the lowest individual prorated benefit receipt rate (63 percent), although elderly individuals living alone had a much higher benefit receipt rate (88 percent) than those living with others (29 percent) (Table 5). In addition, households with elderly members and those with household incomes between 101 and 130 percent of the poverty guidelines had among the lowest household benefit receipt rates (55 percent and 58 percent, respectively) (Table 6). In contrast to households with higher incomes, those with no income received approximately 91 percent of the benefits for which they were eligible (Table 6).

Benefit receipt rates also tend to be higher than household participation rates. However, in FY 2018, it was not the case for households with non-elderly adults with disabilities and households with no income. These two subgroups had benefit receipt rates lower than their household participation rates by about 4 and 5 percentage points, respectively (Table 6; Figure 7).

Figure 7. Participation rate and benefit receipt rates for all households, households with non-elderly adults with disabilities, and households with no income, FY 2018



Sources: FY 2018 SNAP Program Operations and SNAP Quality Control data, and 2018 and 2019 Current Population Survey Annual Social and Economic Supplement data.

* In this report, we do not report estimated rates higher than 100 percent. See Appendix D for more information.

METHODOLOGY

The denominator of the participation rate is the average monthly number of SNAP-eligible individuals during the 12 months of the fiscal year (October to September). We estimated the number of eligible individuals with a microsimulation model, using two combined years of CPS ASEC data to simulate SNAP eligibility in an average month within the fiscal year. Because the CPS ASEC collects household income data for the previous calendar year, for the FY 2018 estimates we used data from the 2018 CPS ASEC to simulate October to December 2017 and data from the 2019 CPS ASEC to simulate January to September 2018.

In the simulation procedure, we applied Federal SNAP eligibility policies to each household in the CPS ASEC. These policies included SNAP household formation rules, gross and net income thresholds, and resource limits. We also considered State-specific policies on vehicle assessment when determining household resources. We imputed some information unavailable in the CPS ASEC, such as citizenship status, net income amounts, and resource eligibility. The methodology is described in more detail in Appendix D.

The numerator of the SNAP participation rate is the average monthly number of participants during the 12 months of the fiscal year. We based the estimates of participants for FY 2018 on the FY 2018 SNAP QC data file. This file is an edited version of the raw data file generated by the SNAP Quality Control System and contains data on the demographic and economic characteristics of a sample of participating households.

We used the FY 2018 SNAP Statistical Summary of Operations (Program Operations) data to weight the SNAP QC data.⁶ The Program Operations data provide counts of individuals and households issued benefits and the total dollar value of benefits in each month of the fiscal year. Before weighting, we adjusted the Program Operations data to exclude participants who received temporary disaster benefits in the wake of events, such as hurricanes and floods that receive a Major Disaster Declaration with Individual Assistance, because these participants are not included in the SNAP QC data. In FY 2018, we removed approximately 364,000 people who received temporary disaster benefits from the average monthly individual totals. In addition, we removed approximately 885,000 individuals who received benefits in error from the FY 2018 participation numbers because this group is also not included in the SNAP QC data. These two groups amounted to approximately 3.1 percent of all participants.

We also excluded 3.5 million categorically eligible participants from the official rates because they did not meet the Federal SNAP income or resource rules. Because limitations of the SNAP QC data prevent us from identifying participating households with resources above the Federal limits, we used a regression equation based on data from the Survey of Income and Program Participation (SIPP) to predict resource ineligibility. Finally, we removed households in Guam and the Virgin Islands because they were not included in the CPS ASEC and thus are not part of the eligible totals.

⁶ SNAP Program Operations data used for this report were retrieved from the National Data Bank on April 13, 2020 and include updated counts for California, North Carolina, and Rhode Island. As a result, the SNAP participation estimates presented here differ slightly from those derived from the published FY 2018 QC data file and presented in the *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2018*.

Table 1. Estimated individual and household participation rates, and benefit receipt rates, FY 2018

	Participating (000)	Eligible (000)	Participation rate (percent) with 90 percent confidence interval
Individuals	35,987	43,862	82 +/- 1.4
SNAP households	17,823	21,362	83 +/- 1.3
Benefits (in dollars)	4,446,024	*	*

Sources: FY 2018 SNAP Program Operations, FY 2018 SNAP Quality Control, and 2018 and 2019 Current Population Survey Annual Social and Economic Supplement data.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received temporary disaster benefits or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

Table 2. Estimated SNAP individual participation rates, by characteristics, FY 2016 to FY 2018

	Individual participation rate (percent)		
	FY 2016	FY 2017	FY 2018
All individuals	83	82	82
Household size			
Small (1 to 2 members)	77	75	74
Medium (3 to 4 members)	90	91	89
Large (5 or more members)	84	84	90
Age			
Children (age 17 or younger)	*	*	*
Non-elderly adults (age 18-59)	87	84	83
Elderly individuals (age 60 or older)	44	46	48
Living alone	58	59	63
Not living alone	24	28	26
Adults age 18-49 without disabilities in childless households^a	93	83	78
Noncitizens^b	66	61	60
Citizen children living with noncitizen adults^c	80	74	72
Household countable income source^d			
Earned income	75	73	74
TANF	69	71	77
SSI benefits	83	82	87
Non-elderly	84	81	86
Elderly	72	77	81
Social Security	63	66	65
Household countable income as a percentage of poverty guidelines			
100 percent of poverty or less	99	99	*
No income	95	89	87
1 to 50 percent	*	*	*
51 to 100 percent	93	93	95
Greater than 100 percent of poverty	42	41	41
101 to 130 percent	49	48	46
131 percent or more	16	17	18
Household benefit as a percentage of maximum benefit			
Minimum benefit or less	29	28	27
1 to 50 percent	51	49	49
51 to 99 percent	*	*	*
Maximum (100 percent)	*	*	*

Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

^b These estimates do not include noncitizens who are outside the SNAP household but reside in the same dwelling unit.

^c These estimates include citizen children living in a household with a noncitizen adult, regardless of SNAP participation or eligibility of the adult.

^d These income sources are not mutually exclusive.

Table 3. Differences in estimated SNAP individual participation rates and 90 percent confidence intervals, by characteristics, FY 2016 to FY 2018 and FY 2017 to FY 2018

	Percentage point change in participation rate					
	FY 2016 to FY 2018			FY 2017 to FY 2018		
All individuals	-1	+/-	1.8	0	+/-	1.5
Household size						
Small (1 to 2 members)	-3	+/-	2.1†	-1	+/-	1.8
Medium (3 to 4 members)	-1	+/-	5.8	-2	+/-	5.4
Large (5 or more members)	6	+/-	8.9	7	+/-	8.5
Age						
Children (age 17 or younger)	*			*		
Non-elderly adults (age 18-59)	-3	+/-	2.3†	-1	+/-	2.0
Elderly individuals (age 60 or older)	4	+/-	2.0†	1	+/-	1.9
Living alone	5	+/-	3.4†	4	+/-	2.9†
Not living alone	2	+/-	2.9	-2	+/-	2.8
Adults age 18-49 without disabilities in childless households^a	-16	+/-	5.7†	-5	+/-	5.0†
Noncitizens^b	-5	+/-	7.0	-1	+/-	6.3
Citizen children living with noncitizen adults^c	-8	+/-	7.4†	-2	+/-	6.6
Household countable income source^d						
Earned income	-1	+/-	3.3	0	+/-	3.1
TANF	8	+/-	9.7	6	+/-	9.6
SSI benefits	4	+/-	4.8	5	+/-	4.3†
Non-elderly	2	+/-	6.2	4	+/-	5.5
Elderly	10	+/-	6.7†	5	+/-	6.1
Social Security	2	+/-	3.0	-1	+/-	2.9
Household countable income as a percentage of poverty guidelines						
100 percent of poverty or less	0	+/-	2.6	0	+/-	2.2
No income	-7	+/-	5.9†	-2	+/-	5.3
1 to 50 percent	*			*		
51 to 100 percent	1	+/-	4.2	1	+/-	3.7
Greater than 100 percent of poverty	-1	+/-	2.5	-1	+/-	2.5
101 to 130 percent	-2	+/-	3.2	-1	+/-	3.1
131 percent or more	2	+/-	2.8	1	+/-	2.6
Household benefit as a percentage of maximum benefit						
Minimum benefit or less	-2	+/-	2.1†	-1	+/-	1.9
1 to 50 percent	-2	+/-	2.1	0	+/-	2.1
51 to 99 percent	*			*		
Maximum (100 percent)	*			*		

Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

† Indicates significance at the .10 level using a two-tailed t-test.

^a With some exceptions, these participants are subject to work requirements and time limits.

^b These estimates do not include noncitizens who are outside the SNAP household but reside in the same dwelling unit.

^c These estimates include citizen children living in a household with a noncitizen adult, regardless of SNAP participation or eligibility of the adult.

^d These income sources are not mutually exclusive.

Table 4. Estimated number of eligible and participating individuals and households, benefits, and participation rates, FY 2016 to FY 2018

	FY 2016	FY 2017	FY 2018
Participating individuals			
Total (000)	39,909	37,808	35,987
Percent change	n.a.	-5.3	-4.8
Cumulative percent change	n.a.	-5.3	-9.8
Eligible individuals			
Total (000)	48,101	46,152	43,862
Percent change	n.a.	-4.1	-5.0
Cumulative percent change	n.a.	-4.1	-8.8
Households (000)			
Participating	19,559	18,605	17,823
Eligible	22,767	22,145	21,362
Benefits (000)			
Benefits received by participants	5,072,046	4,779,372	4,446,024
Potential benefits to eligible individuals	*	*	*
Participation rate (percent)			
Individual rate	83.0	81.9	82.0
Household rate	85.9	84.0	83.4
Benefit receipt rate (percent)			
	*	*	*

Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received temporary disaster benefits or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

n.a. = not applicable.

Table 5. Estimated participation rates and benefit receipt rates, by person-level demographic characteristics, FY 2018

Demographic characteristic	Individual participation rate (percent)	Prorated benefit receipt rate (percent)
Age		
Children (age 17 or younger)	*	*
Non-elderly adults (age 18-59)	83	*
Elderly individuals (age 60 or older)	48	63
Living alone	63	88
Not living alone	26	29
Noncitizens	60	72
Citizen children living with noncitizen adults	72	91
Employment status of non-elderly adults		
Employed	70	92
Not employed	90	*

Sources: FY 2018 SNAP Program Operations, FY 2018 SNAP Quality Control, and 2018 and 2019 Current Population Survey Annual Social and Economic Supplement data.

Note: An individual's prorated benefits are calculated by dividing the household benefit by the number of people in the household. Benefit receipt rates by individual-level characteristics are calculated by summing the prorated benefits of individuals with the selected characteristic.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

Table 6. Estimated participation rates and benefit receipt rates, by household-level demographic and economic characteristics, FY 2018

Household characteristic	Household participation rate (percent)	Benefit receipt rate (percent)
All households	83	*
Household composition		
Children (age 17 or younger)	*	*
Elderly individuals (age 60 or older)	51	55
Non-elderly adults with disabilities (age 18-59)	90	86
Countable income source		
Earned income	71	98
TANF	84	82
SSI	*	*
Social Security	70	88
Countable income as a percentage of poverty guidelines		
No income	96	91
1 to 50 percent	*	*
51 to 100 percent	97	*
101 to 130 percent	42	58

Sources: FY 2018 SNAP Program Operations, FY 2018 SNAP Quality Control, and 2018 and 2019 Current Population Survey Annual Social and Economic Supplement data.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

REFERENCES

- Cronquist, Kathryn. "Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2018." Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2019.
- Cunyngham, Karen. "Trends in Food Stamp Program Participation Rates: 1994 to 2000." Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2002.
- Cunyngham, Karen. "Trends in Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2010 to Fiscal Year 2016." Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2018.
- Leftin, Joshua, Esa Eslami, and Mark Strayer. "Trends in Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2002 to Fiscal Year 2009." Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2011.
- Passel, Jeffery S., and D'Vera Cohn. "A Portrait of Unauthorized Immigrants in the United States." Washington, DC: Pew Hispanic Center, April 2009.
- Trippe, Carole, and Scott Cody. "Trends in Food Stamp Program Participation Rates: Focus on August 1995." Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 1997.
- Vigil, Alma. "Trends in Supplemental Nutrition Assistance Program Participation Rates: Fiscal Year 2010 to Fiscal Year 2017." Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2019.
- Wolkwitz, Kari. "Trends in Food Stamp Program Participation Rates: 1999 to 2005." Alexandria, VA: U.S. Department of Agriculture, Food and Nutrition Service, 2007.

APPENDIX A

DETAILED PARTICIPATION RATE ESTIMATES FOR FY 2018

Table A.1. Estimated individual and household participation rates and benefit receipt rates, FY 2018

	Participating (QC)	Eligible (CPS)	Participation rate (QC/CPS)
Individuals	35,987,131	43,862,367	82.0
SNAP households	17,823,266	21,362,119	83.4
Benefits	4,446,024,409	*	*

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

Table A.2. Estimated individual participation rates, by household size, FY 2018

	Participating (QC)	Eligible (CPS)	Participation rate (QC/CPS)
Individuals by household size			
1 person	9,654,204	10,887,113	88.7
2 people	6,195,823	10,465,882	59.2
3 people	6,805,444	7,694,896	88.4
4 people	6,058,076	6,754,695	89.7
5 people	3,851,010	4,492,112	85.7
6 or more people	3,422,574	3,567,668	95.9
Individuals in all households	35,987,131	43,862,367	82.0

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

Table A.3. Estimated individual participation rates, by demographic characteristics, FY 2018

Demographic characteristic	Participating (QC)	Eligible (CPS)	Participation rate (QC/CPS)
All individuals	35,987,131	43,862,367	82.0
Age			
Children (age 17 or younger)	15,973,901	*	*
Preschool-age (age 0-4)	4,681,406	4,744,262	98.7
School-age (age 5-17)	11,292,495	*	*
Non-elderly adults (age 18-59)	15,212,224	18,244,106	83.4
Elderly individuals (age 60 or older)	4,801,006	10,029,661	47.9
Living alone	3,728,727	5,896,689	63.2
Not living alone	1,072,279	4,132,971	25.9
Adults age 18-49 without disabilities in childless households^a	2,531,270	3,262,092	77.6
Noncitizens	1,476,244	2,453,773	60.2
Citizen children living with noncitizen adults	2,942,251	4,074,217	72.2
Employment status of non-elderly adults			
Employed	4,334,931	6,212,177	69.8
Not employed	10,877,293	12,031,929	90.4
Individuals by household composition			
Living with children	24,558,630	25,573,384	96.0
Single-adult household	13,889,009	*	*
Married-head household	5,399,130	8,730,507	61.8
Other households	5,270,491	5,877,212	89.7
Not living with children	11,428,500	18,288,983	62.5
Gender			
Male	15,329,004	19,202,664	79.8
Female	20,658,127	24,659,703	83.8
Metropolitan status			
Urban	29,816,706	36,750,130	81.1
Rural	6,170,424	7,112,237	86.8

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

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^a With some exceptions, these participants are subject to work requirements and time limits.

Table A.4. Estimated individual participation rates, by economic characteristics of households, FY 2018

Economic characteristic	Participating (QC)	Eligible (CPS)	Participation rate (QC/CPS)
All individuals	35,987,131	43,862,367	82.0
Household countable income sources			
No income	5,690,491	6,506,092	87.5
No earned income	20,792,277	23,203,021	89.6
Earned income	15,194,854	20,659,346	73.5
TANF	2,550,196	3,321,255	76.8
Earned income	601,561	1,330,141	45.2
No earned income	1,948,635	1,991,114	97.9
No TANF	33,436,935	40,541,112	82.5
Earned income	14,593,292	19,329,206	75.5
No earned income	18,843,642	21,211,907	88.8
Social Security	7,289,076	11,216,996	65.0
Household countable income as a percentage of poverty guidelines			
100 percent of poverty or less	30,671,574	30,813,447	99.5
No income	5,690,491	6,506,092	87.5
1 to 50 percent	9,112,563	*	*
51 to 100 percent	15,868,520	16,735,113	94.8
Greater than 100 percent of poverty	5,315,557	13,048,920	40.7
101 to 130 percent	4,850,341	10,483,939	46.3
131 percent or more	465,216	2,564,981	18.1
Household monthly SNAP benefit			
Minimum benefit or less	1,303,946	4,881,418	26.7
Greater than the minimum to \$150	5,245,555	8,350,264	62.8
\$151 to \$300	9,913,915	11,416,045	86.8
\$301 to \$450	7,800,322	8,873,274	87.9
\$451 to \$600	5,980,666	*	*
\$601 or more	5,742,727	*	*
Benefit as a percentage of maximum benefit			
Low benefits (1 to 50 percent)	9,203,986	18,650,684	49.3
1 to 25 percent	3,500,513	9,806,674	35.7
26 to 50 percent	5,703,473	8,844,010	64.5
High benefits (51 to 99 percent)	14,950,765	*	*
51 to 75 percent	7,277,238	8,170,164	89.1
76 to 99 percent	7,673,527	*	*
Maximum (100 percent)	11,832,379	*	*

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

Table A.5A. Estimated individual participation rates for individuals living with children, FY 2018

Demographic or economic characteristic	Participating (QC)	Eligible (CPS)	Participation rate (QC/CPS)
Individuals living with children	24,558,630	25,573,384	96.0
Age			
Children (age 17 or younger)	15,973,901	*	*
Non-elderly adults (age 18-59)	8,407,420	9,393,548	89.5
Elderly individuals (age 60 or older)	177,310	591,235	30.0
Household countable income source			
No income	3,307,174	3,694,978	89.5
No earned income	10,798,715	*	*
Earned income	13,759,915	16,457,002	83.6
TANF	2,520,038	3,294,821	76.5
Earned income	600,042	1,322,117	45.4
No earned income	1,919,996	1,972,704	97.3
No TANF	22,038,593	22,278,562	98.9
Earned income	13,159,873	15,134,885	87.0
No earned income	8,878,720	*	*
Social Security	2,244,335	2,426,921	92.5
Household countable income as a percentage of poverty guidelines			
100 percent of poverty or less	21,016,252	*	*
No income	3,307,174	3,694,978	89.5
1 to 50 percent	7,856,093	*	*
51 to 100 percent	9,852,985	*	*
Greater than 100 percent of poverty	3,542,378	7,089,108	50.0
101 to 130 percent	3,446,120	6,381,439	54.0
131 percent or more	96,258	707,668	13.6
Household earned income as a percentage of poverty guidelines			
100 percent of poverty or less	22,165,993	*	*
No earnings	10,806,057	*	*
1 to 50 percent	4,410,665	*	*
51 to 100 percent	6,949,271	7,974,683	87.1
Greater than 100 percent of poverty	2,392,638	5,826,525	41.1
101 to 130 percent	2,365,492	5,384,037	43.9
131 percent or more	27,145	442,489	6.1

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

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Table A.5B. Estimated individual participation rates for individuals not living with children, FY 2018

Demographic or economic characteristic	Participating (QC)	Eligible (CPS)	Participation rate (QC/CPS)
Individuals not living with children	11,428,500	18,288,983	62.5
Age			
Children (age 17 or younger)	0	0	0.0
Non-elderly adults (age 18-59)	6,804,804	8,850,557	76.9
Elderly individuals (age 60 or older)	4,623,696	9,438,426	49.0
Household countable income source			
No income	2,383,317	2,811,114	84.8
No earned income	9,993,562	14,086,639	70.9
Earned income	1,434,939	4,202,345	34.1
TANF	30,159	*	*
Earned income	1,519	8,024	18.9
No earned income	28,639	*	*
No TANF	11,398,342	18,262,550	62.4
Earned income	1,433,419	4,194,321	34.2
No earned income	9,964,923	14,068,229	70.8
Social Security	5,044,741	8,790,075	57.4
Household countable income as a percentage of poverty guidelines			
100 percent of poverty or less	9,655,322	12,329,171	78.3
No income	2,383,317	2,811,114	84.8
1 to 50 percent	1,256,469	1,867,206	67.3
51 to 100 percent	6,015,535	7,650,851	78.6
Greater than 100 percent of poverty	1,773,178	5,959,812	29.8
101 to 130 percent	1,404,221	4,102,500	34.2
131 percent or more	368,957	1,857,313	19.9
Household earned income as a percentage of poverty guidelines			
100 percent of poverty or less	11,175,545	16,514,310	67.7
No earnings	9,994,576	14,086,639	71.0
1 to 50 percent	615,193	757,649	81.2
51 to 100 percent	565,776	1,670,023	33.9
Greater than 100 percent of poverty	252,956	1,774,673	14.3
101 to 130 percent	213,894	1,329,168	16.1
131 percent or more	39,062	445,506	8.8

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

n.a. = not applicable

Table A.6. Estimated household participation rates, FY 2018

Household characteristic	Participating (QC)	Eligible (CPS)	Participation rate (QC/CPS)
Household composition			
Children (age 17 or younger)	7,459,209	*	*
Single-adult	4,633,616	*	*
Married-head	1,195,240	1,969,043	60.7
Other	1,630,352	1,768,593	92.2
No children	10,364,057	13,987,952	74.1
Households containing			
Elderly individuals	4,436,480	8,735,571	50.8
Non-elderly adults with disabilities	3,903,618	4,360,809	89.5
Adults age 18-49 without disabilities and no children ^a	2,382,791	2,581,141	92.3
Noncitizens	1,022,617	1,809,556	56.5
Household countable income source			
Earned income	5,126,276	7,223,623	71.0
TANF	840,085	996,050	84.3
SSI	4,480,518	*	*
Social Security	5,187,592	7,408,863	70.0
Household countable income as a percentage of poverty guidelines			
No income	3,431,371	3,568,007	96.2
1 to 50 percent	3,473,167	*	*
51 to 100 percent	8,322,026	8,571,137	97.1
101 percent or more	2,596,702	6,199,358	41.9

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

Table A.7. Estimated benefit receipt rates, by household-level demographic and economic characteristics, FY 2018

Household characteristic	Benefits received by participating households (QC)	Potential benefits to eligible households (CPS)	Benefit receipt rate (percent)
All benefits	4,446,024,409	*	*
Household composition			
Children (age 17 or younger)	2,973,273,061	*	*
Single-adult	1,793,537,967	*	*
Married-head	548,969,833	771,519,472	71.2
Other	630,765,262	*	*
No children	1,472,751,347	1,679,868,515	87.7
Households containing			
Elderly individuals	570,400,238	1,037,819,228	55.0
Non-elderly adults with disabilities	732,155,058	848,517,827	86.3
Countable income source			
No earned income	2,819,358,969	*	*
Earned income	1,626,665,439	1,658,717,223	98.1
TANF	332,649,281	406,828,608	81.8
SSI	818,770,194	*	*
Social Security	696,996,883	795,862,649	87.6
Countable income as a percentage of poverty guidelines			
No income	1,006,423,280	1,105,508,880	91.0
1 to 50 percent	1,417,892,889	*	*
51 to 100 percent	1,721,058,262	*	*
101 to 130 percent	278,249,546	475,690,520	58.5
131 percent or more	22,400,432	52,026,550	43.1
Monthly SNAP benefit			
Minimum benefit or less	17,745,267	62,759,860	28.3
Greater than the minimum to \$150	362,842,617	433,995,239	83.6
\$151 to \$300	1,367,493,897	*	*
\$301 to \$450	1,030,678,869	1,101,861,033	93.5
\$451 to \$600	836,234,203	*	*
\$601 or more	831,029,556	*	*
Benefits as a percentage of maximum benefit			
1 to 25 percent	82,038,613	194,263,754	42.2
26 to 50 percent	374,497,640	553,273,666	67.7
51 to 75 percent	776,303,370	827,325,128	93.8
76 to 99 percent	1,132,375,647	*	*
Maximum (100 percent)	2,080,809,139	*	*

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: The benefit totals are monthly averages. The benefit totals in this table exclude participants who received disaster assistance, replacement benefits, or who were ineligible for SNAP. The potential benefit totals exclude those ineligible for SNAP under Federal SNAP income or resource rules and some categorically eligible participants who did not meet the Federal SNAP income or resource rules. Total potential benefits to eligible households in this table do not exactly match prorated potential benefits to eligible individuals in Table A.8 because of differences between household weights and the sum of individual weights in the Current Population Survey Annual Social and Economic Supplement.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

Table A.8. Estimated benefit receipt rates, by individual-level demographic characteristics, FY 2018

Demographic characteristic	Prorated benefits received by participating individuals (QC)	Prorated potential benefits to eligible individuals (CPS)	Benefit receipt rate (percent)
All benefits	4,446,024,409	*	*
Age			
Children (age 17 or younger)	1,946,956,458	*	*
Preschool-age (age 0-4)	598,577,802	*	*
School-age (age 5-17)	1,348,378,655	*	*
Non-elderly adults (age 18-59)	1,987,137,238	*	*
Elderly individuals (age 60 or older)	511,930,713	816,448,574	62.7
Living alone	411,408,508	469,386,423	87.6
Not living alone	100,522,206	347,062,151	29.0
Adults age 18-49 without disabilities in childless households^a	428,079,845	*	*
Noncitizens	183,723,164	254,799,052	72.1
Citizen children living with noncitizen adults	375,361,349	413,805,825	90.7
Gender			
Male	1,904,317,917	1,940,278,678	98.1
Female	2,541,706,492	*	*
Employment status of non-elderly adults			
Employed	477,256,892	520,589,516	91.7
Not employed	1,509,880,345	*	*

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: The prorated benefit totals are monthly averages. The benefit totals in this table exclude participants who received disaster assistance, replacement benefits, or who were ineligible for SNAP. The potential benefit totals exclude those ineligible for SNAP under Federal SNAP income or resource rules and some categorically eligible participants who did not meet the Federal SNAP income or resource rules. An individual's prorated benefits are calculated by dividing the household benefit by the number of people in the household. Benefit receipt rates by individual-level characteristics are calculated by summing the prorated benefits of individuals with the selected characteristic. Prorated potential benefits to eligible individuals in this table do not exactly match potential benefits to eligible households in Table A.7 because of differences between household weights and the sum of individual weights in the Current Population Survey Annual Social and Economic Supplement .

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

APPENDIX B

PARTICIPATION RATE ESTIMATES FOR FY 2016 TO FY 2018

Table B.1. Estimated individual and household participation rates and benefit receipt rates, FY 2016 to 2018

	Participating (QC)	Eligible (CPS)	Participation rate (QC/CPS)
Individuals			
FY 2016	39,908,521	48,101,113	83
FY 2017	37,807,973	46,151,754	82
FY 2018	35,987,131	43,862,367	82
SNAP households			
FY 2016	19,559,437	22,767,367	86
FY 2017	18,605,274	22,144,691	84
FY 2018	17,823,266	21,362,119	83
Benefits			
FY 2016	5,072,045,721	*	*
FY 2017	4,779,372,438	*	*
FY 2018	4,446,024,409	*	*

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

Note: Participating and eligible totals are monthly averages. The participant totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. The eligible totals include only those eligible for SNAP under Federal income or resource rules.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

Table B.2. Estimated individual participation rates, by household size, FY 2016 to FY 2018

	Individual participation rate (percent)		
	FY 2016	FY 2017	FY 2018
All individuals	83	82	82
Individuals by household size			
1 person	93	90	89
2 people	62	60	59
3 people	86	93	88
4 people	94	89	90
5 people	85	83	86
6 or more people	83	85	96

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

Table B.3. Estimated individual participation rates, by demographic characteristics, FY 2016 to FY 2018

	Individual participation rate (percent)		
	FY 2016	FY 2017	FY 2018
All individuals	83	82	82
Age			
Children (age 17 or younger)	*	*	*
Preschool-age (age 0-4)	*	100	99
School-age (age 5-17)	*	*	*
Non-elderly adults (age 18-59)	87	84	83
Elderly individuals (age 60 or older)	44	46	48
Living alone	58	59	63
Not living alone	24	28	26
Adults age 18-49 without disabilities in childless households^a	93	83	78
Noncitizens	66	61	60
Citizen children living with noncitizen adults	80	74	72
Employment status of non-elderly adults			
Employed	72	71	70
Not employed	94	92	90
Individuals by household composition			
Living with children	95	94	96
Single-adult household	*	*	*
Married-head household	63	64	62
Other households	95	94	90
Not living with children	65	64	62
Gender			
Male	82	81	80
Female	84	83	84
Metropolitan status			
Urban	83	81	81
Rural	83	88	87

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

Table B.4. Estimated individual participation rates, by economic characteristics of households, FY 2016 to FY 2018

	Individual participation rate (percent)		
	FY 2016	FY 2017	FY 2018
All individuals	83	82	82
Household countable income sources			
No income	95	89	87
No earned income	91	90	90
Earned income	75	73	74
TANF	69	71	77
Earned income	39	46	45
No earned income	92	90	98
No TANF	84	83	82
Earned income	78	76	75
No earned income	90	90	89
Social Security	63	66	65
Household countable income as a percentage of poverty guidelines			
100 percent of poverty or less	99	99	100
No income	95	89	87
1 to 50 percent	*	*	*
51 to 100 percent	93	93	95
Greater than 100 percent of poverty	42	41	41
101 to 130 percent	49	48	46
131 percent or more	16	17	18
Household monthly SNAP benefit			
Minimum benefit or less	29	28	27
Greater than the minimum to \$150	60	61	63
\$151 to \$300	92	88	87
\$301 to \$450	87	85	88
\$451 to \$600	*	*	*
\$601 or more	100	*	*
Benefit as a percentage of maximum benefit			
Low benefits (1 to 50 percent)	51	49	49
1 to 25 percent	38	37	36
26 to 50 percent	63	61	64
High benefits (51 to 99 percent)	*	*	*
51 to 75 percent	87	86	89
76 to 99 percent	*	*	*
Maximum (100 percent)	*	*	*

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

Table B.5A. Estimated individual participation rates for individuals living with children, FY 2016 to FY 2018

	Individual participation rate (percent)		
	FY 2016	FY 2017	FY 2018
Individuals living in households with children	95	94	96
Age			
Children (age 17 or younger)	*	*	*
Non-elderly adults (age 18-59)	88	88	90
Elderly individuals (age 60 or older)	29	30	30
Household countable income source			
No income	90	89	90
No earned income	*	*	*
Earned income	84	82	84
TANF	69	70	76
Earned income	39	46	45
No earned income	91	89	97
No TANF	100	98	99
Earned income	89	86	87
No earned income	*	*	*
Social Security	90	99	92
Household countable income as a percentage of poverty guidelines			
100 percent of poverty or less	*	*	*
No income	90	89	90
1 to 50 percent	*	*	*
51 to 100 percent	*	*	*
Greater than 100 percent of poverty	54	52	50
101 to 130 percent	59	57	54
131 percent or more	16	11	14
Household earned income as a percentage of poverty guidelines			
100 percent of poverty or less	*	*	*
No earnings	*	*	*
1 to 50 percent	*	*	*
51 to 100 percent	89	82	87
Greater than 100 percent of poverty	43	43	41
101 to 130 percent	46	46	44
131 percent or more	5	3	6

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

Table B.5B. Estimated individual participation rates for individuals not living with children, FY 2016 to FY 2018

	Individual participation rate (percent)		
	FY 2016	FY 2017	FY 2018
Individuals not living in households with children	65	64	62
Age			
Children (age 17 or younger)	0	0	0
Non-elderly adults (age 18-59)	85	80	77
Elderly individuals (age 60 or older)	45	47	49
Household countable income source			
No income	*	89	85
No earned income	73	72	71
Earned income	38	38	34
TANF	*	*	*
Earned income	18	16	19
No earned income	*	*	*
No TANF	65	64	62
Earned income	39	38	34
No earned income	73	72	71
Social Security	54	57	57
Household countable income as a percentage of poverty guidelines			
100 percent of poverty or less	84	82	78
No income	*	89	85
1 to 50 percent	78	74	67
51 to 100 percent	79	81	79
Greater than 100 percent of poverty	28	29	30
101 to 130 percent	33	34	34
131 percent or more	17	19	20
Household earned income as a percentage of poverty guidelines			
100 percent of poverty or less	70	69	68
No earnings	73	72	71
1 to 50 percent	91	90	81
51 to 100 percent	37	38	34
Greater than 100 percent of poverty	18	16	14
101 to 130 percent	21	20	16
131 percent or more	5	5	9

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

Table B.6. Estimated household participation rates, FY 2016 to FY 2018

	Household participation rate (percent)		
	FY 2016	FY 2017	FY 2018
Household composition			
Children (age 17 or younger)	*	99	*
Single-adult	*	*	*
Married-head	62	63	61
Other	*	99	92
No children	77	75	74
Households containing			
Elderly individuals	47	49	51
Non-elderly adults with disabilities	89	90	90
Adults age 18-49 without disabilities and no children ^a	*	98	92
Noncitizens	61	58	57
Household countable income source			
Earned income	74	73	71
TANF	79	80	84
SSI	97	97	*
Social Security	68	70	70
Household countable income as a percentage of poverty guidelines			
No income	*	99	96
1 to 50 percent	*	*	*
51 to 100 percent	98	98	97
101 percent or more	41	41	42

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

Table B.7. Estimated benefit receipt rates, by household-level demographic and economic characteristics, FY 2016 to FY 2018

	Benefit receipt rate (percent)		
	FY 2016	FY 2017	FY 2018
All benefits	*	*	*
Household composition			
Children (age 17 or younger)	*	*	*
Single-adult	*	*	*
Married-head	70	73	71
Other	*	*	*
No children	91	89	88
Households containing			
Elderly individuals	49	53	55
Non-elderly adults with disabilities	80	85	86
Household countable income source			
No earned income	*	*	*
Earned income	95	95	98
TANF	74	77	82
SSI	*	*	*
Social Security	82	87	88
Household countable income as a percentage of poverty guidelines			
No income	99	92	91
1 to 50 percent	*	*	*
51 to 100 percent	*	*	*
101 to 130 percent	57	59	58
131 percent or more	33	35	43
Household monthly SNAP benefit			
Minimum benefit or less	31	30	28
Greater than the minimum to \$150	78	82	84
\$151 to \$300	*	*	*
\$301 to \$450	92	91	94
\$451 to \$600	*	*	*
\$601 or more	*	*	*
Benefits as a percentage of maximum benefit			
1 to 25 percent	44	44	42
26 to 50 percent	66	64	68
51 to 75 percent	91	90	94
76 to 99 percent	*	*	*
Maximum (100 percent)	*	*	*

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

Note: Benefit receipt rates by individual-level characteristics are calculated by summing the prorated benefits of individuals with the selected characteristic.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

Table B.8. Estimated benefit receipt rates, by individual-level demographic characteristics, FY 2016 to FY 2018

	Benefit receipt rate (percent)		
	FY 2016	FY 2017	FY 2018
All benefits	99	99	*
Age			
Children (age 17 or younger)	*	*	*
Non-elderly adults (age 18-59)	*	*	*
Elderly individuals (age 60 or older)	57	60	63
Living alone	80	82	88
Not living alone	27	31	29
Adults age 18-49 without disabilities in childless households^a	*	*	*
Noncitizens	79	75	72
Citizen children living with noncitizen adults	96	92	91
Gender			
Male	99	98	98
Female	99	100	*
Employment status of non-elderly adults			
Employed	92	92	92
Not employed	*	*	*

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

Note: Benefit receipt rates by individual-level characteristics are calculated by summing the prorated benefits of individuals with the selected characteristic.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

APPENDIX C

HISTORICAL SNAP PARTICIPATION RATE ESTIMATES

Table C.1. Estimated number of eligible and participating individuals, households, and benefits, and participation rates, 1976 to 2018

	Eligible (000)			Participating (000)			Participation rates (percent)		
	Individuals	Households	Benefits (\$)	Individuals	Households	Benefits (\$)	Individuals	Households	Benefits
September 1976 ^a	50,061	16,282	1,075,819	15,880	5,308	375,461	31.7	32.6	34.9
February 1978	40,175	13,984	934,427	15,387	5,286	398,066	38.3	37.8	42.6
August 1980	36,567	14,042	1,108,330	20,185	7,372	689,381	55.2	52.5	62.2
August 1982	39,364	14,538	1,352,251	20,548	7,487	785,658	52.2	51.5	58.1
August 1984	38,591	14,194	1,386,231	19,990	7,324	841,442	51.8	51.6	60.7
August 1986	40,061	15,273	1,544,833	19,069	7,102	860,472	47.6	46.5	55.7
August 1988	38,166	14,896	1,646,310	18,358	7,016	907,117	48.1	47.1	55.1
August 1990	37,631	14,523	1,905,141	20,396	7,973	1,188,808	54.2	54.9	62.4
August 1991	40,989	15,574	2,229,403	23,364	9,204	1,471,406	57.0	59.1	66.0
August 1992	43,474	16,627	2,491,671	25,759	10,238	1,749,058	59.3	61.6	70.2
August 1993	45,241	17,031	2,515,761	27,260	10,900	1,839,469	60.3	64.0	73.1
August 1994	44,327	17,040	2,473,299	27,207	11,005	1,873,953	61.4	64.6	75.8
September 1994	35,053	15,305	2,028,290	26,229	10,659	1,747,990	74.8	69.6	86.2
September 1995	34,665	14,994	2,017,983	25,213	10,374	1,751,560	72.7	69.2	86.8
September 1996	34,478	15,264	2,060,242	23,874	9,934	1,706,230	69.2	65.1	82.8
September 1997	31,818	14,692	1,913,367	20,365	8,446	1,407,148	64.0	57.5	73.5
September 1998	30,350	14,024	1,836,184	18,152	7,606	1,253,632	59.8	54.2	68.3
September 1999	29,502	13,723	1,779,829	17,081	7,280	1,199,679	57.9	53.0	67.4
FY 1999 ^b	30,857	14,508	1,812,128	17,705	7,481	1,256,625	57.4	51.6	69.3
FY 2000	29,458	14,235	1,741,177	16,701	7,146	1,193,970	56.7	50.2	68.6
FY 2001	31,223	15,107	1,912,260	16,834	7,250	1,240,961	53.9	48.0	64.9
FY 2002(a)	34,388	16,693	2,230,454	18,500	7,951	1,451,229	53.8	47.6	65.1
FY 2002(b)	34,182	15,989	2,144,408	18,478	7,954	1,455,518	54.1	49.7	67.9
FY 2003	36,462	17,070	2,426,022	20,577	8,892	1,712,175	56.4	52.1	70.6
FY 2004	37,342	17,489	2,579,462	23,090	9,991	1,976,344	61.8	57.1	76.6
FY 2005	37,735	17,727	2,765,622	24,510	10,737	2,255,976	65.0	60.6	81.6
FY 2006	36,460	17,124	2,683,513	25,136	11,186	2,346,568	68.9	65.3	87.4
FY 2007	37,167	17,454	2,770,779	25,461	11,427	2,437,438	68.5	65.5	88.0
FY 2008	38,575	17,985	3,012,995	27,229	12,297	2,759,830	70.6	68.4	91.6
FY 2009	44,512	20,330	4,443,998	32,146	14,685	4,040,195	72.2	72.2	90.9

Table C.1. (continued)

	Eligible (000)			Participating (000)			Participation rates (percent)		
	Individuals	Households	Benefits (\$)	Individuals	Households	Benefits (\$)	Individuals	Households	Benefits
FY 2010	52,264	23,268	6,008,963	37,482	17,361	5,071,095	71.7	74.6	84.4
FY 2011	52,161	23,495	6,118,029	40,694	19,221	5,525,832	78.0	81.8	90.3
FY 2012	50,708	23,162	5,957,258	42,129	20,201	5,694,917	83.1	87.2	95.6
FY 2013	50,716	23,212	*	43,231	20,914	5,841,269	85.2	90.1	*
FY 2014	51,026	23,415	*	42,300	20,620	5,371,005	82.9	88.1	*
FY 2015	50,036	23,021	*	41,554	20,436	5,380,918	83.0	88.8	*
FY 2016(a)	47,070	21,982	*	39,904	19,556	5,071,716	84.8	89.0	*
FY 2017(a)	45,164	21,269	*	37,837	18,620	4,783,394	83.8	87.5	*
FY 2016(b)	48,101	22,767	*	39,909	19,559	5,072,046	83.0	85.9	*
FY 2017(b)	46,152	22,145	*	37,808	18,605	4,779,372	81.9	84.0	*
FY 2018	43,862	21,362	*	35,987	17,823	4,446,024	82.0	83.4	*

Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

Note: Participating and eligible totals are monthly averages. There are two estimates for 1994 and 1999 because of revised methodologies for determining SNAP eligibility, two estimates for 2002 because of revised methodologies for determining SNAP eligibility and the number of participants, and two estimates for FY 2016 and FY 2017 because of changes to the Current Population Survey Annual Social and Economic Supplement. The September 1976 to August 1994 estimates are methodologically consistent, as are the September 1994 to September 1999 estimates, the FY 1999 to FY 2002(a) estimates, the FY 2002(b) to FY 2009 estimates, the FY 2010 to FY 2017(a) estimates, and the FY 2016(b) to FY 2018 estimates. Readers should not compare the FY 2016 to FY 2018 estimates with any prior estimates.

The totals in this table do not include participants who received disaster assistance or were ineligible for SNAP. Some categorically eligible participants who were not eligible under the Federal rules are also excluded. See Appendix D for details.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

^a The benefit rates for 1976 and 1978 are based on the net benefit amount left after subtracting the amount paid for food stamps (see Table G.3H for a description of the purchase requirement) and thus are consistent throughout all years.

^b All fiscal year numbers are average monthly values.

Table C.2. Change in estimated individual SNAP participation rates, 1988 to 2018

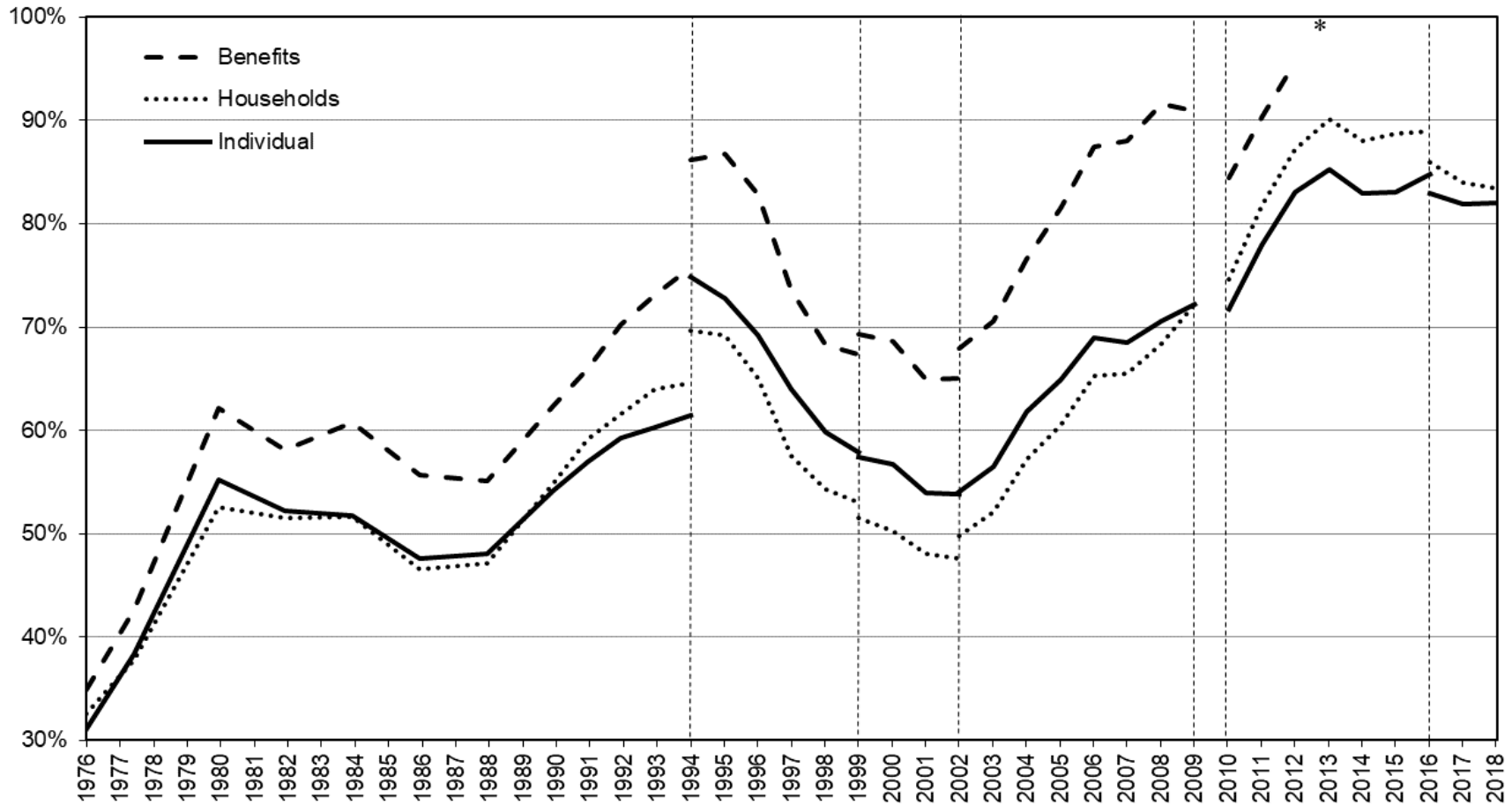
Time period	Change in participation rate	Change in participants (percent)	Change in eligible individuals (percent)
1988 to 1990	6.1 points	11.1	-1.4
1990 to 1991	2.8 points	14.6	8.9
1991 to 1992	2.3 points	10.3	6.1
1992 to 1993	1.0 points	5.8	4.1
1993 to 1994	1.1 points	-0.2	-2.0
1994 to 1995	-2.1 points	-3.9	-1.1
1995 to 1996	-3.5 points	-5.3	-0.5
1996 to 1997	-5.2 points	-14.7	-7.7
1997 to 1998	-4.2 points	-10.9	-4.6
1998 to 1999	-1.9 points	-5.9	-2.8
FY 1999 to FY 2000	-0.7 points	-5.7	-4.5
FY 2000 to FY 2001	-2.8 points	0.8	6.0
FY 2001 to FY 2002(a)	-0.1 points	9.9	10.1
FY 2002(b) to FY 2003	2.4 points	11.4	6.7
FY 2003 to FY 2004	5.4 points	12.2	2.4
FY 2004 to FY 2005	3.1 points	6.1	1.1
FY 2005 to FY 2006	4.0 points	2.6	-3.4
FY 2006 to FY 2007	-0.4 points	1.3	1.9
FY 2007 to FY 2008	2.1 points	6.9	3.8
FY 2008 to FY 2009	1.6 points	18.1	15.4
FY 2010 to FY 2011	6.3 points	8.6	-0.2
FY 2011 to FY 2012	5.1 points	3.5	-2.8
FY 2012 to FY 2013	2.2 points	2.6	0.0
FY 2013 to FY 2014	-2.3 points	-2.2	0.6
FY 2014 to FY 2015	0.1 points	-1.8	-1.9
FY 2015 to FY 2016(a)	1.7 points	-4.0	-5.9
FY 2016(a) to FY 2017(a)	-1.0 points	-5.2	-4.0
FY 2016(b) to FY 2017(b)	-1.0 points	-5.3	-4.1
FY 2017(b) to FY 2018	0.1 points	-4.8	-5.0

Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

Note: There were revisions to the methodology or data in 1994, 1999, FY 2002, FY 2010, and FY 2016. For years with multiple estimates shown, the rate calculated with the revised methodology is used for comparison with the year after the change in methodology. For example, the original 1994 estimate is used to calculate the change between 1993 and 1994, whereas the revised 1994 estimate is used to calculate the change between 1994 and 1995.

Figure C.1. Trends in SNAP participation rate estimates, 1976 to 2018

Participation rate



Sources: SNAP Program Operations data, SNAP Quality Control data, and Current Population Survey Annual Social and Economic Supplement data for the years shown.

Note: There are breaks in the time series in 1994 and 1999 because of revisions in the methodology for determining eligibility; there are breaks in 2002 and 2009 because of revisions in the methodology for determining eligibility and the number of participants; and there is a break in 2016 because of changes in the Current Population Survey Annual Social and Economic Supplement.

* In this report, we do not report estimated rates higher than 100 percent. See Appendix D for more information.

APPENDIX D
METHODOLOGY

METHODOLOGY

The participation rates presented in this report are based on estimates of the numbers of individuals who were eligible for and participated in SNAP. Because survey data underreport SNAP participation, we estimated rate numerators from a different data source than rate denominators: we estimated the number of participants using SNAP QC data and the number of eligible individuals from a microsimulation model based on data from the U.S. Census Bureau's CPS ASEC. The resulting participation rates estimate the percentage of individuals eligible for SNAP under applicable Federal rules who chose to participate in the program.⁷ The rates do not include individuals eligible solely through State expanded categorical eligibility policies.

The estimation approach used for the FY 2016 through FY 2018 rates presented in this report produced a series of methodologically consistent rates, allowing the reader to observe and evaluate trends in SNAP participation over this time period. The FY 2016 and FY 2017 rates in this report slightly differ from those presented in Cunyningham (2018) and Vigil (2019). Because of changes to the CPS ASEC, readers should not compare the rates in this report with those in prior published reports.⁸

In this appendix, we describe the methodology used to estimate SNAP eligibility (Section A), SNAP participation (Section B), and SNAP participation rates (Section C) for FY 2016 through FY 2018. Section D describes differences between the SNAP QC and CPS ASEC data that resulted in some estimated participation rates exceeding 100 percent. In this report, we use an asterisk to indicate estimated rates higher than 100 percent and the associated eligibility estimates.

A. Determining the number of SNAP-eligible individuals

The CPS ASEC provides detailed demographic and economic information on individuals potentially eligible for SNAP in all 50 States and the District of Columbia for the previous calendar year. The Census Bureau implemented a redesigned processing system for the 2019 CPS ASEC file and released redesigned 2017 and 2018 files. Estimates of eligibility in this report use the redesigned versions of the CPS ASEC.

We estimated the number of SNAP-eligible individuals with a microsimulation model that combined two years of CPS ASEC data to simulate SNAP eligibility in an average month within the fiscal year (October to September). For FY 2018, we used data from the 2018 CPS ASEC to simulate October to December 2017 and from the 2019 CPS ASEC to simulate January to September 2018. We derived estimates for previous fiscal years using the two CPS ASEC files appropriate for each of those years. Table D.1 lists the unweighted counts of households in the

⁷ In an average month in FY 2018, about 87,000 individuals participated in the Food Distribution Program on Indian Reservations (FDPIR). Participants in this program are not eligible for SNAP even though many meet the SNAP income and resource eligibility standards. We did not exclude them from estimates of SNAP-eligible individuals, however, because of the substantial error associated with estimating numbers of FDPIR participants in the CPS ASEC. As a result, participation rates are slightly underestimated—by 0.16 percentage points at most.

⁸ We present consistent rates for FY 2010 through FY 2017 in Vigil (2019), for FY 2002 through FY 2009 in Leftin et al. (2011), for FY 1999 through FY 2002 in Wolkwitz (2007), for September 1994 through September 1999 in Cunyningham (2002), and for September 1976 through August 1995 in Trippe and Cody (1997).

CPS ASEC files that we used for this series of reports. Table D.2 lists unweighted counts of households by their probability of having been eligible in FY 2018. A summary of changes in the CPS ASEC over time is available in Table D.3.

In the simulation procedure, we applied SNAP eligibility guidelines to each household in the CPS ASEC. The SNAP guidelines include household formation rules, resource limits, and income limits. Because several types of information necessary for determining SNAP eligibility are missing from the CPS ASEC data, we imputed some information to improve the model estimates of eligible households. We explain this estimation procedure below.

1. Simulating the composition of the SNAP household

We simulated the formation of SNAP households within each CPS ASEC dwelling unit, following SNAP rules about which individuals must apply for SNAP together. Spouses living together must apply together for SNAP, and parents must apply together with their children younger than age 22 who reside with them, even if the children have spouses or children of their own. Beginning in 2015, the CPS ASEC began allowing spouses and unmarried partners to identify as opposite- or same-sex. In addition, all individuals who share living quarters and purchase and prepare food together must apply together. We assign every member of a CPS ASEC dwelling unit to a SNAP household, even members we later exclude as ineligible, as described below.

The CPS ASEC defines dwelling units according to shared living quarters but does not identify who applies for SNAP together. Therefore, we imputed SNAP household formation following the rules described previously. In most cases, we simulated all members of a dwelling unit as being in the same SNAP household; for the relatively small percentage of households with multiple families or unrelated individuals, however, we sometimes simulated two or more groups of people to form separate SNAP households. We did so according to patterns observed in our SIPP-based microsimulation model, which contained information on how dwelling unit members shared food expenses.

According to Federal SNAP eligibility criteria, certain groups of people are ineligible for SNAP. We simulate this ineligibility by excluding the following individuals from SNAP households:

- Simulated SSI recipients in California who were ineligible for SNAP because they received an additional State SSI cash supplement to be used for food
- Individuals living in group quarters
- Full-time postsecondary students who were age 18-49 and did not have a disability, TANF income, or children younger than age 6 (but not full-time postsecondary students who were married with children younger than age 12 or working at least 20 hours per week)
- Any individual living in a household headed by a member of the armed forces⁹
- Certain noncitizens, as described in Section A.2

⁹ We excluded all individuals living in households headed by members of the armed forces because limitations in the CPS ASEC do not allow us to determine which of these households would be eligible.

- Certain adults age 18-49 without disabilities in childless households subject to work registration who had reached the time limit for receiving SNAP benefits, as described in Section A.2

To match household composition patterns in the SNAP QC data file more closely, our SNAP household formation methodology allowed a small number of child-only SNAP households to be headed by an older teen if that individual was not living with a parent and not related to the household head. We also ensured unmarried parents living together formed a single SNAP household with their children.

2. Identifying potentially eligible noncitizens and adults age 18-49 without disabilities in childless households

The Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (PRWORA) made most noncitizens ineligible for SNAP and required many adults age 18-49 without disabilities in childless households to work or face three-month time limits on receiving benefits. Subsequently, the Agricultural Research, Extension, and Education Reform Act of 1998 and the Farm Security and Rural Investment Act of 2002 restored SNAP eligibility to certain categories of lawfully present noncitizens based on their immigration status, length of time legally in the country, work status, age, disability status, and other criteria.

The American Recovery and Reinvestment Act of 2009 (ARRA) allowed States to suspend the time limits on nonworking adults age 18-49 without disabilities in childless households from April 2009 to September 2010. After September 2010, States that had an unemployment rate higher than 10 percent or did not have a sufficient number of jobs to provide employment were eligible to request further waivers of the time limits. In FY 2010, 47 States and the District of Columbia received a statewide waiver from the time limits. By the end of FY 2018, this number had dropped to 6 States, although many States continued to have partial waivers covering certain counties or cities in their States. States can also provide discretionary exemptions for up to 15 percent of the State's cases that are subject to the time limit. Further, adults potentially subject to the time limit are exempt if they participate in certain work activities.

Because the CPS ASEC does not include all the information required to identify the noncitizens and adults age 18-49 without disabilities in childless households who were ineligible for SNAP, we made assumptions (detailed below) about how many and which of these individuals in our sample remained potentially eligible. To retain sample size, we implemented our eligibility assumptions for these populations through weighting adjustments. The weighting adjustments reflect the probability that a household of a certain composition is eligible for SNAP. Specifically, if a household had one noncitizen, we duplicated the record for that household. In the first copy of the record, we retained the noncitizen in the household and multiplied the household weight by the probability that the noncitizen was eligible for SNAP benefits. In the second copy, we excluded the noncitizen from the household and multiplied the household weight by the probability that the noncitizen was ineligible.

a. Identifying potentially eligible noncitizens

SNAP eligibility is limited to certain categories of lawfully present noncitizens, who are also subject to the same income and resource limits as regular participants. Unlawfully present

noncitizens and noncitizen visitors, such as tourists, students, and those on a temporary work visa, are never eligible for SNAP. The following types of lawfully present noncitizens were eligible for SNAP during the time period covered by this report:

- Noncitizens who had lived legally in the United States for more than five years from their date of entry¹⁰
- Noncitizens receiving disability benefits, regardless of date of entry
- Noncitizen children younger than age 18, regardless of date of entry
- Noncitizens admitted as refugees or granted asylum or a stay of deportation
- Other groups of noncitizens, including active duty members of the U.S. armed forces, honorably discharged veterans, and dependents of service members and veterans

Some noncitizens are brought to the United States by a sponsor who has signed a legally-binding agreement to provide the noncitizen with enough financial support so the noncitizen does not have to rely on public benefits, typically until the noncitizen has 40 quarters of work history or naturalizes. In most cases, when a noncitizen with a sponsor applies for SNAP, a portion of the sponsor's income and resources is deemed to the noncitizen, meaning the income and resources are considered available to the noncitizen and included when determining their eligibility and benefits. This deeming provision applies even if the sponsor receives SNAP. If the sponsor lives in the same household as the sponsored noncitizen, deeming does not apply because the sponsor's income and resources are already counted.

The CPS ASEC distinguishes between citizens and noncitizens but does not specify whether a noncitizen is in the United States lawfully. To simulate some noncitizens as unlawfully present, and thus ineligible for SNAP, we randomly assigned unlawfully present immigration status according to estimates of the number of unlawfully present noncitizens in the CPS ASEC.¹¹ First, we estimated, by State, the probability that a noncitizen was unlawfully present. We defined the probability as the ratio of the estimated number of unlawfully present noncitizens age 18 or older to the total number of foreign-born noncitizens age 18-64 reported in the CPS ASEC. (Because there are very few elderly unlawfully present noncitizens, the numerator of the probability is essentially undocumented noncitizens age 18-64.)¹² We then applied the estimated probabilities to individuals age 18-64 in order to randomly select unlawfully present noncitizens. To improve the consistency of citizenship status within CPS ASEC households, we recoded as citizens all children who were reported to be noncitizens but were born after their mothers arrived in the United States.

¹⁰ Lawfully present noncitizens also could qualify for benefits by attaining 40 qualifying quarters of work, including work attained by the applicant's spouse (if attained when the applicant was married to the spouse) or parents (if the parents attained the quarters before the applicant turned 18). However, almost all of the individuals meeting the work requirement would also have met the five-year residency requirement.

¹¹ We used Dr. Jeffrey Passel's unpublished estimates, prepared for the Pew Hispanic Center, of the number of unauthorized migrants included in the CPS ASEC supplements.

¹² Passel and Cohn (2009) estimated that only around 1 percent of unlawfully present noncitizens were age 65 or older.

We used CPS ASEC information on noncitizens' ages and years of arrival in the United States to identify those potentially eligible for SNAP, including qualified noncitizens who had been in the country for at least five years, were younger than age 18, or were receiving disability benefits. The CPS ASEC does not include data on whether a noncitizen was admitted as a refugee; to simulate eligibility for refugees, we randomly assigned refugee status by year of entry, according to estimates derived from United States Citizenship and Immigration Services data (Table D.4).

The CPS ASEC also does not include the information required to determine which noncitizens are subject to having a portion of their sponsor's income and resources deemed available and are thus likely either to be ineligible or choose to remove themselves from the SNAP household to avoid negative repercussions for their sponsor. Using data from the New Immigrant Survey, a nationally representative, multicohort, longitudinal study of new legal noncitizens and their children, we estimated that 26.4 percent of lawfully present nonrefugee noncitizens who had been in the country 5 to 10 years had a sponsor who was required to sign an affidavit of support, and lived in a household separate from at least one sponsor. To simulate the sponsor-deeming provisions, we randomly assigned 26.4 percent of noncitizens who had arrived after December 1997 and had been in the country for fewer than 10 years as subject to deeming from a sponsor (we used 10 years as an approximation of how long it would take to accumulate 40 quarters of work).

We excluded from the SNAP household those noncitizens who did not meet the eligibility requirements, were unlawfully present, or were subject to deeming. We assigned a prorated portion of excluded noncitizens' income to the SNAP household and included their resources in the household's countable resources.

b. Identifying adults age 18-49 without disabilities in childless households subject to time limits

Many working-age SNAP participants are required to register for work, with some exceptions. SNAP participants age 18-49 who are subject to work registration, living in a SNAP household with no children, and are not pregnant are restricted to three months of SNAP benefits in any 36-month period unless they (1) work or participate in an employment and training or other work program for at least 20 hours per week or (2) participate in a workfare program for the number of hours equivalent to their SNAP benefit divided by the minimum wage. They are exempt from the three-month time limit if they live in an area that has been approved for a waiver from the time limit because of high unemployment or insufficient jobs (a waiver area). States can also provide discretionary exemptions for up to 15 percent of the State's cases who are subject to the time limit.

We identified adults age 18-49 without disabilities in childless households by examining basic demographic characteristics in the CPS ASEC. Because it is not possible to determine from the CPS ASEC which of these individuals were ineligible because of time limits, we randomly assigned a percentage of them to be eligible based on estimates of the eligible proportion in each State. We estimated the proportion that had received no more than three months of benefits while not working, with separate estimates for individuals who participated in SNAP in the past year and those who did not, based on SIPP data. We estimated the proportions eligible because of residence in a waiver area, participation in an employment and training program, or receipt of the

15 percent exemption based on Federal and State administrative data and, in the case of waiver areas, American Community Survey (ACS) data. Table D.5 presents the percentage of adults age 18-49 without disabilities in childless households imputed to be eligible, by State, year, and past year participant status.

3. Simulating SSI and TANF receipt

Because the CPS ASEC underreports SSI and TANF, we simulated SSI and TANF eligibility, participation, and benefits based on program rules and the most recently available administrative data.¹³ We imputed resource eligibility for SSI and TANF using equations estimated from our 2011 SIPP-based microsimulation model. We calibrated SSI receipt to administrative totals in the Social Security Administration (SSA) statistical report, using SSA data for December 2018 for the FY 2018 estimates. We calibrated TANF receipt to administrative totals in the Administration for Children and Families (ACF) data file, using ACF data for FY 2017 (the most recent data available) for the FY 2018 estimates. We adjusted the ACF data so that estimates in the ACF file of TANF households with SNAP were consistent with estimates in the SNAP QC data file of SNAP households with TANF.

4. Categorically eligible SNAP households

Certain households are categorically eligible for SNAP and not subject to Federal income or resource limits. A household is categorically eligible if it is pure PA, meaning that all of its members receive SSI, TANF cash benefits, or, where provided, GA. In addition, States are required to confer categorical eligibility on SNAP households receiving benefits or services at least 50 percent funded by TANF or Maintenance of Effort (MOE) funds. States have the option of conferring categorical eligibility on SNAP households receiving benefits or services less than 50 percent funded by TANF or MOE funds. They can also confer categorical eligibility on SNAP households in which one member receives the benefit or service when the State determines that the whole household would benefit.

Many States have broad TANF or MOE-funded programs that provide a simple service or noncash benefit—a brochure on domestic violence, for example—to confer categorical eligibility on a large number of households. These programs are known as broad-based categorical eligibility (BBCE) policies. The number of States implementing BBCE policies increased from 40 in FY 2016 and FY 2017 to 41 in FY 2018. These totals include the District of Columbia but exclude Guam and the Virgin Islands.

States have some flexibility in setting the eligibility criteria for the TANF or MOE-funded noncash benefit. Some States with BBCE policies retained the Federal SNAP gross income limit for households without an elderly member or a member with a disability, whereas others raised the gross income limit for those households to between 160 and 200 percent of the poverty guidelines. Most States with BBCE policies have eliminated the net income test—though participants must still qualify for a positive benefit—and have eliminated or relaxed the resource test. Instead of, or in addition to, BBCE policies, some States have smaller TANF or MOE-funded programs, such as job training or after-school programs, which have specific eligibility

¹³ Simulated SSI and TANF program rules are available upon request.

requirements and confer categorical eligibility on only the small number of households they serve.

We used simulated TANF and SSI receipt, along with reported GA receipt, to identify pure PA households in the CPS ASEC. Those that qualified for a positive SNAP benefit were included in the denominator of the participation rates presented in this report. We did not include other categorically eligible households that were not eligible under SNAP Federal income and resource rules.

5. Determining income eligibility

To be included in the participation rates presented in this report, most SNAP households must have had income at or below Federal income limits. Pure PA households are not subject to the SNAP income limits. A SNAP household that does not contain an elderly member or a member with a disability must have gross monthly income at or below 130 percent of the Federal poverty guidelines. A household with an elderly member or a member with a disability is not subject to the gross income standard. All households that are not pure PA must have net monthly income at or below 100 percent of the Federal poverty guidelines. The FY 2018 maximum allowable gross and net monthly income standards are available in Table D.7, and corresponding values for previous years are available in Appendix G.

Simply dividing annual income by 12 would underestimate the number of eligible individuals in any given month. Therefore, to estimate monthly income, we distributed the annual income amounts reported in the CPS ASEC to simulated months based on the number of weeks worked as reported in the CPS ASEC, income receipt shown by SIPP data, and U.S. Bureau of Labor Statistics (BLS) data on employment and unemployment spells. We then summed the estimated monthly income for each person in the household to determine the SNAP household's gross income for each month.

The CPS ASEC does not include information on the expenses deducted from gross income to compute net income, so we modeled net income as a function of the household's demographic and economic characteristics for each year. The net income model for the estimates in this report was based on patterns observed in our SIPP-based microsimulation model. The estimated relationships (the regression coefficients) are available in Table D.6.

6. Determining resource eligibility

To be included in the participation rates presented in this report, SNAP households that were not pure PA must have had countable resources at or below the applicable SNAP resource limit. In FY 2016 and FY 2017, the resource limit was \$3,250 for households with an elderly member or a member with a disability. The resource limit for these households increased to \$3,500 in FY 2018. Households that did not have an elderly member or a member with a disability faced a resource limit of \$2,250 during the full FY 2016 through FY 2018 time period.

Under Federal vehicle rules, vehicles with equity of less than \$1,500 or used as a home or to produce income, transport a disabled household member, or carry fuel or water are excluded from the resource test. In addition, one vehicle per adult household member and any vehicle used by a minor household member to drive to work, school, or training is counted at the fair market

value in excess of \$4,650. Remaining vehicles are valued at the vehicle's fair market value in excess of \$4,650 or equity, whichever is higher.

States can align their SNAP vehicle rules with those from a TANF or MOE-funded assistance program as long as the rules are less restrictive than Federal SNAP vehicle rules. In FY 2018, almost all States had aligned their vehicle rules with those of other programs, and more than half had adopted rules that exclude all vehicles from the resource test.

Because resource balances are not reported in the CPS ASEC, we used equations estimated from our 2011 SIPP-based microsimulation model to impute the probability that income-eligible households subject to the resource test were resource eligible and thus fully eligible. For FY 2018, we simulated 29 States as excluding the value of all vehicles when determining resources, and all States except Delaware, North Dakota, and Washington as excluding some or all of the value of at least one vehicle per household. We modeled eight different vehicle rules to fully capture State-level differences. Because we did not include in the participation rate categorically eligible households not otherwise eligible under SNAP Federal income and resource rules or through receipt of pure PA, the vehicle rules we modeled reflected those used for non-BBCE households in each State.

7. Determining SNAP benefit amount

Monthly SNAP benefits for eligible households are calculated by subtracting 30 percent of a household's net income from the maximum benefit amount to which it is entitled. If a household has zero net income, it receives the maximum SNAP benefit. Eligible one- and two-person households are guaranteed at least a minimum benefit. SNAP maximum benefits are based on 100 percent of the cost of the Thrifty Food Plan for a family of four in June of the previous fiscal year, adjusted for household size and geographic areas outside of the contiguous United States. The FY 2018 maximum and minimum SNAP benefit amounts are available in Table D.8, and corresponding values for previous years are available in Appendix G.

B. Determining the number of SNAP participants

For the participation rate numerator, we used the average monthly number of participants eligible under Federal income and resource rules across the 12 months in the fiscal year. Because the CPS ASEC underreports SNAP participation, we estimated the numerator from SNAP QC data files. These files are edited versions of the raw data file generated by the SNAP Quality Control System and contain data on the demographic and economic characteristics of a sample of participating households. We based estimates of SNAP participants in FY 2018 on FY 2018 SNAP QC data and derived estimates for previous years from data for those years. Table D.9 shows sample sizes.

We weighted the SNAP QC data files to match adjusted Program Operations counts of individuals and households that were issued SNAP benefits and the total dollar value of these benefits in each month of the fiscal year.¹⁴ We adjusted them to exclude temporary disaster

¹⁴ SNAP Program Operations data used for this report were retrieved from the National Data Bank on April 13, 2020 and include updated counts for California, North Carolina, and Rhode Island. As a result, the SNAP participation

benefits issued in response to Major Disaster Declarations with Individual Assistance and benefits issued to individuals found to be ineligible because those groups are not represented in the edited SNAP QC data file. We used data from USDA to determine the numbers of households and individuals who received temporary disaster benefits, the amounts of temporary disaster benefits issued to those households, and the amounts of supplemental disaster benefits issued to existing SNAP participants. We reduced the Program Operations counts by the disaster-related counts in the months and States in which the disaster relief occurred.¹⁵

To adjust the Program Operations counts for benefits issued in error, we first used the raw unweighted SNAP QC data file to calculate disqualification rates for households, individuals, and benefits, and then reduced the Program Operations counts by those percentages, by State and month. The household disqualification rate is the percentage of all participating households that are either ineligible or eligible but do not qualify for a positive benefit. The individual disqualification rate is the percentage of all participants in households not eligible for a positive benefit.¹⁶ The benefit disqualification rate is slightly more complex—it considers over- and under-issuances to eligible households as well as benefits issued to disqualified households.

We removed households in Guam and the Virgin Islands from the participation rate numerator because they are not included in the CPS ASEC. We describe the procedure for estimating the number and characteristics of SNAP participants eligible under Federal income and resource rules below.

1. Predicting the resource ineligibility under Federal rules of some households eligible for SNAP through State BBCE policies

We were able to identify and remove from the participation rate numerator categorically eligible households that had income higher than the Federal income limits. However, QC reviewers do not collect data on resources from households not subject to the resource test, so we could not directly identify and remove from the numerator categorically eligible households with resources higher than the Federal resource limit. Instead, we used a regression equation to predict the probability that households that met the Federal income guidelines and were not pure PA would fail the SNAP Federal resource test and removed them from the numerator. We estimated the equation using our 2011 SIPP-based microsimulation model and households simulated to participate in SNAP.

estimates presented here differ slightly from those derived from the published FY 2018 QC data file and presented in the *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2018*.

¹⁵ In FY 2018, about 128,000 households not previously receiving SNAP benefits received temporary benefits through the Disaster Supplemental Nutrition Assistance Program.

¹⁶ The individual disqualification rate in FY 2018 was 2.2 percent (about 885,000 ineligible participants).

In FY 2018, we removed 1.9 million individuals in households with incomes that exceeded the Federal SNAP income limits and an additional 1.6 million in income-eligible households that we estimated would fail the Federal SNAP resource test from the participation rate numerator. In total, we estimated that 3.5 million participants, or 10 percent of total participants, were eligible through BBCE policies and would not otherwise have been eligible for SNAP in FY 2018. We did not include these individuals in the participation rates.

2. Identifying pure PA participating SNAP households

The SNAP QC data file provides individual-level data on receipt of an SSI, TANF, or GA benefit. Whereas an SSI or GA benefit is generally for the person who receives it, TANF benefits may cover additional family members. Because the SNAP QC data do not identify which additional household members are covered by a TANF benefit received by a household member, we used an algorithm to determine program coverage as follows:

- TANF received by the household head or the head's spouse covers the household head, spouse, and children (as identified by the relationship codes and ages).
- TANF received by a child of the household head covers that child and other relatives.
- In child-only households, TANF received by anyone in the household covers all of the children.

We identified a household as pure PA if all members were covered by TANF, SSI, or GA or if it had TANF income and all adults were covered by TANF, SSI, or GA. Although pure PA households are categorically eligible for SNAP and thus exempt from the income and resource tests, they still had to qualify for a positive SNAP benefit to be counted as participating. We included participating pure PA households in the rate numerator.

3. Identifying SNAP household composition

Certain disqualified household members cannot be identified in the CPS ASEC data. Possible reasons for a household member to be disqualified include:

- Not paying child support or cooperating with a child support agency
- Being an ineligible striker
- Violating program rules or failing to meet work requirements
- Being a fleeing felon, parole or probation violator, or convicted drug felon
- Having a disqualified Social Security number
- Some other unknown reason

In order to account for the presence of disqualified household members in the participation rate denominator, we adjusted the composition of participating households in the numerator. For example, we categorized a dwelling unit with two children in the SNAP household and an adult outside of the SNAP household who was disqualified for not meeting work requirements as a single adult with children rather than a child-only SNAP household. We did not include disqualified members considered for household composition purposes in counts of participants.

For this adjustment, we considered only disqualified SNAP household members whom we could not identify in the CPS ASEC and remove from the denominator. Disqualified SNAP household members whom we were able to identify in the CPS ASEC data remained excluded from consideration when defining household composition for the numerator. For example, a SNAP household with an eligible citizen child inside and an ineligible noncitizen adult outside of it was still considered a child-only SNAP household.

C. Calculating SNAP participation rates

We calculated participation rates by dividing the estimated number of participants by the estimated number of eligible individuals. SNAP participation rates for FY 2018, along with the numbers of participants and eligible individuals used to calculate them, are available in Appendix A. SNAP participation rates for FY 2016 through FY 2018 are available in Appendix B.

D. Differences between the CPS ASEC and SNAP QC data

Using different data sources to estimate participation rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic that are lower than the corresponding estimates of participants. When this happens, estimated participation rates exceed 100 percent. This situation is particularly likely to occur when there are substantial differences between the two data sources.

Differences between the SNAP QC data and the CPS ASEC that might cause rates exceeding 100 percent include (1) who is represented in the data, (2) data on household composition, (3) when and how income is reported, and (4) reported program participation. We describe these differences here.

Differences in who is represented in the data. The universe for the participant estimates based on the SNAP QC data is slightly different than that for the eligibility estimates based on the CPS ASEC. For example, homeless individuals, those in group quarters, and some members of the armed forces and their families are included in the SNAP QC data but are not captured in the CPS ASEC. In addition, the CPS ASEC includes individuals who are categorically ineligible for SNAP (such as intentional program violators) but does not contain sufficient information to identify and remove them from the rate denominator. The SNAP QC data, appropriately, do not include categorically ineligible individuals.¹⁷ Finally, certain subgroups in the SNAP QC file or the CPS ASEC could be either over- or underrepresented because of sampling or weighting methods.

Differences in data on household composition. The SNAP QC file includes information on who applies together for SNAP (the SNAP household), but the file does not contain information on individuals who live in the same dwelling unit that are not part of the SNAP household. Conversely, the CPS ASEC includes information on all individuals in the dwelling unit but not on how these individuals would form SNAP households. To handle the CPS ASEC limitations, we simulated SNAP household formation in those data (described in Section A.1). The SNAP QC limitations, however, meant we could not use data on actual SNAP household

¹⁷ In Section B.3 of this appendix, we describe a method we used to lessen the impact of this difference.

formation to develop the simulation. Furthermore, differences between the simulated CPS ASEC and actual SNAP QC SNAP household compositions could have affected subgroup participation rates. For instance, the estimated FY 2018 participation rate for SNAP households consisting of one adult and one or more children was higher than 100 percent, implying an underestimation of how often this type of eligible SNAP household was formed.

In addition, the time period represented by the SNAP household composition could differ between the two data sets. For example, the SNAP QC data might not capture household composition changes that occur between the certification and sampling dates. Similarly, although the CPS ASEC provides information on household composition at the time of the interview, changes could occur after the calendar year (the CPS ASEC income reporting period) but before the interview date in February, March, or April of the next calendar year.

Differences in reported income. There are several differences in how income is reported in the SNAP QC file versus the CPS ASEC. Two that directly affect the estimation of participation rates are the income reporting period and how income is counted. The SNAP QC file uses a monthly income reporting period, whereas the CPS records annual income. The monthly income estimation process we applied to the CPS ASEC data, described in Section A.5, aims to minimize the resulting inconsistencies, but the results likely differ from actual monthly income.

In addition, the SNAP QC file and the CPS ASEC use different methods of counting income. For the SNAP QC sample, countable income is measured according to SNAP certification rules and procedures (for example, pertaining to anticipating income, prospective budgeting, and change reporting). It is reasonable to expect these amounts to differ from those in the CPS ASEC, which are based on households' reports of income they received in the previous year.

Differences in reported program participation. The SNAP QC file includes high quality information on income received by SNAP households from other government programs, such as SSI and TANF. In the CPS ASEC, however, participation in those programs is underreported, so we simulated SSI and TANF eligibility, participation, and benefits as described in Section A. The SSI administrative data we used for calibration are available only on an annual basis and for a single month (December). Furthermore, the TANF data we used for calibration are typically for the previous fiscal year. For these and other reasons, estimates of eligible individuals receiving SSI or TANF benefits are not entirely consistent with corresponding estimates of participants.

Table D.1. Unweighted sample sizes for the CPS ASEC, 1977 to 2019

CPS ASEC year	All households	Analysis year(s)
1977	68,294	1976
1979	68,455	1978
1981	81,451	1980
1983	73,195	1982
1985	74,568	1984
1987	73,843	1986
1989	70,454	1988
1991	75,076	1990
1992	74,236	1991
1993	73,878	1992
1994	73,126	1993
1995	72,152	1994
1996	63,339	1995
1997	64,046	1996
1998	64,659	1997
1999	65,377	1998
2000	51,016	1999
2001	78,054	2000
2002	78,265	2001, 2002
2003	78,310	2002, 2003
2004	77,149	2003, 2004
2005	76,447	2004, 2005
2006	75,939	2005, 2006
2007	75,477	2006, 2007
2008	75,872	2007, 2008
2009	76,185	2008, 2009
2010	76,260	2009, 2010
2011	75,188	2010, 2011
2012	74,383	2011, 2012
2013	74,821	2012, 2013
2014	74,170	2013, 2014
2015	74,257	2014, 2015
2016	69,484	2015, 2016
2017	69,957	2016, 2017
2018	67,909	2017,2018
2019	68,345	2018

Table D.2. Median monthly unweighted counts of households, by the probability of being eligible, FY 2018

	Unweighted counts
All households ^a	66,939
Households with a probability of being eligible greater than zero	14,022
Total	
Probability of being eligible	
Greater than 0.0 to 0.25	903
Greater than 0.25 to 0.50	466
Greater than 0.50 to 0.75	2,121
Greater than 0.75 to less than 1.00	8,358
1.00	2,174

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Notes: Estimates in this table reflect median monthly numbers of CPS households. We calculate a household's probability of being eligible for SNAP benefits by determining whether it passes the appropriate income tests and then estimating the probability of it passing the resource test. In dwelling units with multiple SNAP households, the probabilities of each household are combined into one dwelling unit probability. We multiply the final probability of being eligible by the weight to determine the household's contribution to the total (weighted) number of eligible households.

^a This count of unweighted households is lower than that presented in Table D.1 because it includes only dwelling units that have potentially eligible individuals. Excluded from the table are dwelling units that contain only undocumented noncitizens, California SSI recipients, full-time students, and those living in group quarters or in dwelling units headed by a member of the armed forces.

Table D.3. Changes in the CPS ASEC over time

CPS ASEC year	Data year	Changes in design or weighting from previous year
1979	1978	Changes in metro/nonmetro definitions; new, more detailed income questions introduced for two rotation groups
1980	1979	Definition of adult changed from age 14 to 15; new concept of families and headship status; new income questions introduced for all rotation groups
1981	1980	New weighting procedure based on 1980 Census introduced that increased the overall population by 2.3 percent and had a disproportionate impact on Hispanics
1982	1981	Top-coding of single-employer earnings variables increased from \$50,000 to \$75,000
1983	1982	New industry and occupation coding; new definition of group quarters; poverty index modified slightly (deleting the farm/nonfarm dimension)
1984	1983	A second (unofficial) version of the file introduced the revised weighting procedure developed for the March 1985 CPS
1985	1984	Revised weighting procedures (specifically, the control on Hispanics changed, causing a slight increase in poverty with disproportionate impacts on the Hispanic population, male unrelated individuals, and individuals in related subfamilies); changes in the designation of metro/nonmetro, farm/nonfarm, central city/noncentral city status, top-coding of single-employer earnings variables increased from \$75,000 to \$99,999
1986	1985	More metro/nonmetro changes
1987–1988	1986–1987	None
1989	1988	Revised processing procedures increased income overall and reduced poverty; poverty rate changed more severely for Blacks and selected age ranges
1990–1992	1989–1991	None
1993	1992	New population controls based on 1990 census and adjustments for the census undercount increased the poverty population; largest increases in poverty rates for Hispanic families, families with single female householders, White children, and individuals in unrelated subfamilies
1994	1993	Survey redesigned to improve the measurement of labor force concepts and wording of questions and to implement a computerized questionnaire
1995	1994	None
1996	1995	Sample reduction; revised earnings top-coding (instead of top-coding single-employer earnings variables at 99,999, top-coded records were assigned the mean earnings for top-coded individuals with similar characteristics); revised race edit and allocation (caution urged when comparing 1995 and 1996 data on race groups)
1997–1999	1996–1998	None
2000	1999	Rewighted based on Census 2000
2001	2000	Rewighted based on Census 2000, expanded sample size
2002	2001	Weights based on Census 2000
2003	2002	Expanded racial categories
2004–2009	2003–2008	None
2010	2009	Replicate weights added to the file, retroactive to 2005
2011–2013	2010–2012	None
2014	2013	About three-eighths of the sample received redesigned income questions; objectives of redesigning income questions were to improve income reporting, include income from resources, improve resource reporting, increase response rates, and reduce errors resulting from respondent fatigue
2015	2014	Full sample received the redesigned income questions introduced in 2014

Table D.3. (continued)

CPS ASEC year	Data year	Changes in design or weighting from previous year
2016 - 2018	2015 - 2017	None
2019	2018	Changes to family structure to identify spouses and unmarried partners as opposite- or same-sex; revised processing procedures implemented that affect income, poverty, and health insurance measures

Note: Each CPS ASEC year corresponds to the preceding data year.

Table D.4. Percentage of noncitizens imputed to be refugees, by analysis year and year of arrival

Year of arrival	Percentage imputed to be refugees, by analysis year		
	FY 2016	FY 2017	FY 2018
2018	n.a.	n.a.	9
2017	n.a.	10	9
2016	11	11	11
2015	11	11	11
2014	11	11	11
2013	11	11	11
2012	11	11	n.a.
2011	10	n.a.	n.a.

Note: The CPS ASEC identifies a two- to three-year range for year of arrival in the United States. Refugee status is not imputed for noncitizens meeting the five-year residency requirement.

n.a. = not applicable.

Table D.5. Percentage of adults age 18-49 without disabilities in childless households imputed to be potentially eligible, by SNAP participation in past year

	Percentage imputed to be eligible (participant / nonparticipant)		
	FY 2016	FY 2017	FY 2018
Alabama	64.3 / 73.8	61.7 / 71.9	61.7 / 71.9
Arizona	81.2 / 86.2	74.3 / 81.2	73.9 / 80.8
Arkansas	62.5 / 72.5	61.8 / 72.0	61.8 / 72.0
Connecticut	91.7 / 93.9	93.4 / 95.1	91.4 / 93.7
Delaware	100	100	61.9 / 72.0
Florida	61.7 / 71.9	62.0 / 72.1	61.9 / 72.0
Georgia	94.0 / 95.6	89.0 / 91.9	77.3 / 83.4
Hawaii	62.7 / 72.6	62.5 / 72.5	62.5 / 72.5
Idaho	67.4 / 76.1	67.2 / 75.9	67.3 / 76.0
Illinois	100	100	98.5 / 98.9
Indiana	61.8 / 72	61.8 / 71.9	61.7 / 71.9
Iowa	61.7 / 71.9	61.7 / 71.9	61.7 / 71.9
Kansas	61.8 / 72.0	61.8 / 72.0	61.8 / 72.0
Kentucky	85.6 / 89.4	85.5 / 89.4	70.6 / 78.4
Maine	61.7 / 71.9	61.7 / 71.9	61.7 / 71.9
Maryland	74.8 / 81.5	74.9 / 81.6	74.7 / 81.4
Massachusetts	75.8 / 82.2	76.9 / 83.0	71.2 / 78.9
Michigan	100	93.0 / 94.9	88.2 / 91.3
Minnesota	63.3 / 73.1	65.3 / 74.5	69.7 / 77.8
Mississippi	63.2 / 73.0	64.1 / 73.7	62.3 / 72.3
Missouri	61.9 / 72.1	100	61.7 / 71.9
Montana	71.7 / 79.2	74.1 / 81.0	75.7 / 82.2
Nebraska	61.8 / 72.0	62.1 / 72.2	62.1 / 72.2
New Hampshire	62.0 / 72.1	62.1 / 72.2	62.0 / 72.1
New Jersey	92.2 / 94.3	64.9 / 74.2	83.1 / 87.6
North Carolina	81.2 / 86.2	61.7 / 71.9	61.7 / 71.9
North Dakota	65.1 / 74.4	65.3 / 74.5	65.6 / 74.7
Ohio	68.4 / 76.8	65.2 / 74.5	68.1 / 76.6
Oklahoma	61.8 / 72.0	61.8 / 72.0	61.8 / 72.0
Pennsylvania	80.3 / 85.5	85.1 / 89.0	91.4 / 93.7
Rhode Island	100	100	99.2 / 99.4
South Carolina	80.9 / 86	61.8 / 71.9	61.8 / 71.9
Tennessee	91.0 / 93.4	90.8 / 93.2	64.1 / 73.7
Utah	62.4 / 72.4	62.8 / 72.7	62.8 / 72.7
Vermont	69.4 / 77.6	65.1 / 74.4	65.5 / 74.7
Virginia	68.2 / 76.7	71.0 / 78.7	70.9 / 78.7
West Virginia	86.2 / 89.9	86.2 / 89.9	95.2 / 96.4
Wyoming	61.7 / 71.9	61.7 / 71.9	61.8 / 72.0

Notes: This table shows the percentage of people subject to a time limit that we impute to be potentially eligible for SNAP because they had received no more than three months of benefits while not working, lived in a waiver area, participated in an employment and training program, or received a State exemption.

States not listed here are those in which 100 percent of adults age 18-49 without disabilities in childless households were imputed to be eligible. These States either obtained permission to suspend time limits Statewide or pledged to make employment and training opportunities available to every participant facing time limits.

Table D.6. SNAP net income regression coefficients

Explanatory variable	Coefficients estimated using administrative data for:		
	FY 2016	FY 2017	FY 2018
Constant	-598.5941† (53.68098)	-590.3329† (54.20976)	-592.8759† (54.36616)
Gross income minus standard and earned income deductions	0.2741204 (0.3145456)	0.296526 (0.3214735)	0.249738 (0.3238519)
Amount of earned income	-0.139276† (0.0629279)	-0.1339686† (0.0643116)	-0.1424605† (0.0647934)
Received TANF income	-209.4088 (129.5367)	-206.2131 (129.2918)	-209.091 (129.4777)
Amount of TANF income	0.3950249 (0.2166289)	0.4133641 (0.2161091)	0.4073798 (0.2160168)
Amount of TANF income squared	-0.0004463 (0.0002333)	-0.000466† (0.0002329)	-0.0004584† (0.000233)
Number of TANF units in SNAP unit	149.4487 (113.9615)	143.5223 (113.7517)	146.1911 (114.0016)
Did not receive SSI income	11.34091 (31.71546)	16.20815 (31.32624)	6.21143 (31.7094)
Amount of SSI income	0.0075313 (0.032259)	0.009223 (0.0321809)	0.0098865 (0.032253)
Amount of SSI income squared	-0.00000969 (0.0000164)	-0.0000101 (0.0000164)	-0.00000888 (0.0000164)
Received maximum monthly SSI benefit for one person	-1.835546 (16.24334)	-6.833844 (16.20272)	-4.837508 (16.21392)
Member younger than age 60 and receiving SSI	46.17096† (8.596529)	49.47863† (8.529307)	49.6525† (8.504307)
Member age 60 or older and receiving SSI	-9.618102 (10.32209)	-16.68133 (9.19496)	-5.676904 (10.24046)
Number of SSI units in SNAP unit	36.06153 (29.46162)	36.08676 (29.36302)	32.11421 (29.46004)
Amount of interest income	-0.1209446† (0.0280376)	-0.1242559† (0.0278259)	-0.125337† (0.0278248)
Amount of dividend income	-0.0415827† (0.0198902)	-0.0374598 (0.0198283)	-0.0418178† (0.0191954)
Amount of rental income	-0.0288179 (0.0200525)	-0.026109 (0.0199396)	-0.0256526 (0.0199523)
Amount of gross income	0.7844072† (0.3182736)	0.7580178† (0.3253174)	0.8094945† (0.3274596)
Amount of gross income squared	-0.00000404† (0.00000114)	-0.00000385† (0.00000115)	-0.00000432† (0.00000109)
Gross income between \$101 and \$200	215.7065† (34.49113)	218.3124† (34.39756)	213.5493† (33.91665)
Gross income between \$201 and \$300	183.9748† (25.07645)	186.8774† (24.96958)	180.1113† (25.04256)

Table D.6. (continued)

Explanatory variable	Coefficients estimated using administrative data for:		
	FY 2016	FY 2017	FY 2018
Gross income between \$301 and \$400	100.5275† (20.79351)	104.2493† (20.66189)	99.14277† (20.81501)
Gross income between \$401 and \$500	61.46288† (20.70266)	64.37118† (20.66129)	60.85933† (20.73919)
Gross income as percentage of poverty guidelines	0.0194432 (0.2884105)	0.1277015 (0.2888861)	-0.001492 (0.2842344)
Gross income as percentage of poverty guidelines, squared	0.0008308 (0.00053)	0.0006758 (0.0005312)	0.0008589 (0.0005234)
Resided in Alaska	140.2118 (77.28234)	55.28413 (58.21387)	94.94278 (77.06057)
Resided in Hawaii	-2.554375 (51.22952)	-38.59719 (38.42378)	-36.69178 (51.18913)
Resided in the Northeast region	-47.02281† (7.785088)	-40.78618† (7.756405)	-45.45218† (7.733756)
Resided in the Mid-Atlantic region	6.632097 (7.062545)	5.632626 (7.036747)	4.526338 (7.013057)
Resided in the Southeast region	74.56352† (6.416001)	72.56501† (6.398391)	71.098† (6.37852)
Resided in the Midwest Region	42.08382† (6.550313)	38.9046† (6.527556)	37.71385† (6.503538)
Resided in the Southwest region	74.95207† (7.149738)	75.16973† (7.133002)	74.70608† (7.117257)
Resided in the Mountain Plains region	54.01629† (8.13528)	52.33889† (8.107101)	50.60528† (8.072472)
SNAP unit size	-34.68192† (7.078321)	-32.20063† (6.940804)	-34.44355† (6.852019)
More than one SNAP unit in household	60.07074† (5.882731)	59.84958† (5.8943)	59.72584† (5.90261)
Single-parent household	-101.6078† (9.255645)	-101.4856† (9.123739)	-103.55† (9.093104)
Multiple-adult household	-97.27096† (8.967744)	-97.90523† (8.85782)	-99.92713† (8.81548)
Number of never-married adults	18.00937† (3.849416)	18.31607† (3.835563)	18.48843† (3.827194)
Number of high school graduates or equivalent	-20.00473† (3.469544)	-19.52884† (3.457093)	-19.19095† (3.451077)
Number of adults not in the labor force	28.01736† (3.609317)	26.78012† (3.536188)	28.32158† (3.589593)
Head of household is African American/Black	21.88145† (5.603932)	21.48838† (5.588798)	21.24151† (5.570328)
Head of household is Hispanic	8.965405 (6.505765)	9.532639 (6.469263)	7.676242 (6.457729)
Head of household is Asian	-21.81941 (11.8466)	-22.17846 (11.82163)	-23.22409† (11.8021)

Table D.6. (continued)

Explanatory variable	Coefficients estimated using administrative data for:		
	FY 2016	FY 2017	FY 2018
Head of household is other race	20.19184 (10.77627)	20.35962 (10.7452)	20.67327 (10.70406)
No housing expenses	241.5639† (6.283617)	239.2163† (6.257298)	237.4358† (6.239439)
Maximum allowable excess shelter expense deduction	-0.0330563† (0.0039012)	-0.0357073† (0.0035375)	-0.0318753† (0.0038101)
Maximum excess shelter expense deduction equal to zero	6.783198 (24.52621)	-5.8474 (23.64982)	9.065692 (24.4827)
Maximum excess shelter expense deduction equal to cap for contiguous States	19.28098 (9.846877)	(omitted)	19.68904† (9.74623)
Maximum excess shelter expense deduction equal to cap for Hawaii	-46.33729 (61.40131)	48.32822 (112.9649)	10.00635 (60.90551)
Maximum excess shelter expense deduction equal to cap for Alaska	-123.2443 (84.24409)	50.99364 (145.7362)	-61.06336 (88.14484)
Sample size	18,617	18,680	18,857
R2	0.9651	0.9653	0.9661
Adjusted R2	0.9650	0.9652	0.9660

† Indicates significance at the .05 level using a two-tailed t-test. Coefficients identified as significant at the .05 level are those with t-values greater than 1.96.

Table D.7. FY 2018 Federal SNAP gross and net income limits, by SNAP household size and geography

	Contiguous states (\$)	Alaska (\$)	Hawaii (\$)
Gross income limit by household size			
1	1,307	1,632	1,502
2	1,760	2,199	2,023
3	2,213	2,765	2,544
4	2,665	3,332	3,065
5	3,118	3,898	3,586
6	3,571	4,465	4,107
7	4,024	5,031	4,628
8	4,477	5,598	5,150
Each additional member	+453	+567	+522
Net income limit by household size			
1	1,005	1,255	1,155
2	1,354	1,691	1,556
3	1,702	2,127	1,957
4	2,050	2,563	2,358
5	2,399	2,999	2,759
6	2,747	3,435	3,160
7	3,095	3,870	3,560
8	3,444	4,306	3,961
Each additional member	+349	+436	+401

Source: U.S. Department of Agriculture.

Table D.8. FY 2018 maximum and minimum monthly SNAP benefit amounts, by SNAP household size and geography

	Contiguous states (\$)	Alaska (\$)	Hawaii (\$)
Maximum benefit by household size			
1	192	230	358
2	352	422	657
3	504	604	941
4	640	767	1,195
5	760	911	1,419
6	913	1,094	1,703
7	1,009	1,209	1,883
8	1,153	1,382	2,152
Each additional member	+144	+173	+269
Minimum benefit by household size			
1 to 2	15	18	29
3 or more	0	0	0

Source: U.S. Department of Agriculture.

Table D.9. Unweighted sample sizes of SNAP QC case records

Month/year	Number of SNAP QC case records
September 1976	11,038
February 1978	14,211
August 1980	4,140
August 1982	7,224
August 1984	6,918
July/August 1986	11,010
July/August 1988	10,695
July/August 1990	10,639
July/August 1991	10,602
July/August 1992	9,586
July/August 1993	9,389
August/September 1994	8,933
August/September 1995	8,313
August/September 1996	8,304
August/September 1997	7,907
August/September 1998	7,336
August/September 1999	7,558
FY 1999	46,935
FY 2000	46,336
FY 2001	46,412
FY 2002	47,602
FY 2003	48,896
FY 2004	48,806
FY 2005	46,673
FY 2006	45,734
FY 2007	47,469
FY 2008	50,214
FY 2009	51,250
FY 2010	52,289
FY 2011	51,115
FY 2012	50,027
FY 2013	49,569
FY 2014	48,250
FY 2015	48,022
FY 2016	46,595
FY 2017	45,530
FY 2018	43,738

Sources: SNAP Quality Control data for the years shown.

APPENDIX E

SAMPLING ERROR OF PARTICIPATION RATE ESTIMATES

SAMPLING ERROR OF PARTICIPATION RATE ESTIMATES

The participation rates in this report represent the ratio of SNAP participants to SNAP-eligible individuals. Participant counts are based on SNAP Program Operations data and SNAP QC data. Eligible counts are based on CPS ASEC data. Both counts are derived from samples and are subject to statistical sampling error, as are the resulting participation rate estimates.

Standard errors of participation rates

One indicator of the magnitude of the sampling error associated with a given estimate is its standard error. Standard errors measure the variation in estimated values that would be observed if multiple replications of the sample were drawn. The magnitude of the standard errors depends on three factors: (1) the degree of variation in the variable within the population from which the sample is drawn; (2) the design of the sample, including such issues as stratification and sampling probabilities; and (3) the size of the sample on which the estimate is based.

Generally, the standard error of a nonlinear variable, such as a participation rate, cannot be estimated directly. Rather, one must estimate the standard error of a linear approximation of the nonlinear variable. To estimate the standard error of participation rates contained in this report, we use a Taylor series expansion to produce a linear approximation of the participation rate. The variance of the participation rate, $\text{var}(r)$, can be expressed as a function of the number of participants (p), the number of eligible individuals (e), and their respective variances:

$$(1) \quad \text{var}(r) = \text{var}(p/e)^2 = (p/e)^2[\text{var}(p)/p^2 + \text{var}(e)/e^2].$$

The standard error of the participation rate is simply the square root of the variance.

In the SNAP QC data file, we directly calculate the variance of the number of participants using replicate weights.¹⁸ In the CPS, the Census Bureau produces a set of replicate weights, which we have incorporated into the estimation of the variance of the number of eligible individuals using the CPS-recommended replicate weight method.

Confidence intervals

Standard errors can serve to compute confidence intervals for the estimated participation rates. A confidence interval is a range of values that will contain the true value of an estimated participation rate with a known probability. For instance, a 90 percent confidence interval extends 1.645 standard errors above and below the estimated rate and indicates there is a 90 percent chance that the confidence interval will contain the true value. Tables E.1 through E.3 show standard errors and confidence intervals for selected participation rates for FY 2018 through FY 2016, respectively.

¹⁸ More details are available in Appendix E of Cronquist (2019).

Table E.1. Sampling error associated with selected participation rate estimates, FY 2018

Variable	Participation rate with 90 percent confidence interval			Eligible		Participating	
				Number	Standard error	Number	Standard error
Individuals	82.0	+/-	1.4	43,862,367	380,622	35,987,131	227,120
Households	83.4	+/-	1.3	21,362,119	194,469	17,823,266	36,749
Benefits	*			*		4,446,024,409	26,456,644
Children (age 17 or younger)	*			*		15,973,901	204,236
Non-elderly adults (age 18-59)	83.4	+/-	1.7	18,244,106	190,564	15,212,224	101,397
Elderly individuals (age 60 or older)	47.9	+/-	1.6	10,029,661	133,156	4,801,006	70,246
Adults age 18-49 without disabilities in childless households ^a	77.6	+/-	3.8	3,262,092	74,422	2,531,270	48,959
Noncitizens	60.2	+/-	4.9	2,453,773	70,377	1,476,244	59,788
Citizen children living with noncitizen adults	72.2	+/-	5.3	4,074,217	108,641	2,942,251	106,742
Household countable income source							
Earned income	73.5	+/-	2.7	20,659,346	248,980	15,194,854	288,420
TANF	76.8	+/-	8.3	3,321,255	109,269	2,550,196	144,326
SSI benefits	87.2	+/-	3.5	8,476,152	155,750	7,389,356	116,251
Non-elderly	85.6	+/-	4.5	6,204,711	140,595	5,313,493	119,172
Elderly	81.3	+/-	5.2	2,638,352	78,538	2,145,578	54,015
Household countable income as a percentage of poverty guidelines							
1 to 50 percent	*			*		9,112,563	170,171
101 to 130 percent	46.3	+/-	2.3	10,483,939	166,170	4,850,341	128,360

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participant, eligible, and benefit totals represent monthly averages.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

Table E.2. Sampling error associated with selected participation rate estimates, FY 2017

Variable	Participation rate with 90 percent confidence interval			Eligible		Participating	
				Number	Standard error	Number	Standard error
Individuals	81.9	+/-	1.2	46,151,754	402,689	37,807,973	104,383
Households	84.0	+/-	1.2	22,144,691	186,555	18,605,274	33,792
Benefits	*			*		4,779,372,438	9,504,529
Children (age 17 or younger)	*			*		16,711,599	99,920
Non-elderly adults (age 18-59)	84.5	+/-	1.7	19,456,093	210,602	16,437,147	87,796
Elderly individuals (age 60 or older)	46.5	+/-	1.5	10,030,346	143,947	4,659,227	62,044
Adults age 18-49 without disabilities in childless households ^a	82.9	+/-	3.9	3,484,295	73,480	2,888,098	54,615
Noncitizens	60.9	+/-	4.8	2,611,119	77,919	1,590,343	59,766
Citizen children living with noncitizen adults	74.1	+/-	4.9	4,241,941	108,335	3,141,568	98,438
Household countable income source							
Earned income	73.2	+/-	2.0	22,156,168	272,706	16,220,621	172,949
TANF	70.7	+/-	5.6	4,087,352	136,017	2,890,145	102,082
SSI benefits	82.5	+/-	3.5	9,044,339	173,737	7,459,310	125,632
Non-elderly	81.5	+/-	4.1	6,680,807	147,748	5,444,020	116,083
Elderly	76.5	+/-	5.0	2,742,557	83,543	2,098,177	52,347
Household countable income as a percentage of poverty guidelines							
1 to 50 percent	*			*		9,894,083	135,976
101 to 130 percent	47.6	+/-	2.2	11,011,834	170,500	5,246,567	121,310

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participant, eligible, and benefit totals represent monthly averages.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

Table E.3. Sampling error associated with selected participation rate estimates, FY 2016

Variable	Participation rate with 90 percent confidence interval			Eligible		Participating	
				Number	Standard error	Number	Standard error
Individuals	83.0	+/-	1.1	48,101,113	367,674	39,908,521	72,263
Households	85.9	+/-	1.1	22,767,367	177,795	19,559,437	33,032
Benefits	*			*		5,072,045,721	8,401,008
Children (age 17 or younger)	*			*		17,874,365	85,175
Non-elderly adults (age 18-59)	86.5	+/-	1.6	20,350,563	203,650	17,612,986	86,689
Elderly individuals (age 60 or older)	43.6	+/-	1.3	10,131,730	122,199	4,421,170	58,116
Adults age 18-49 without disabilities in childless households ^a	93.3	+/-	4.2	3,698,366	78,548	3,451,550	59,095
Noncitizens	65.6	+/-	5.0	2,690,895	66,593	1,765,940	68,434
Citizen children living with noncitizen adults	80.0	+/-	5.1	4,441,677	107,042	3,554,953	108,984
Household countable income source							
Earned income	74.7	+/-	1.9	23,132,628	260,585	17,282,829	188,859
TANF	69.2	+/-	5.2	4,470,363	127,789	3,091,690	109,094
SSI benefits	83.0	+/-	3.3	9,259,391	168,515	7,686,013	123,996
Non-elderly	84.0	+/-	4.2	6,920,869	155,889	5,815,472	119,546
Elderly	71.8	+/-	4.2	2,700,384	67,057	1,939,153	49,636
Household countable income as a percentage of poverty guidelines							
1 to 50 percent	*			*		10,605,900	159,024
101 to 130 percent	48.6	+/-	2.1	10,974,233	172,835	5,329,277	113,831

Sources: SNAP Program Operations, SNAP Quality Control, and Current Population Survey Annual Social and Economic Supplement data.

Note: Participant, eligible, and benefit totals represent monthly averages.

* The use of different data sources to estimate rate numerators and denominators can result in estimates of eligible individuals with a particular characteristic or of potential benefits to eligible individuals that are lower than the corresponding estimates of participants or benefits received by participants. When this happens, estimated rates exceed 100 percent. In this report, we do not report estimated rates higher than 100 percent or the associated estimates of eligible individuals, households, or potential benefits. See Appendix D for more information.

^a With some exceptions, these participants are subject to work requirements and time limits.

APPENDIX F

ECONOMIC AND POLICY INFLUENCES ON SNAP

Table F.1. Summary of major influences on SNAP participation rate estimates, 1976 to 2018

Period of change	Major influences	Effect on number of participants and eligible individuals	Participation rate change
1978 to 1980	Food Stamp Act of 1977	Substantial increase in participants; decrease in eligible individuals	Up 17 points
1980 to 1982	Recession	Almost no change in participants; substantial increase in eligible individuals	Down 3 points
1982 to 1984	Economic recovery	Slight decrease in both participants and eligible individuals	No change
1984 to 1986	1985 Food Security Act	Almost no change in participants; substantial increase in eligible individuals	Down 4 points
1986 to 1988	Growth in economy	Small decrease in participants and eligible individuals	No change
1988 to 1990	Medicaid expansion, Homeless Assistance Act, IRCA, worsening economy	Increase in participants; small decrease in eligible individuals	Up 6 points
1990 to 1992	Continued Medicaid expansion, recession	Increase in participants; smaller increase in eligible individuals	Up 5 points
1992 to 1993	Improving economy	Increase in participants; smaller increase in eligible individuals	Up 1 point
1993 to 1994	Improving economy	No change in participants; small drop in eligible individuals	Up 1 point
1994 to 1995	Improving economy	Decrease in participants; smaller decrease in eligible individuals	Down 2 points
1995 to 1996	Improving economy	Decrease in participants; no change in eligible individuals	Down 3 points
1996 to 1997	Welfare reform, improving economy	Large decrease in participants and eligible individuals; larger decrease in participants	Down 5 points
1997 to 1998	Welfare reform, improving economy	Large decrease in participants and eligible individuals; larger decrease in participants	Down 4 points
1998 to 1999	Welfare reform, improving economy	Decrease in participants and eligible individuals; larger decrease in participants	Down 2 points
1999 to 2000	Welfare reform, improving economy	Decrease in participants and eligible individuals; larger decrease in participants	Down less than 1 point
2000 to 2001	Expanded vehicle exclusions, worsening economy	Slight increase in participants; large increase in eligible individuals	Down 3 points
2001 to 2002(a)	Expanded vehicle exclusions, increased poverty	Large increase in participants and eligible individuals; larger increase in eligible individuals	Down less than 1 point
2002(b) to 2003	Increased outreach, increased eligibility for noncitizens, increased poverty, expanded vehicle exclusions	Increase in both participants and eligible individuals	Up 2 points
2003 to 2004	Increased outreach, increased poverty, increased eligibility for immigrant children, expanded vehicle exclusions	Increase in both participants and eligible individuals; larger increase in participants	Up more than 5 points

Table F.1. (continued)

Period of change	Major influences	Effect on number of participants and eligible individuals	Participation rate change
2004 to 2005	Increased outreach, expanded vehicle exclusions	Increase in both participants and eligible individuals; larger increase in participants	Up 3 points
2005 to 2006	Increased outreach, decreased poverty, expanded vehicle exclusions	Increase in participants; decrease in eligible individuals	Up 4 points
2006 to 2007	Increased outreach, increased poverty, expanded vehicle exclusions	Increase in participants; larger increase in eligible individuals	Down less than 1 point
2007 to 2008	Worsening economy, increased outreach, expanded vehicle exclusions	Increases in both participants and eligible individuals	Up 2 points
2008 to 2009	Recession, increased outreach, increase in minimum benefit allotments, midyear increase in maximum benefit allotments, midyear State option to eliminate time-limited benefits, expanded vehicle exclusions	Large increases in both participants and eligible individuals	Up more than 1 point
2010 to 2011	Slow economic recovery	Large increase in participants; very minor decrease in eligible individuals	Up more than 6 points
2011 to 2012	Improving economy	Increase in participants; decrease in eligible individuals	Up 5 points
2012 to 2013	Improving economy	Increase in participants; very minor decrease in eligible individuals	Up 2 points
2013 to 2014	Agricultural Act of 2014, decrease in maximum benefit allotments	Decrease in participants; minor increase in eligible individuals.	Down 2 points
2014 to 2015	Improving economy	Small decrease in participants and eligible individuals	No change
2015 to 2016(a)	Improving economy	Decrease in participants; larger decrease in eligible individuals	Up 2 points
2016(b) to 2017(b)	Strong economy	Decrease in participants; smaller decrease in eligible individuals	Down 1 point
2017(b) to 2018	Strong economy	Small decrease in participants and eligible individuals	No change

Note: Readers should not compare estimates for FY 2016 through FY 2018 with estimates for any prior years because of a revised methodology for those years.

Table F.2. Major economic indicators, 1976 to 2018

Year	Real GDP increase ^a	Productivity increase ^b	Unemployment rate ^c	Inflation rate ^d	Poverty rate	Individuals in poverty (000)
1976	5.4	3.3	7.7	5.5	11.8	24,975
1977	4.6	1.8	7.1	6.2	11.6	24,720
1978	5.5	1.2	6.1	7.0	11.4	24,497
1979	3.2	0.1	5.9	8.3	11.7	26,072
1980	-0.3	0.0	7.2	9.1	13.0	29,272
1981	2.5	2.2	7.6	9.4	14.0	31,822
1982	-1.8	-0.5	9.7	6.2	15.0	34,398
1983	4.6	3.4	9.6	3.9	15.2	35,303
1984	7.2	2.9	7.5	3.6	14.4	33,700
1985	4.2	2.3	7.2	3.2	14.0	33,064
1986	3.5	2.8	7.0	2.0	13.6	32,370
1987	3.5	0.6	6.2	2.5	13.4	32,221
1988	4.2	1.5	5.5	3.5	13.0	31,745
1989	3.7	1.2	5.3	3.9	12.8	31,528
1990	1.9	2.0	5.6	3.8	13.5	33,585
1991	-0.1	1.6	6.9	3.4	14.2	35,708
1992	3.5	4.7	7.5	2.3	14.8	38,014
1993	2.8	0.1	6.9	2.4	15.1	39,265
1994	4.0	0.6	6.1	2.1	14.5	38,059
1995	2.7	0.7	5.6	2.1	13.8	36,425
1996	3.8	2.5	5.4	1.8	13.7	36,529
1997	4.4	2.2	4.9	1.7	13.3	35,574
1998	4.5	3.1	4.5	1.1	12.7	34,476
1999	4.8	4.0	4.2	1.4	11.9	32,791
2000	4.1	3.4	4.0	2.3	11.3	31,581
2001	1.0	2.8	4.7	2.2	11.7	32,907
2002	1.7	4.3	5.8	1.5	12.1	34,570
2003	2.9	4.0	6.0	1.9	12.5	35,861
2004	3.8	3.0	5.5	2.7	12.7	37,040
2005	3.5	2.2	5.1	3.1	12.6	36,950
2006	2.9	1.1	4.6	3.1	12.3	36,460
2007	1.9	1.6	4.6	2.7	12.5	37,276
2008	-0.1	1.1	5.8	1.9	13.2	39,829
2009	-2.5	3.6	9.3	0.8	14.3	43,569
2010	2.6	3.3	9.6	1.2	15.1	46,343

Table F.2. (continued)

Year	Real GDP increase ^a	Productivity increase ^b	Unemployment rate ^c	Inflation rate ^d	Poverty rate	Individuals in poverty (000)
2011	1.6	-0.1	8.9	2.1	15.0	46,247
2012	2.2	0.8	8.1	1.9	15.0	46,496
2013	1.8	0.9	7.4	1.8	14.8	46,269
2014	2.5	0.7	6.2	1.8	14.8	46,657
2015	3.1	1.5	5.3	1.0	13.5	43,123
2016	1.7	0.4	4.9	1.0	12.7	40,616
2017	2.3	1.2	4.4	1.9	12.3	39,564
2018	3.0	1.6	3.9	2.4	11.8	38,146

Sources: Real Gross Domestic Product (GDP) increase: U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts*. Productivity increase: U.S. Department of Labor, Bureau of Labor Statistics, "Major Sector Productivity and Costs Index." Unemployment rate: U.S. Department of Labor, U.S. Bureau of Labor Statistics. Inflation rate: U.S. Department of Commerce, Bureau of Economic Analysis, *National Income and Product Accounts*. Individuals below poverty line: U.S. Census Bureau.

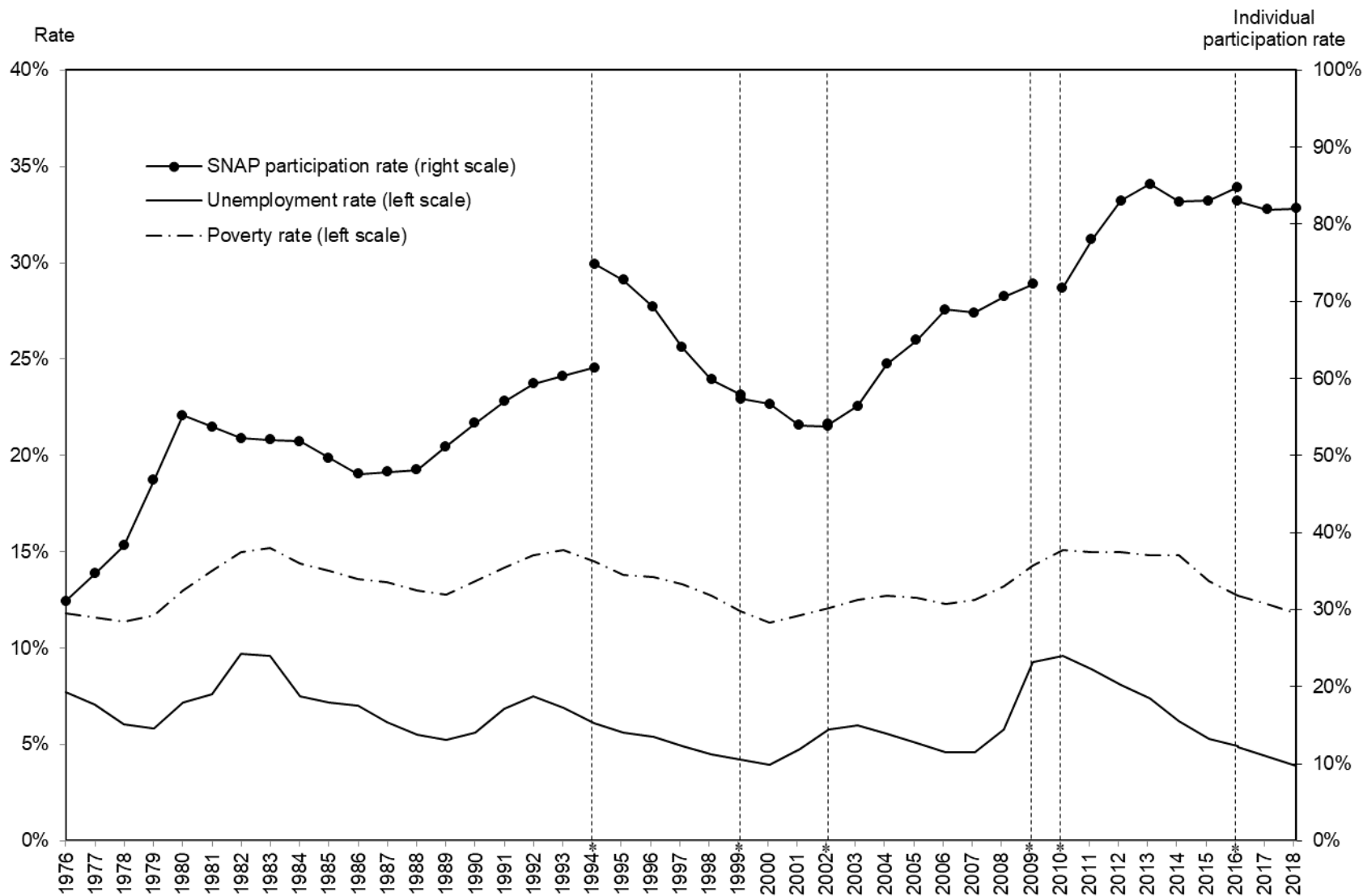
^a Percentage change from preceding year.

^b Percentage change from preceding year in output per hour, business sector.

^c All civilian workers.

^d Percentage change from preceding year in the implicit price deflator for GDP.

Figure F.1. Trends in SNAP individual participation rate estimates, poverty rates, and unemployment rates, 1976 to 2018



Sources: Participation rates from SNAP Program Operations data, SNAP QC data, and CPS ASEC data for the years shown. Poverty rates from U.S. Bureau of the Census, Poverty in the United States. Unemployment rates from U.S. Department of Labor, U.S. Bureau of Labor Statistics.

* There are breaks in the time series in 1994 and 1999 because of revisions in the methodology for determining eligibility, in 2002 and 2009 because of revisions in the methodology for determining eligibility and the number of participants, and in 2016 because of changes in the CPS ASEC.

Table F.3A. Historical legislation affecting SNAP

Full Legislation Name	Short title for use in this report	Public Law
Food Stamp Act of 1964, as amended	Food Stamp Act of 1964, as amended	PL 88-525
Food Stamp Act of 1977, effective 1/1/79	Food Stamp Act of 1977	PL 95-113
Food Stamp amendments of 1979 and 1980	Food Stamp amendments of 1979 and 1980	PL 96-58 and PL 96-249
Omnibus Budget Reconciliation Act of 1981 and Food Stamp amendments and Reauthorization Act of 1981, effective 10/1/81	OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	PL 86-35 and PL 97-98
Food Stamp amendments of 1982, effective 10/82, and Continuing Resolution of 1984	Food Stamp amendments of 1982 and Continuing Resolution of 1984	PL 97-253 and PL 84-473
1985 Food Security Act, effective 5/86	1985 Food Security Act	PL 99-198
1987 Homeless Assistance Act	1987 Homeless Assistance Act	PL 100-77
Hunger Prevention Act of 1988	HPA of 1988	PL 100-435
Farm, Agriculture, Conservation and Trade Act of 1990 and 1991	FACTA	PL 102-237
Amendments to Farm, Agriculture, Conservation and Trade Act of 1991	Amendments to FACTA of 1991	
The Mickey Leland Childhood Hunger Relief Act of 1993	MLCHRA	PL 103-66
The Personal Responsibility and Work Opportunity Reconciliation Act of 1996	PRWORA	PL 104-193
The Balanced Budget Act of 1997	BBA	PL 105-33
Agricultural Research, Extension, and Education Reform Act of 1998	AREERA	PL 105-185
Agriculture Appropriations Act of 2001	Agriculture Appropriations Act of 2001	PL 106-387
Farm Security and Rural Investment Act of 2002	Farm Security and Rural Investment Act of 2002	PL 107-171
Food, Conservation, and Energy Act of 2008	2008 Farm Bill	PL 110-246
American Recovery and Reinvestment Act of 2009	ARRA	PL 111-5
Agricultural Act of 2014	2014 Farm Bill	PL 113-79
Agricultural Act of 2018	2018 Farm Bill	PL 115-334

Table F.3B. Selected features of SNAP under past legislation—Income limits

Legislation	Income limits
Food Stamp Act of 1964, as amended	Net income had to be less than or equal to the maximum SNAP net income, which was tied to the maximum coupon allotment
Food Stamp Act of 1977	Net income had to be less than or equal to the poverty line
Food Stamp amendments of 1979 and 1980	Excluded energy assistance as income; included income of ineligible aliens less prorated share
OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	Gross income had to be less than or equal to 130 percent of the poverty line, except for individuals who are elderly and disabled, who kept previous net income limit
Food Stamp amendments of 1982 and Continuing Resolution of 1984	Individuals who are not elderly or disabled were subjected to both net and gross income limits
1985 Food Security Act	Minor changes in treatment of income
1987 Homeless Assistance Act	Moved annual adjustment in income eligibility guidelines from July 1 to October 1 of each year
HPA of 1988	No change
FACTA	Certain types of educational assistance not counted as income
Amendments to FACTA of 1991	No change
MLCHRA	Earnings of students excluded from income through age 21; excluded as income 100 percent of vendor payments made to transitional housing facilities on behalf of homeless households and GA vendor payments for assistance with utility costs
PRWORA	Earnings of students excluded from income through age 17
BBA	No change
AREERA	No change
Agriculture Appropriations Act of 2001	No change
Farm Security and Rural Investment Act of 2002	State options to exclude certain types of income not counted under the State's TANF cash assistance or Medicaid programs and to treat legally obligated child support payments to a non-household member as an income exclusion rather than a deduction
2008 Farm Bill	Combat-related military pay excluded from income
ARRA	No change
2014 Farm Bill	No change
2018 Farm Bill	No change

Table F.3C. Selected features of SNAP under past legislation—Resource limits

Legislation	Resource limits
Food Stamp Act of 1964, as amended	\$1,500; \$3,000 for elderly household of at least two individuals; excluded vehicles used for employment or handicapped transportation
Food Stamp Act of 1977	\$1,750; \$3,000 for elderly household of at least two individuals; excluded first \$4,500 of the FMV for vehicles
Food Stamp amendments of 1979 and 1980	\$1,500; \$3,000 for elderly household of at least two individuals; excluded vehicles used for handicapped
OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	No change
Food Stamp amendments of 1982 and Continuing Resolution of 1984	State option to waive resource test for pure AFDC households passing gross income test. IRA KEOGH accounts counted as resources
1985 Food Security Act	\$2,000; \$3,000 for households with elderly member(s) (including one-person households); changed definition of countable resources
1987 Homeless Assistance Act	No change
HPA of 1988	No change
FACTA	Nonliquid resources and those exempted by AFDC and SSI not counted
Amendments to FACTA of 1991	Same limits; resource holding of AFDC and SSI recipients not counted
MLCHRA	Raised the vehicle FMV resource limit to \$4,550 on 9/1/94, to \$4,600 on 10/1/95, and to \$5,000 on 10/1/96, with annual cost-of-living adjustments thereafter; excluded vehicles necessary to carry food or water
PRWORA	Vehicle FMV resource limit raised to \$4,650, with no planned future cost-of-living adjustments
BBA	No change
AREERA	No change
Agriculture Appropriations Act of 2001	Allowed States to use the vehicle limit they used in a TANF assistance program if it would result in a lower attribution of resources for the household
Farm Security and Rural Investment Act of 2002	Increased the resource limit for household with a disabled member from \$2,000 to \$3,000
2008 Farm Bill	Indexed resource limits to inflation; excluded all tax-preferred education accounts and retirement accounts from countable resources
ARRA	No change
2014 Farm Bill	No change
2018 Farm Bill	No change

Table F.3D. Selected features of SNAP under past legislation—Benefits

Legislation	Maximum benefit	Minimum benefit	Benefit reduction rate
Food Stamp Act of 1964, as amended	Thrifty Food Plan; indexed since 1971; indexed semiannually from 1973 to 1979 based on U.S. Bureau of Labor Statistics (BLS) food price index	Minimum benefit varied by household size	Basis of issuance tables (average 30 percent above lowest levels)
Food Stamp Act of 1977	Indexed semiannually based on Thrifty Food Plan components	\$10 for one- and two-person households only	30 percent
Food Stamp amendments of 1979 and 1980	Indexed annually in January based on September cost-of-plan components	No change	No change
OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	Indexing frozen until 7/1/83; next adjustment 10/1/84 based on June cost-of-plan components	No change	No change
Food Stamp amendments of 1982 and Continuing Resolution of 1984	Indexed to 99 percent of Thrifty Food Plan cost; changed back to 100 percent by PL 98-473; last step in benefit calculation rounded down	No change	No change
1985 Food Security Act	No change	No change	No change
1987 Homeless Assistance Act	No change	No change	No change
HPA of 1988	Incremental indexing to 103 percent of Thrifty Food Plan by FY 1991 and thereafter	No change	No change
FACTA	No change	Required annual adjustments to the \$10 minimum benefit	No change
Amendments to FACTA of 1991	No change*	No change	No change
MLCHRA	No change	No change	No change
PRWORA	Reduced to 100 percent of Thrifty Food Plan for contiguous U.S. and District of Columbia; Alaska and Hawaii remained at 1996 levels	Removed requirement for indexing of minimum benefit	No change
BBA	No change	No change	No change
AREERA	No change	No change	No change
Agriculture Appropriations Act of 2001	No change	No change	No change
Farm Security and Rural Investment Act of 2002	No change	No change	No change
2008 Farm Bill	No change	Increased for one- and two-person households from \$10 to 8 percent of maximum benefit of one-person households	No change
ARRA	Increased to 113.6 percent of June 2008 value of Thrifty Food Plan, effective April 2009 until October 31, 2013	Adjusted for one- and two-person households, April 2009 until October 31, 2013	No change
2014 Farm Bill	No change	No change	No change
2018 Farm Bill	No change	No change	No change

Table F.3E. Selected features of SNAP under past legislation—Deductions

Legislation	Deductions
Food Stamp Act of 1964, as amended	Payroll; 10 percent of earnings up to \$30; child care; education; medical over \$10; alimony or child support; casualty losses; shelter in excess of 30 percent of net income
Food Stamp Act of 1977	Standard \$60; indexed semi-annually to CPI nonfood components; 20 percent of earnings; child care up to \$75; shelter in excess of 50 percent of net, not to exceed \$80 in combination with child care; limit indexed annually in July based on shelter-fuel-utilities component of the CPI
Food Stamp amendments of 1979 and 1980	1980 act: standard deduction and shelter/child care cap indexed annually in January based on September to September change; 1979 act: people who are elderly or disabled are not subjected to the excess shelter expense deduction maximum and allowed medical expenses over \$35a
OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	18 percent of earnings; shelter/child care cap set at \$115 with next inflation adjustment on 7/1/83, then on 10/1/84, and each October thereafter
Food Stamp amendments of 1982 and Continuing Resolution of 1984	Standard deduction raised to \$89; next inflation adjustment delayed until 10/1/83; limited use of standard utility expense allowances
1985 Food Security Act	20 percent of earnings; separate cap of \$147 on excess shelter expense deduction with indexed increases; separate cap of \$160 on dependent care not indexed
1987 Homeless Assistance Act	Increased cap on excess shelter expense deduction for all households certified after 10/1/87
HPA of 1988	Dependent care deduction increased to \$160 per month per dependent, rather than per household
FACTA	No change
Amendments to FACTA of 1991	No change
MLCHRA	Increased cap on excess shelter expense deductions for all households to \$231 after 7/1/94 and to \$247 after 10/1/95; raised the dependent care deduction cap to \$200 a month for each child younger than age 2 and \$175 a month for all other dependents
PRWORA	Standard deduction frozen at current levels; raised excess shelter expense deduction to \$250 on 1/1/97, to \$275 on 10/1/98, to \$300 on 10/1/00
BBA	No change
AREERA	No change
Agriculture Appropriations Act of 2001	Increased the excess shelter cap to \$340 in FY 2001 and then indexed the cap to changes in the CPI for all consumers each year, beginning in fiscal year 2002
Farm Security and Rural Investment Act of 2002	Changed standard deduction to vary according to household size and be adjusted annually for cost-of-living increases; allowed States to simplify the standard utility allowance if they elected to use it rather than actual utility costs for all households; also allowed States to use a standard deduction of \$143 per month for homeless households with some excess shelter expense deductions
2008 Farm Bill	Raised the minimum standard deduction for households with one to three members from \$134 to \$144 for FY 2009 and indexed it to inflation starting in FY 2010; eliminated the dependent care deduction cap
ARRA	No change
2014 Farm Bill	Tightened standards for households qualifying for standard utility allowances based on receipt of energy assistance
2018 Farm Bill	Changed homeless households shelter deduction from State option to mandatory. The new rule indexed the current value of \$143 to inflation beginning in Fiscal Year (FY) 2019

^a A provision to reduce the medical deduction from \$35 to \$25 was repealed in the Omnibus Budget Reconciliation Act (OBRA) and never implemented.

Table F.3F. Selected features of SNAP under past legislation—Accounting period, categorical eligibility

Legislation	Accounting period	Categorical eligibility
Food Stamp Act of 1964, as amended	Prospective month	Public assistance households automatically eligible
Food Stamp Act of 1977	Prospective month	Public assistance households not automatically eligible
Food Stamp amendments of 1979 and 1980	State option to use either prospective or retrospective with monthly report	No change
OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	Retrospective becomes mandatory 10/1/83 for some households, prospective for others	No change
Food Stamp amendments of 1982 and Continuing Resolution of 1984	Migrant workers and elderly and disabled households with no earnings exempted from monthly reporting	No change
1985 Food Security Act	Retrospective budgeting and monthly reporting required for households with earnings or work history except migrant farmers and people who are elderly or disabled	Categorical eligibility for pure AFDC or SSI households
1987 Homeless Assistance Act	Exempted seasonal farm workers and households in which all members were homeless from monthly reporting requirements	No change
HPA of 1988	No change	No change
FACTA	No change	Expanded categorical eligibility to recipients of certain State and local general assistance payments
Amendments to FACTA of 1991	No change	No change
MLCHRA	No change	No change
PRWORA	No change	Categorical eligibility for pure TANF (instead of pure AFDC) households
BBA	No change	No change
AREERA	No change	No change
Agriculture Appropriations Act of 2001	No change	No change
Farm Security and Rural Investment Act of 2002	No change	No change
2008 Farm Bill	No change	No change
ARRA	No change	No change
2014 Farm Bill	No change	No change
2018 Farm Bill	No change	No change

Table F.3G. Selected features of SNAP under past legislation—Work registration requirements and time limits

Legislation	Work registration requirements and time limits
Food Stamp Act of 1964, as amended	Required work registration and employment as a condition of eligibility for able-bodied adults age 18-65, except for individuals responsible for care of a dependent child or incapacitated adult; students; or individuals employed 30 hours a week
Food Stamp Act of 1977	Lowered age for individuals required to work from 65 to 60; added job search as a work requirement; lowered age for caretaker exemption from 18 to 12 years
Food Stamp amendments of 1979 and 1980	No change
OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	Applied disqualification for voluntarily quitting a job to participants as well as applicants; lowered age for caretaker exemption to age 6
Food Stamp amendments of 1982 and Continuing Resolution of 1984	No change
1985 Food Security Act	Disqualified only the violating member rather than the entire household unless that member was also head of household; required all States to implement an employment and training (E&T) program by April 1, 1987
1987 Homeless Assistance Act	No change
HPA of 1988	No change
FACTA	No change
Amendments to FACTA of 1991	No change
MLCHRA	No change
PRWORA	Able-bodied adults without dependents required to work at least 20 hours per week in a job or qualified training program; if individual is subject to, but not complying with, the requirement, he or she is limited to 3 months of benefits in any 36-month period; minimum disqualification periods for individuals who fail to comply with work requirements range from 1 month to permanently, depending on the number of violations
BBA	Increased funds for SNAP E&T programs but restricted the use of the funds (requiring them to earmark 80 percent for adults age 18-49 without disabilities in childless households); made the funds available until expended; allowed States to grant discretionary exemptions from the time limits for up to 15 percent of the State's unwaived able-bodied caseload
AREERA	No change
Agriculture Appropriations Act of 2001	No change
Farm Security and Rural Investment Act of 2002	Authorized additional funding for States that pledge to offer work slots to all unemployed childless adults subject to the 3-month time limit and eliminated the requirement that 80 percent of unmatched funds be used for nondisabled childless adults
2008 Farm Bill	Permitted the use of E&T funds for job retention services for up to 90 days after individuals who received E&T services gain employment
ARRA	Allowed States to temporarily suspend the time limit on benefits for nondisabled adults without dependents
2014 Farm Bill	No change
2018 Farm Bill	Increased funding for SNAP E&T programs and reduced available caseload exemptions from the time limit for "able-bodied adults without dependents."

Table F.3H. Selected features of SNAP under past legislation—Treatment of legally resident noncitizens

Legislation	Treatment of legally resident noncitizens ^a
Food Stamp Act of 1964, as amended	No disqualifications
Food Stamp Act of 1977	No disqualifications
Food Stamp amendments of 1979 and 1980	No disqualifications
OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	The 1980 amendments required certification workers to report an ineligible noncitizen to the Immigration and Naturalization Service; income and resources of noncitizens' sponsors were deemed to noncitizen for three years after entry into the country
Food Stamp amendments of 1982 and Continuing Resolution of 1984	No disqualifications
1985 Food Security Act	No disqualifications
1987 Homeless Assistance Act	No disqualifications
HPA of 1988	No disqualifications
FACTA	No disqualifications
Amendments to FACTA of 1991	No disqualifications
MLCHRA	No disqualifications
PRWORA	Permanent resident noncitizens disqualified unless they have 40 quarters of qualified work history in the United States or are currently or were formerly members of the U.S. armed forces; members of their families also exempt; refugees, asylees, and deportees eligible for five years after entering the United States
BBA	No change
AREERA	Restored eligibility to permanent resident noncitizens lawfully in the United States on August 22, 1996, and disabled, blind, or younger than age 18, or 65 or older on August 22, 1996; extended eligibility for refugees, asylees, and deportees from five to seven years after entering the United States
Agriculture Appropriations Act of 2001	No change
Farm Security and Rural Investment Act of 2002	Restored eligibility to qualified noncitizens otherwise eligible for SNAP and who are receiving disability benefits regardless of date of entry (effective FY 2003); are younger than age 18 regardless of date of entry (effective FY 2004); or have lived in the United States for five years as qualified noncitizens (effective April 2003)
2008 Farm Bill	No change
ARRA	No change
2014 Farm Bill	No change
2018 Farm Bill	No change

^a Unauthorized immigrants have always been ineligible for SNAP.

Table F.3I. Selected features of SNAP under past legislation—Other changes

Legislation	Other changes
Food Stamp Act of 1964, as amended	Nationwide program
Food Stamp Act of 1977	Eliminated the purchase requirement, which required that all participating households purchase their food stamps, paying an amount commensurate with their income and expenses
Food Stamp amendments of 1979 and 1980	Increased State incentives for reducing error; Social Security numbers required; limits on eligible students; residents of shelters for battered women and disabled in small groups may participate; established quality control system
OBRA of 1981 and Food Stamp amendments and Reauthorization Act of 1981	Tightened definition of household, no extra benefits for strikers, prorated first month benefits; for Puerto Rico, replaced the Food Stamp Program with a block grant Nutrition Assistance Program
Food Stamp amendments of 1982 and Continuing Resolution of 1984	Replaced three-tiered incentive system with increased administrative funding for States with error rates below 5 percent, limited student eligibility, benefits rounded down, job search requirements, Puerto Rico cashout prohibited; SNAP household definition altered; no initial-month benefits less than \$10; Supplemental Security Income and Social Security cost of living adjustments disregarded up to three months; new definition of disabled
1985 Food Security Act	New definition of disabled; Puerto Rico block grant funds; Job Training Partnership Act students exempted from categorical restriction; residents of publicly operated mental health centers may participate
1987 Homeless Assistance Act	Outreach efforts for homeless individuals and other hard-to-serve groups; simplified application process for these groups; expanded eligibility for expedited source
HPA of 1988	Expanded the definition of disabled; excluded advanced earned income tax credit payments as income
FACTA	Rules for student eligibility modified
Amendments to FACTA of 1991	All Title IV payments and Bureau of Indian Affairs educational assistance excluded from the program's countable income (Higher Education Amendments of 1992 [PL 102-325])
MLCHRA	Simplified the household definition by allowing individuals who live together but do not purchase and prepare food together to be in separate program households; spouses still must be in the same household
PRWORA	A child younger than age 22 living with parents must apply as part of the parents' household even if the child is married or has children, and all States must convert food stamp benefits from paper coupons to electronic benefit transfer systems by 10/1/02
BBA	None
AREERA	None
Agriculture Appropriations Act of 2001	None
Farm Security and Rural Investment Act of 2002	Allowed States to offer transitional SNAP benefits for up to five months after households lose TANF cash assistance and allowed States to extend semiannual reporting of changes to all households not exempt from periodic reporting
2008 Farm Bill	Renamed the Food Stamp Program the "Supplemental Nutrition Assistance Program"; renamed the Food Stamp Act of 1977 the Food and Nutrition Act of 2008; prohibited issuance of paper coupons effective 6/18/08; food stamp coupons no longer redeemable at stores after 8/17/09; allowed States to place all households on simplified reporting; allowed State agencies to provide transitional food stamp benefits to households that cease to receive cash assistance; and allowed applicants to sign an application through a recorded verbal assent over the telephone
ARRA	None
2014 Farm Bill	None
2018 Farm Bill	None

APPENDIX G
HISTORICAL SNAP ELIGIBILITY PARAMETERS

Table G.1. Monthly SNAP gross income screen, 1982 to 2018

Analysis period	Household size								Each additional
	1	2	3	4	5	6	7	8	
August 1982									
Contiguous states	\$507	\$674	\$841	\$1,008	\$1,175	\$1,342	\$1,508	\$1,675	+ 167
Alaska	636	844	1,052	1,260	1,468	1,676	1,884	2,092	+ 208
Hawaii	584	776	968	1,160	1,351	1,543	1,735	1,927	+ 192
August 1984									
Contiguous states	540	728	917	1,105	1,294	1,482	1,671	1,859	+ 189
Alaska	676	912	1,147	1,382	1,617	1,852	2,087	2,322	+ 236
Hawaii	621	838	1,055	1,271	1,488	1,705	1,921	2,138	+ 217
August 1986									
Contiguous states	582	786	988	1,193	1,397	1,599	1,804	2,008	+ 205
Alaska	727	982	1,235	1,490	1,745	2,000	2,252	2,509	+ 255
Hawaii	670	904	1,138	1,372	1,606	1,840	2,074	2,308	+ 234
August 1988									
Contiguous states	596	802	1,008	1,214	1,420	1,625	1,831	2,037	+ 206
Alaska	744	1,001	1,259	1,517	1,775	2,033	2,291	2,548	+ 258
Hawaii	684	921	1,159	1,396	1,633	1,870	2,108	2,345	+ 238
August 1990									
Contiguous states	648	869	1,090	1,311	1,532	1,753	1,974	2,195	+ 221
Alaska	811	1,087	1,363	1,640	1,916	2,192	2,468	2,745	+ 277
Hawaii	745	999	1,254	1,508	1,763	2,018	2,272	2,527	+ 255
August 1991									
Contiguous states	681	913	1,144	1,376	1,608	1,840	2,072	2,304	+ 232
Alaska	850	1,140	1,430	1,721	2,011	2,301	2,592	2,882	+ 291
Hawaii	784	1,050	1,317	1,583	1,850	2,116	2,383	2,649	+ 267
August 1992									
Contiguous states	718	962	1,207	1,452	1,697	1,942	2,187	2,431	+ 245
Alaska	899	1,204	1,510	1,815	2,121	2,426	2,732	3,037	+ 306
Hawaii	825	1,107	1,388	1,670	1,952	2,233	2,515	2,797	+ 282
August 1993									
Contiguous states	738	996	1,254	1,512	1,770	2,027	2,285	2,543	+ 258
Alaska	921	1,244	1,567	1,890	2,213	2,535	2,858	3,181	+ 323
Hawaii	849	1,146	1,442	1,739	2,036	2,333	2,630	2,927	+ 297
September 1994									
Contiguous states	756	1,022	1,289	1,555	1,822	2,088	2,355	2,621	+ 267
Alaska	943	1,277	1,610	1,944	2,278	2,611	2,945	3,279	+ 334
Hawaii	871	1,177	1,482	1,788	2,093	2,399	2,704	3,010	+ 306
September 1995									
Contiguous states	798	1,066	1,335	1,604	1,872	2,141	2,410	2,678	+ 269
Alaska	997	1,333	1,669	2,005	2,340	2,676	3,012	3,348	+ 336
Hawaii	918	1,227	1,536	1,844	2,153	2,462	2,771	3,079	+ 309
September 1996									
Contiguous states	810	1,087	1,364	1,642	1,919	2,196	2,474	2,751	+ 278
Alaska	1,012	1,359	1,706	2,052	2,399	2,746	3,092	3,439	+ 347
Hawaii	933	1,252	1,570	1,889	2,207	2,526	2,844	3,163	+ 319
September 1997									
Contiguous states	839	1,123	1,407	1,690	1,974	2,258	2,542	2,826	+ 284
Alaska	1,047	1,402	1,758	2,113	2,468	2,824	3,179	3,534	+ 356
Hawaii	966	1,292	1,618	1,944	2,270	2,596	2,922	3,248	+ 327
September 1998									
Contiguous states	855	1,150	1,445	1,739	2,034	2,329	2,623	2,918	+ 295
Alaska	1,070	1,438	1,806	2,175	2,543	2,911	3,280	3,648	+ 369
Hawaii	983	1,322	1,661	2,000	2,339	2,678	3,018	3,357	+ 340

Table G.1. (continued)

Analysis period	Household size								Each additional
	1	2	3	4	5	6	7	8	
September 1999									
Contiguous states	873	1,176	1,479	1,783	2,086	2,389	2,693	2,996	+ 304
Alaska	1,091	1,471	1,850	2,229	2,608	2,987	3,366	3,746	+ 380
Hawaii	1,004	1,352	1,701	2,050	2,399	2,748	3,097	3,445	+ 349
September 2000									
Contiguous states	893	1,199	1,504	1,810	2,115	2,421	2,726	3,032	+ 306
Alaska	1,118	1,500	1,881	2,262	2,644	3,025	3,406	3,788	+ 382
Hawaii	1,029	1,380	1,731	2,082	2,433	2,784	3,135	3,486	+ 351
FY 2001									
Contiguous states	905	1,219	1,533	1,848	2,162	2,476	2,790	3,104	+ 315
Alaska	1,130	1,524	1,917	2,310	2,703	3,097	3,490	3,883	+ 394
Hawaii	1,039	1,401	1,763	2,125	2,487	2,849	3,210	3,572	+ 362
FY 2002									
Contiguous states	931	1,258	1,585	1,913	2,240	2,567	2,894	3,221	+ 328
Alaska	1,163	1,572	1,982	2,391	2,801	3,210	3,620	4,029	+ 410
Hawaii	1,072	1,448	1,824	2,200	2,576	2,951	3,327	3,703	+ 376
FY 2003									
Contiguous states	960	1,294	1,628	1,961	2,295	2,629	2,962	3,296	+ 334
Alaska	1,201	1,618	2,035	2,452	2,869	3,286	3,703	4,120	+ 418
Hawaii	1,105	1,489	1,872	2,256	2,639	3,023	3,406	3,790	+ 384
FY 2004									
Contiguous states	973	1,313	1,654	1,994	2,334	2,674	3,014	3,354	+ 341
Alaska	1,215	1,641	2,066	2,492	2,918	3,344	3,769	4,195	+ 426
Hawaii	1,120	1,511	1,902	2,293	2,684	3,075	3,466	3,857	+ 392
FY 2005									
Contiguous states	1,009	1,354	1,698	2,043	2,387	2,732	3,076	3,421	+ 345
Alaska	1,260	1,692	2,123	2,554	2,985	3,416	3,847	4,279	+ 432
Hawaii	1,160	1,556	1,953	2,349	2,746	3,142	3,539	3,935	+ 397
FY 2006									
Contiguous states	1,037	1,390	1,744	2,097	2,450	2,803	3,156	3,509	+ 354
Alaska	1,295	1,737	2,179	2,621	3,063	3,505	3,947	4,389	+ 442
Hawaii	1,193	1,599	2,006	2,412	2,818	3,224	3,631	4,037	+ 407
FY 2007									
Contiguous states	1,062	1,430	1,799	2,167	2,535	2,904	3,272	3,640	+ 369
Alaska	1,328	1,788	2,248	2,709	3,169	3,630	4,090	4,550	+ 461
Hawaii	1,221	1,645	2,069	2,492	2,916	3,339	3,763	4,186	+ 424
FY 2008									
Contiguous states	1,107	1,484	1,861	2,238	2,615	2,992	3,369	3,746	+ 377
Alaska	1,384	1,855	2,326	2,798	3,269	3,740	4,211	4,683	+ 472
Hawaii	1,273	1,707	2,140	2,573	3,007	3,440	3,873	4,307	+ 434
October 2008 to March 2009									
Contiguous states	1,127	1,517	1,907	2,297	2,687	3,077	3,467	3,857	+ 390
Alaska	1,409	1,896	2,384	2,871	3,359	3,846	4,334	4,821	+ 488
Hawaii	1,296	1,745	2,193	2,642	3,090	3,539	3,987	4,436	+ 449
April 2009 to September 2009									
Contiguous states	1,127	1,517	1,907	2,297	2,687	3,077	3,467	3,857	+ 390
Alaska	1,409	1,896	2,384	2,871	3,359	3,846	4,334	4,821	+ 488
Hawaii	1,296	1,745	2,193	2,642	3,090	3,539	3,987	4,436	+ 449
FY 2010									
Contiguous states	1,174	1,579	1,984	2,389	2,794	3,200	3,605	4,010	+ 406
Alaska	1,466	1,973	2,480	2,987	3,494	4,001	4,508	5,015	+ 507
Hawaii	1,350	1,816	2,282	2,748	3,214	3,679	4,145	4,611	+ 466

Table G.1. (continued)

Analysis period	Household size								Each additional
	1	2	3	4	5	6	7	8	
FY 2011									
Contiguous states	1,174	1,579	1,984	2,389	2,794	3,200	3,605	4,010	+ 406
Alaska	1,466	1,973	2,480	2,987	3,494	4,001	4,508	5,015	+ 507
Hawaii	1,350	1,816	2,282	2,748	3,214	3,679	4,145	4,611	+ 466
FY 2012									
Contiguous states	1,180	1,594	2,008	2,422	2,836	3,249	3,663	4,077	+ 414
Alaska	1,474	1,992	2,509	3,027	3,545	4,063	4,581	5,099	+ 518
Hawaii	1,359	1,835	2,310	2,786	3,261	3,737	4,212	4,688	+ 476
FY 2013									
Contiguous states	1,211	1,640	2,069	2,498	2,927	3,356	3,785	4,214	+ 429
Alaska	1,514	2,050	2,586	3,123	3,659	4,195	4,731	5,268	+ 537
Hawaii	1,394	1,887	2,379	2,872	3,365	3,858	4,351	4,844	+ 493
FY 2014									
Contiguous states	1,245	1,681	2,116	2,552	2,987	3,423	3,858	4,294	+ 436
Alaska	1,555	2,100	2,645	3,190	3,735	4,280	4,825	5,369	+ 545
Hawaii	1,434	1,934	2,435	2,935	3,436	3,936	4,437	4,937	+ 501
FY 2015									
Contiguous states	1,265	1,705	2,144	2,584	3,024	3,464	3,904	4,344	+440
Alaska	1,580	2,130	2,681	3,231	3,781	4,332	4,882	5,432	+551
Hawaii	1,454	1,960	2,466	2,972	3,478	3,984	4,490	4,996	+506
FY 2016									
Contiguous states	1,276	1,726	2,177	2,628	3,078	3,529	3,980	4,430	+451
Alaska	1,595	2,158	2,722	3,285	3,848	4,412	4,975	5,538	+564
Hawaii	1,468	1,986	2,504	3,022	3,540	4,058	4,575	5,093	+518
FY 2017									
Contiguous states	1,287	1,736	2,184	2,633	3,081	3,530	3,980	4,430	+451
Alaska	1,608	2,169	2,730	3,292	3,853	4,414	4,975	5,538	+564
Hawaii	1,481	1,997	2,513	3,028	3,544	4,060	4,575	5,093	+518
FY 2018									
Contiguous states	1,307	1,760	2,213	2,665	3,118	3,571	4,024	4,477	+453
Alaska	1,632	2,199	2,765	3,332	3,898	4,465	5,031	5,598	+567
Hawaii	1,502	2,023	2,544	3,065	3,586	4,107	4,628	5,150	+522

Source: U.S. Department of Agriculture.

Table G.2. Monthly SNAP net income screen, 1976 to 2018

Analysis period	Household size								Each additional
	1	2	3	4	5	6	7	8	
September 1976									
Contiguous states	\$245	\$322	\$433	\$553	\$660	\$787	\$873	\$993	+ 127
Alaska	307	413	593	753	893	1,073	1,187	1,353	+ 167
Hawaii	273	407	580	740	880	1,053	1,167	1,333	+ 166
February 1978									
Contiguous states	262	344	460	580	687	827	913	1,047	+ 133
Alaska	328	447	633	807	960	1,147	1,273	1,453	+ 180
Hawaii	286	427	607	773	920	1,100	1,220	1,393	+ 173
August 1980									
Contiguous states	316	418	520	621	723	825	926	1,028	+ 102
Alaska	397	524	650	777	904	1,030	1,157	1,284	+ 127
Hawaii	365	481	598	715	831	948	1,065	1,181	+ 117
August 1982									
Contiguous states	390	519	647	775	904	1,032	1,160	1,289	+ 129
Alaska	490	650	810	970	1,130	1,290	1,450	1,610	+ 160
Hawaii	450	597	745	892	1,040	1,187	1,335	1,482	+ 148
August 1984									
Contiguous states	415	560	705	850	995	1,140	1,285	1,430	+ 145
Alaska	520	701	882	1,063	1,244	1,425	1,605	1,786	+ 181
Hawaii	478	645	811	978	1,145	1,311	1,478	1,645	+ 167
August 1986									
Contiguous states	447	604	760	917	1,074	1,230	1,387	1,544	+ 157
Alaska	559	755	950	1,146	1,342	1,538	1,732	1,930	+ 196
Hawaii	515	695	875	1,055	1,235	1,415	1,595	1,775	+ 180
August 1988									
Contiguous states	459	617	775	934	1,092	1,250	1,409	1,567	+ 158
Alaska	572	770	969	1,167	1,365	1,564	1,762	1,960	+ 198
Hawaii	526	709	891	1,074	1,256	1,439	1,621	1,804	+ 183
August 1990									
Contiguous states	499	669	839	1,009	1,179	1,349	1,519	1,689	+ 170
Alaska	624	836	1,049	1,261	1,474	1,686	1,899	2,111	+ 213
Hawaii	573	769	965	1,160	1,356	1,552	1,748	1,944	+ 196
August 1991									
Contiguous states	524	702	880	1,059	1,237	1,415	1,594	1,772	+ 179
Alaska	654	877	1,100	1,324	1,547	1,770	1,994	2,217	+ 224
Hawaii	603	808	1,013	1,218	1,423	1,628	1,833	2,038	+ 205
August 1992									
Contiguous states	552	740	929	1,117	1,305	1,494	1,682	1,870	+ 189
Alaska	691	926	1,161	1,396	1,631	1,866	2,101	2,336	+ 235
Hawaii	635	851	1,068	1,285	1,501	1,718	1,935	2,151	+ 217
August 1993									
Contiguous states	568	766	965	1,163	1,361	1,560	1,758	1,956	+ 199
Alaska	709	957	1,205	1,454	1,702	1,950	2,199	2,447	+ 249
Hawaii	653	881	1,110	1,338	1,566	1,795	2,023	2,251	+ 229
September 1994									
Contiguous states	581	786	991	1,196	1,401	1,606	1,811	2,016	+ 205
Alaska	725	982	1,239	1,495	1,752	2,009	2,265	2,522	+ 257
Hawaii	670	905	1,140	1,375	1,610	1,845	2,080	2,315	+ 235
September 1995									
Contiguous states	614	820	1,027	1,234	1,440	1,647	1,854	2,060	+ 207
Alaska	767	1,025	1,284	1,542	1,800	2,059	2,317	2,575	+ 259
Hawaii	706	944	1,181	1,419	1,656	1,894	2,131	2,369	+ 238

Table G.2. (continued)

Analysis period	Household size								Each additional
	1	2	3	4	5	6	7	8	
September 1996									
Contiguous states	623	836	1,050	1,263	1,476	1,690	1,903	2,116	+ 214
Alaska	779	1,045	1,312	1,579	1,845	2,112	2,379	2,645	+ 267
Hawaii	718	963	1,208	1,453	1,698	1,943	2,188	2,433	+ 245
September 1997									
Contiguous states	645	864	1,082	1,300	1,519	1,737	1,955	2,174	+ 219
Alaska	805	1,079	1,352	1,625	1,899	2,172	2,445	2,719	+ 274
Hawaii	743	994	1,245	1,495	1,746	1,997	2,248	2,499	+ 251
September 1998									
Contiguous states	658	885	1,111	1,338	1,565	1,791	2,018	2,245	+ 227
Alaska	823	1,106	1,390	1,673	1,956	2,240	2,523	2,806	+ 284
Hawaii	756	1,017	1,278	1,539	1,800	2,060	2,321	2,582	+ 261
September 1999									
Contiguous states	671	905	1,138	1,371	1,605	1,838	2,071	2,305	+ 234
Alaska	840	1,131	1,423	1,715	2,006	2,298	2,590	2,881	+ 292
Hawaii	772	1,040	1,309	1,577	1,845	2,114	2,382	2,650	+ 269
September 2000									
Contiguous states	687	922	1,157	1,392	1,627	1,862	2,097	2,332	+ 235
Alaska	860	1,154	1,447	1,740	2,034	2,327	2,620	2,914	+ 294
Hawaii	791	1,061	1,331	1,601	1,871	2,141	2,411	2,681	+ 270
FY 2001									
Contiguous states	696	938	1,180	1,421	1,663	1,905	2,146	2,388	+ 242
Alaska	870	1,172	1,475	1,777	2,080	2,382	2,685	2,987	+ 303
Hawaii	800	1,078	1,356	1,635	1,913	2,191	2,470	2,748	+ 279
FY 2002									
Contiguous states	716	968	1,220	1,471	1,723	1,975	2,226	2,478	+ 252
Alaska	895	1,210	1,525	1,840	2,155	2,470	2,785	3,100	+ 315
Hawaii	825	1,114	1,403	1,692	1,981	2,270	2,560	2,849	+ 290
FY 2003									
Contiguous states	739	995	1,252	1,509	1,765	2,022	2,279	2,535	+ 257
Alaska	924	1,245	1,565	1,886	2,207	2,528	2,849	3,170	+ 321
Hawaii	850	1,145	1,440	1,735	2,030	2,325	2,620	2,915	+ 295
FY 2004									
Contiguous states	749	1,010	1,272	1,534	1,795	2,057	2,319	2,580	+ 262
Alaska	935	1,262	1,590	1,917	2,245	2,572	2,900	3,227	+ 328
Hawaii	861	1,162	1,463	1,764	2,065	2,365	2,666	2,967	+ 301
FY 2005									
Contiguous states	776	1,041	1,306	1,571	1,836	2,101	2,366	2,631	+ 265
Alaska	970	1,301	1,633	1,965	2,296	2,628	2,960	3,291	+ 332
Hawaii	892	1,197	1,502	1,807	2,112	2,417	2,722	3,027	+ 305
FY 2006									
Contiguous states	798	1,070	1,341	1,613	1,885	2,156	2,428	2,700	+ 272
Alaska	996	1,336	1,676	2,016	2,356	2,696	3,036	3,376	+ 340
Hawaii	918	1,230	1,543	1,855	2,168	2,480	2,793	3,105	+ 313
FY 2007									
Contiguous states	817	1,100	1,384	1,667	1,950	2,234	2,517	2,800	+ 284
Alaska	1,021	1,375	1,730	2,084	2,438	2,792	3,146	3,500	+ 355
Hawaii	940	1,265	1,591	1,917	2,243	2,569	2,895	3,220	+ 326
FY 2008									
Contiguous states	851	1,141	1,431	1,721	2,011	2,301	2,591	2,881	+ 290
Alaska	1,065	1,427	1,790	2,152	2,515	2,877	3,240	3,602	+ 363
Hawaii	980	1,313	1,646	1,980	2,313	2,646	2,980	3,313	+ 334
October 2008 to March 2009									
Contiguous states	867	1,167	1,467	1,767	2,067	2,367	2,667	2,967	+ 300
Alaska	1,084	1,459	1,834	2,209	2,584	2,959	3,334	3,709	+ 375
Hawaii	997	1,342	1,687	2,032	2,377	2,722	3,067	3,412	+ 345

Table G.2. (continued)

Analysis period	Household size								Each additional
	1	2	3	4	5	6	7	8	
April 2009 to September 2009									
Contiguous states	867	1,167	1,467	1,767	2,067	2,367	2,667	2,967	+ 300
Alaska	1,084	1,459	1,834	2,209	2,584	2,959	3,334	3,709	+ 375
Hawaii	997	1,342	1,687	2,032	2,377	2,722	3,067	3,412	+ 345
FY 2010									
Contiguous states	903	1,215	1,526	1,838	2,150	2,461	2,773	3,085	+ 312
Alaska	1,128	1,518	1,908	2,298	2,688	3,078	3,468	3,858	+ 390
Hawaii	1,039	1,397	1,755	2,114	2,472	2,830	3,189	3,547	+ 359
FY 2011									
Contiguous states	903	1,215	1,526	1,838	2,150	2,461	2,773	3,085	+ 312
Alaska	1,128	1,518	1,908	2,298	2,688	3,078	3,468	3,858	+ 390
Hawaii	1,039	1,397	1,755	2,114	2,472	2,830	3,189	3,547	+ 359
FY 2012									
Contiguous states	908	1,226	1,545	1,863	2,181	2,500	2,818	3,136	+ 319
Alaska	1,134	1,532	1,930	2,329	2,727	3,125	3,524	3,922	+ 399
Hawaii	1,045	1,411	1,777	2,143	2,509	2,875	3,240	3,606	+ 366
FY 2013									
Contiguous states	931	1,261	1,591	1,921	2,251	2,581	2,911	3,241	+ 330
Alaska	1,165	1,577	1,990	2,402	2,815	3,227	3,640	4,052	+ 413
Hawaii	1,072	1,451	1,830	2,210	2,589	2,968	3,347	3,726	+ 380
FY 2014									
Contiguous states	958	1,293	1,628	1,963	2,298	2,633	2,968	3,303	+ 335
Alaska	1,196	1,615	2,035	2,454	2,873	3,292	3,711	4,130	+ 420
Hawaii	1,103	1,488	1,873	2,258	2,643	3,028	3,413	3,798	+ 385
FY 2015									
Contiguous states	973	1,311	1,650	1,988	2,326	2,665	3,003	3,341	+339
Alaska	1,215	1,639	2,062	2,485	2,909	3,332	3,755	4,179	+424
Hawaii	1,119	1,508	1,897	2,286	2,675	3,065	3,454	3,843	+390
FY 2016									
Contiguous states	981	1,328	1,675	2,021	2,368	2,715	3,061	3,408	+347
Alaska	1,227	1,660	2,094	2,527	2,960	3,394	3,827	4,260	+434
Hawaii	1,130	1,528	1,926	2,325	2,723	3,121	3,520	3,918	+399
FY 2017									
Contiguous states	990	1,335	1,680	2,025	2,370	2,715	3,061	3,408	+347
Alaska	1,237	1,669	2,100	2,532	2,964	3,395	3,827	4,260	+434
Hawaii	1,140	1,536	1,933	2,330	2,726	3,123	3,520	3,918	+399
FY 2018									
Contiguous states	1,005	1,354	1,702	2,050	2,399	2,747	3,095	3,444	+349
Alaska	1,255	1,691	2,127	2,563	2,999	3,435	3,870	4,306	+436
Hawaii	1,155	1,556	1,957	2,358	2,759	3,160	3,560	3,961	+401

Source: U.S. Department of Agriculture.

Table G.3. Monthly maximum SNAP benefit, 1976 to 2018

Analysis period	Household size								
	1	2	3	4	5	6	7	8	Each additional
September 1976									
Contiguous states	\$50	\$92	\$130	\$166	\$198	\$236	\$262	\$298	+ 38
Alaska	68	124	178	226	268	322	356	406	+ 50
Hawaii	66	122	174	222	264	316	350	400	+ 50
February 1978									
Contiguous states	52	96	138	174	206	248	274	314	+ 40
Alaska	72	134	190	242	288	344	382	436	+ 54
Hawaii	70	128	182	232	276	330	366	418	+ 52
August 1980									
Contiguous states	63	115	165	209	248	298	329	376	+ 47
Alaska	98	180	258	327	388	466	515	589	+ 74
Hawaii	84	158	226	287	341	409	452	517	+ 65
August 1982									
Contiguous states	70	128	183	233	277	332	367	419	+ 53
Alaska	108	197	293	359	426	512	565	646	+ 81
Hawaii	95	175	250	318	378	453	501	572	+ 72
August 1984									
Contiguous states	76	139	199	253	301	361	399	457	+ 57
Alaska	109	200	286	364	432	518	473	655	+ 82
Hawaii	108	198	283	360	427	513	567	648	+ 81
August 1986									
Contiguous states	80	147	211	268	318	382	422	483	+ 60
Alaska	111	204	293	372	442	530	586	670	+ 84
Hawaii	124	228	327	415	493	592	654	748	+ 94
August 1988									
Contiguous states	87	159	228	290	344	413	457	522	+ 65
Alaska	113	207	297	378	448	538	595	680	+ 85
Hawaii	133	244	350	444	527	633	700	800	+ 100
August 1990									
Contiguous states	99	182	260	331	393	472	521	596	+ 75
Alaska	123	227	325	413	490	588	650	743	+ 93
Hawaii	151	276	396	503	598	717	793	906	+ 113
August 1991									
Contiguous states	105	193	277	352	418	502	555	634	+ 79
Alaska	137	252	361	459	545	655	723	827	+ 103
Hawaii	172	316	452	574	682	819	905	1,034	+ 129
August 1992									
Contiguous states	111	203	292	370	440	528	584	667	+ 83
Alaska	142	261	374	475	564	677	748	855	+ 107
Hawaii	181	333	477	606	720	864	955	1,091	+ 136
August 1993									
Contiguous states	111	203	292	370	440	528	584	667	+ 83
Alaska	143	262	376	477	567	680	752	859	+ 107
Hawaii	182	335	480	609	724	868	960	1,097	+ 137
September 1994									
Contiguous states	112	206	295	375	446	535	591	676	+ 85
Alaska	147	271	388	492	585	702	776	887	+ 111
Hawaii	187	343	492	625	742	890	984	1,125	+ 141
September 1995									
Contiguous states	115	212	304	386	459	550	608	695	+ 87
Alaska	147	271	388	492	585	702	776	887	+ 111
Hawaii	193	354	508	645	766	919	1,016	1,161	+ 145
September 1996									
Contiguous states	119	218	313	397	472	566	626	716	+ 90
Alaska	153	280	401	510	605	726	803	918	+ 115
Hawaii	198	364	522	663	787	945	1,044	1,193	+ 149

Table G.3. (continued)

Analysis period	Household size								
	1	2	3	4	5	6	7	8	Each additional
September 1997									
Contiguous states	120	220	315	400	475	570	630	720	+ 90
Alaska	153	280	401	510	605	726	803	918	+ 115
Hawaii	198	364	522	663	787	945	1,044	1,193	+ 149
September 1998									
Contiguous states	122	224	321	408	485	582	643	735	+ 92
Alaska	154	283	405	514	611	733	810	926	+ 116
Hawaii	197	361	517	657	780	936	1,035	1,183	+ 148
September 1999									
Contiguous states	125	230	329	419	497	597	659	754	+ 94
Alaska	157	287	412	523	621	746	824	942	+ 118
Hawaii	197	362	518	658	781	938	1,036	1,185	+ 148
September 2000									
Contiguous states	127	234	335	426	506	607	671	767	+ 96
Alaska	158	290	415	528	627	752	831	950	+ 119
Hawaii	199	365	523	664	789	947	1,047	1,196	+ 150
FY 2001									
Contiguous states	130	238	341	434	515	618	683	781	+ 98
Alaska	160	294	421	535	635	762	842	963	+ 120
Hawaii	199	366	524	665	790	948	1,048	1,198	+ 150
FY 2002									
Contiguous states	135	248	356	452	537	644	712	814	+ 102
Alaska	167	307	440	559	663	796	880	1,006	+ 126
Hawaii	204	374	536	680	808	970	1,072	1,225	+ 153
FY 2003									
Contiguous states	139	256	366	465	553	664	733	838	+ 105
Alaska	169	309	443	563	669	803	887	1,014	+ 127
Hawaii	212	389	557	707	840	1,008	1,114	1,273	+ 159
FY 2004									
Contiguous states	141	259	371	471	560	672	743	849	+ 106
Alaska	167	307	439	558	663	795	879	1,005	+ 126
Hawaii	210	386	553	702	834	1,001	1,106	1,264	+ 158
FY 2005									
Contiguous states	149	274	393	499	592	711	786	898	+ 112
Alaska	177	324	465	590	701	841	930	1,063	+ 133
Hawaii	222	408	585	742	882	1,058	1,170	1,337	+ 167
FY 2006									
Contiguous states	152	278	399	506	601	722	798	912	+ 114
Alaska	181	333	477	606	720	864	955	1,091	+ 136
Hawaii	229	421	602	765	909	1,090	1,205	1,378	+ 172
FY 2007									
Contiguous states	155	284	408	518	615	738	816	932	+ 117
Alaska	183	336	482	612	726	872	964	1,101	+ 138
Hawaii	240	440	630	800	950	1,140	1,260	1,440	+ 180
FY 2008									
Contiguous states	162	298	426	542	643	772	853	975	+ 122
Alaska	194	356	510	648	770	924	1,021	1,167	+ 146
Hawaii	258	473	678	861	1,022	1,227	1,356	1,549	+ 194
October 2008 to March 2009									
Contiguous states	176	323	463	588	698	838	926	1,058	+ 132
Alaska	210	385	552	701	833	999	1,105	1,263	+ 158
Hawaii	276	506	725	921	1,094	1,313	1,451	1,658	+ 207

Table G.3. (continued)

Analysis period	Household size								
	1	2	3	4	5	6	7	8	Each additional
April 2009 to September 2009 ^a									
Contiguous states	200	367	526	668	793	952	1,052	1,202	+ 150
Alaska	239	438	627	797	946	1,135	1,255	1,434	+ 179
Hawaii	314	575	824	1,046	1,243	1,491	1,648	1,884	+ 236
FY 2010									
Contiguous states	200	367	526	668	793	952	1,052	1,202	+ 150
Alaska	239	438	627	797	946	1,135	1,255	1,434	+ 179
Hawaii	314	575	824	1,046	1,243	1,491	1,648	1,884	+ 236
FY 2011									
Contiguous states	200	367	526	668	793	952	1,052	1,202	+ 150
Alaska	239	438	627	797	946	1,135	1,255	1,434	+ 179
Hawaii	314	575	824	1,046	1,243	1,491	1,648	1,884	+ 236
FY 2012									
Contiguous states	200	367	526	668	793	952	1,052	1,202	+ 150
Alaska	239	438	627	797	946	1,135	1,255	1,434	+ 179
Hawaii	314	575	824	1,046	1,243	1,491	1,648	1,884	+ 236
FY 2013									
Contiguous states	200	367	526	668	793	952	1,052	1,202	+ 150
Alaska	239	438	627	797	946	1,135	1,255	1,434	+ 179
Hawaii	319	585	839	1,065	1,265	1,518	1,678	1,917	+ 240
October 2013 ^a									
Contiguous states	200	367	526	668	793	952	1,052	1,202	+ 150
Alaska	239	438	627	797	946	1,135	1,255	1,434	+ 179
Hawaii	330	605	867	1,100	1,307	1,568	1,734	1,981	+ 248
November 2013 to September 2014									
Contiguous states	189	347	497	632	750	900	995	1,137	+ 142
Alaska	226	415	594	755	896	1,076	1,189	1,359	+ 170
Hawaii	330	605	867	1,100	1,307	1,568	1,734	1,981	+ 248
FY 2015									
Contiguous states	194	357	511	649	771	925	1,022	1,169	+146
Alaska	227	417	598	759	902	1,082	1,196	1,367	+171
Hawaii	332	609	872	1,107	1,315	1,578	1,744	1,994	+249
FY 2016									
Contiguous states	194	357	511	649	771	925	1,022	1,169	+146
Alaska	237	435	622	790	939	1,127	1,245	1,423	+178
Hawaii	343	630	902	1,146	1,361	1,633	1,805	2,063	+258
FY 2017									
Contiguous states	194	357	511	649	771	925	1,022	1,169	+146
Alaska	237	435	622	790	939	1,127	1,245	1,423	+178
Hawaii	354	650	931	1,182	1,404	1,685	1,862	2,128	+266
FY 2018									
Contiguous states	192	352	504	640	760	913	1,009	1,153	+144
Alaska	230	422	604	767	911	1,094	1,209	1,382	+173
Hawaii	358	657	941	1,195	1,419	1,703	1,883	2,152	+269

Source: U.S. Department of Agriculture.

^a ARRA increased maximum benefits from April 2009 through October 2013.

Table G.4. Minimum monthly SNAP benefit, 1980 to 2018

Analysis period	Household size		
	1	2	3 +
August 1980 to FY 2008			
Contiguous states	\$10	\$10	\$0
Alaska	10	10	0
Hawaii	10	10	0
First half of FY 2009 (October 2008 to March 2009)			
Contiguous states	14	14	0
Alaska	17	17	0
Hawaii	22	22	0
Second half of FY 2009 (April to September 2009) to FY 2012			
Contiguous states	16	16	0
Alaska	19	19	0
Hawaii	25	25	0
FY 2013 to October 2013			
Contiguous states	16	16	0
Alaska	19	19	0
Hawaii	26	26	0
FY 2014			
Contiguous states	15	15	0
Alaska	18	18	0
Hawaii	26	26	0
FY 2015			
Contiguous states	16	16	0
Alaska	18	18	0
Hawaii	27	27	0
FY 2016			
Contiguous states	16	16	0
Alaska	19	19	0
Hawaii	28	28	0
FY 2017			
Contiguous states	16	16	0
Alaska	19	19	0
Hawaii	28	28	0
FY 2018			
Contiguous states	15	15	0
Alaska	18	18	0
Hawaii	29	29	0

Source: U.S. Department of Agriculture.

Table G.5. Resource eligibility, 1976 to 2018

Analysis period	Resource eligibility
September 1976 to August 1984	\$1,500; \$3,000 for elderly households with at least 2 members
August 1986 to FY 2002	\$2,000; \$3,000 for elderly households
FY 2003 to FY 2011	\$2,000; \$3,000 for households containing elderly individuals or individuals with disabilities
FY 2012 to FY 2014	\$2,000; \$3,250 for households containing elderly individuals or individuals with disabilities
FY 2015 to FY 2017	\$2,250; \$3,250 for households containing elderly individuals or individuals with disabilities
FY 2018	\$2,250; \$3,500 for households containing elderly individuals or individuals with disabilities

Source: U.S. Department of Agriculture.

APPENDIX H
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