SNAP-Ed Data Improvement

Agenda and Action Plan

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Authors
Stacy Gleason
Jarle Crocker
Vivian Gabor
Dani Hansen

Submitted to
Lisa Mays
United States Department of Agriculture
Food and Nutrition Service
Braddock Metro Center II
1320 Braddock Place
Alexandria, VA 22314

Submitted by
Insight Policy Research, Inc.
1901 North Moore Street
Suite 1100
Arlington, VA 22209

Project Director
Stacy Gleason
# Contents

Executive Summary ................................................................................................................................. i

Chapter 1. Introduction ............................................................................................................................. 1

  Background ........................................................................................................................................... 1

  Statement of the Problem .................................................................................................................... 3

  Organization of the Action Plan ............................................................................................................ 5

Chapter 2. Approach ..................................................................................................................................... 6

Chapter 3. Recommendations by Data Improvement Priority ...................................................................... 8

  Priority 1: Improve SNAP-Ed data collection and reporting ................................................................. 8

  Priority 2: Increase continuity of data use across the SNAP-Ed life cycle ........................................... 13

  Priority 3: Increase data accessibility and transparency ..................................................................... 16

  Priority 4: Develop an implementation plan for longer term improvements ..................................... 18

Chapter 4. Recommendations by Data Category ....................................................................................... 20

  Program Reach .................................................................................................................................... 20

  Delivery Sites and Settings .................................................................................................................. 23

  Partnerships and Coalitions ................................................................................................................ 25

  Policy, Systems, and Environmental Change Adoption ...................................................................... 28

  Individual Behavior Change ................................................................................................................. 30

Appendix A. Steering Committee and TWG Members ............................................................................. A-1

Appendix B. Summary of Findings on Program Dosage .......................................................................... B-1

Appendix C. Summary of Findings on Population Results ....................................................................... C-1

## Figures

Figure 1.1. SNAP-Ed Data Life Cycle ........................................................................................................ 3

Figure 2.1. Overview of Four Project Phases .......................................................................................... 6
Executive Summary

The Supplemental Nutrition Assistance Program (SNAP) is the country’s largest food assistance program, providing more than 40 million low-income people with more than $60 billion in supplemental benefits to purchase groceries each month. The SNAP Nutrition Education and Obesity Prevention Services grant program (SNAP-Ed) complements SNAP by teaching people about good nutrition, how to make their food dollars stretch further, and how to live physically active lifestyles. SNAP-Ed works with all types of partners to build healthier communities, so the healthy choice is the easiest choice for people to make.

In July 2019 the U.S. Department of Agriculture’s Food and Nutrition Service (FNS) contracted with Insight Policy Research (Insight) on the Updating SNAP-Ed Data Collection Processes project to improve reporting on program outputs, outcomes, and impacts in compliance with section 4019 of the Food and Nutrition Act of 2008 (Pub. L. 88–525; 1 U.S.C. 112, 204), as amended in 2018. This action plan summarizes input provided by nearly 100 experts and outlines recommendations to improve processes and ensure SNAP-Ed data are reliable, valid, and meaningful when aggregated to the national level.

Approach

To identify SNAP-Ed data needs and opportunities for both near-term and longer term data improvements, the study team formed a series of expert groups that consisted of a Steering Committee and 12 technical working groups (TWGs), conducted a focused literature review, convened each expert group 1 to 3 times (for a total of 24 meetings), synthesized information across sources, and validated and refined project conclusions. The following work was accomplished in each project phase:

- **Phase 1. Selected SNAP-Ed data categories and expert groups.** A total of 12 categories were selected: 7 impact-focused and 5 process-focused categories. Almost 100 SNAP-Ed and other nutrition and research experts were recruited to form the TWGs. The Steering Committee was composed of project champions from each TWG who understood the strategic objectives of the project and represented key stakeholder groups.

- **Phase 2. Identified SNAP-Ed data needs, challenges, and opportunities.** The study team held initial meetings with each of the TWGs and the Steering Committee to clarify SNAP-Ed data needs, understand challenges, and identify opportunities for improvement.

- **Phase 3. Further defined priority measurement areas and data development steps.** Key themes and takeaways from the 12 initial TWG meetings were compiled and shared with FNS, Steering Committee members, and the Association of SNAP Nutrition Education Administrators evaluation committee. Preliminary recommendations were also formulated and shared with FNS and the Steering Committee during its second meeting.

- **Phase 4. Synthesized information across sources and project phases to develop and validate a data improvement agenda.** Information gathered across all the project phases was synthesized to develop this action plan. To refine and validate project conclusions and recommendations, this document was presented to and reviewed by the Steering Committee.
Recommendations by Data Improvement Priority

To support FNS in its immediate response to requests for data about program outcomes, broad recommendations were categorized as either near term (i.e., 6 to 12 months) or longer term and organized around four priority areas. A high-level summary of findings and recommendations by priority area follows; see chapter 3 for more details on these recommendations.

Priority 1: Improve SNAP-Ed data collection and reporting

FNS, the Steering Committee, and TWG members agreed quality national data on SNAP-Ed outcomes and impacts are essential for communicating to policymakers about the program’s effectiveness. Recommendations to improve the type and quality of SNAP-Ed data available at the national level follow:

- Recommendation 1.1: Select measures at the national level that demonstrate outcomes aligned with the program’s mission.
- Recommendation 1.2: Develop clear operational definitions and guidelines for each measure.
- Recommendation 1.3: Identify opportunities for more meaningful aggregation.
- Recommendation 1.4: Develop protocols and tools to support consistent data aggregation.
- Recommendation 1.5: Develop a revised form and new system for collecting standardized national data measures that supports timely data review and aggregation (implemented in concert with recommendation 2.3).

Priority 2: Increase continuity of data use across the SNAP-Ed life cycle

Experts engaged in the project suggested State agencies (SAs) and State implementing agencies (IAs) needed more training, guidance, and other resources to help them use State plans and annual reports in a meaningful way for program management, planning, and improvement. FNS staff also indicated there were significant challenges to extracting the needed information from annual reports because of their length and other factors such as that the reports could not be queried or easily searched. Recommendations related to this priority area follow:

- Recommendation 2.1: Provide enhanced guidance and support on SNAP-Ed needs assessment.
- Recommendation 2.2: Encourage annual reporting of success stories on national priority areas to provide richness to quantitative data.
- Recommendation 2.3: Revise State plan and annual report templates to promote continuous data use, analysis, and visualization to inform planning and reduce burden (implemented in concert with recommendation 1.5).

Priority 3: Increase data accessibility and transparency

A common theme across the TWG discussions was the value of making SNAP-Ed data directly available to funders, partners, broader networks of community-based organizations and advocates, and the general public. This stemmed from the importance of using data to make the case for SNAP-Ed to policymakers at all levels, building awareness of the program in communities, strengthening
partnerships with other service providers, and supporting program improvement efforts. Recommendations related to this priority area follow:

- Recommendation 3.1: Develop a communication plan.
- Recommendation 3.2: Develop an annual impact report that includes select data on SNAP-Ed outputs and outcomes.

Priority 4: Develop an implementation plan for the longer term

This action plan represents an important initial step toward improved SNAP-Ed data; however, substantial work remains. Experts estimate it will take 3 to 5 years to fully implement a new SNAP-Ed data collection and reporting system. To balance the need to have improved data as soon as possible with a realistic timeframe for full implementation, it is important for FNS to consider options for a longer term plan that will leverage more immediate efforts. Existing reporting systems used to track and report SNAP-Ed data may inform longer term implementation plans. Recommendations related to this priority area follow:

- Recommendation 4.1: Engage other Federal agencies that have undergone similar efforts to improve data collection and reporting systems.
- Recommendation 4.2: Develop a pilot testing plan for new data collection measures and reporting protocols.
- Recommendation 4.3: Develop a technical assistance and training plan.
- Recommendation 4.4: Develop a timeline for a longer term rollout plan.

Recommendations by Data Category

Experts made substantial progress toward identifying candidate measures for national reporting and opportunities for data improvement that would help ensure SNAP-Ed data are reliable, valid, and meaningful when aggregated to the national level. Recommendations on how to standardize, report, revise, and define measures were identified for the following five content areas:

1. Program reach
2. Program delivery sites and settings
3. Partnerships and coalitions
4. Policy, systems, and environmental change adoption
5. Individual behavior change

These impact areas have been identified as being high priority for national aggregation because related data are needed for the purposes of program improvement and communicating program effectiveness and successes to partners and key stakeholder groups. For each impact area, the action plan identifies recommended measures, key findings, and specific opportunities for data improvement.
Chapter 1. Introduction

The Supplemental Nutrition Assistance Program (SNAP) is the country’s largest food assistance program, providing more than 40 million low-income people with more than $60 billion in supplemental benefits to purchase groceries each month. The SNAP Nutrition Education and Obesity Prevention Services grant program (SNAP-Ed) complements SNAP by equipping people using or eligible for the program with tools and information to make healthy choices that align with the U.S. Department of Agriculture’s (USDA) guidance and Dietary Guidelines for Americans.1 Specifically, SNAP-Ed teaches people about good nutrition, how to make their food dollars stretch further, and how to live physically active lifestyles. SNAP-Ed works with all types of partners to build healthier communities, so the healthy choice is the easiest choice for people to make.

In July 2019 USDA’s Food and Nutrition Service (FNS) contracted with Insight Policy Research (Insight) to update SNAP-Ed data collection processes and tools to improve reporting on program outputs, outcomes, and impacts in compliance with section 4019 of the Food and Nutrition Act of 2008 (Pub. L. 88–525; 1 U.S.C. 112, 204), as amended in 2018. The three objectives of the Updating SNAP-Ed Data Collection Processes project follow:

1. Identify SNAP-Ed data needs through currently available information and develop 8–15 data collection and reporting categories on which the project will focus.
2. Convene and engage small technical working groups (TWG) of experts in public health nutrition and related fields to discuss data collection and reporting protocols.
3. Develop an action plan to improve data collection and reporting that facilitates aggregation at a national level.

This action plan addresses the third objective. It provides important contextual information, presents summary findings from the project, and outlines five data improvement priorities and related recommendations. The recommendations were informed by a focused review of SNAP-Ed literature and resources, 21 TWG meetings focused on 12 important SNAP-Ed data categories, three Steering Committee meetings, project discussions with FNS, and information gleaned from presentations and discussions at the 2020 annual conference of the Association of SNAP-Ed Nutrition Education Administrators (ASNNA).

Background

Since 1992 SNAP-Ed has helped low-income children and adults lead healthier lives.2 Originally called Food Stamp Nutrition Education, the program focused on delivering nutrition education messages to reinforce the link between food security and healthy diet. However, following the enactment of the 2010 Child Nutrition Act (Pub. L. 111–296; 42 U.S.C. 1751), which amended section 2 of the Food and Nutrition Act of 2008, SNAP-Ed was restructured as a nutrition education and obesity prevention grant program. The statute updated the goals of SNAP-Ed by (1) emphasizing promotion; (2) expanding the scope of SNAP-Ed activities to include individual and group-based strategies, comprehensive multilevel

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Interventions, and/or community and public health approaches; and (3) lowering the income eligibility threshold to 185 percent of the Federal Poverty Level to be more consistent with other FNS means-tested programs. Importantly, the statute also specified SNAP-Ed activities must be evidence based.

Nearly 10 years later the Agriculture Improvement Act of 2018 (Pub. L. 115–334; 7 U.S.C. 2036a), also known as the 2018 Farm Bill, strengthened SNAP-Ed by bolstering technical assistance for evidence-based practices, emphasizing data-driven impacts and outcomes, and adding a legislative mandate for FNS to prepare an annual report to Congress. The 2018 Farm Bill, along with 7 C.F.R. 272.2, also provided legal authority for program implementation requirements, which included data to be collected and reported, such as through a State’s SNAP-Ed Plan (State plan) and annual report.

More than 150 State implementing agencies (IAs) currently contract with their State SNAP agencies (SAs) to deliver SNAP-Ed programming in all 50 States, the District of Columbia, Guam, and the U.S. Virgin Islands.3 SAs have considerable flexibility in how they deliver SNAP-Ed, including choosing community-based organizations and universities to help design and implement SNAP-Ed interventions. These entities in turn nurture, enhance, and support partnerships with various types of community organizations and stakeholders to bolster SNAP-Ed activities and collaborate on the program’s goals for improved healthy eating and physical activity.

**SNAP-Ed Data**

Per the **SNAP-Ed Plan Guidance,**4 all SAs must collect and report program data annually. These data are part of a continuum referred to as the SNAP-Ed data life cycle (see figure 1.1). The life cycle starts with a needs assessment and visioning process. During this phase SAs and their IAs conduct an assessment of the nutrition, physical activity, and obesity prevention needs of their SNAP-eligible populations and develop a shared vision for improving the likelihood individuals eligible for SNAP will make healthy food and lifestyle choices that prevent obesity.

During the planning phase, the agencies are expected to use the needs assessment results to develop specific, measurable, achievable, realistic, and timebound (known as SMART) goals and objectives and plan strategies for the upcoming fiscal year (FY) that will best meet community needs and align with the SNAP-Ed mission. Agencies also identify measures they can use to assess progress toward their goals and objectives. Information from SNAP-Ed needs assessment, visioning, and planning phases culminates in a State plan, which SAs must submit to FNS before the start of the Federal FY to receive grants to provide nutrition education and obesity prevention services. With prior approval, State agencies can submit a multiyear State plan that covers a 2- or 3-year period rather than an annual plan. SNAP-Ed guidance suggests multiyear plans may allow agencies to better plan, implement, evaluate, and show progress on multilevel interventions, including policy, systems, and environmental change (PSE) change initiatives.

Program implementation for the next Federal FY begins upon FNS approval of the State plan but no sooner than October 1. During this phase and throughout the FY, SAs and IAs work with partners to implement planned SNAP-Ed strategies to achieve the desired outcomes in places where people eat, learn, live, play, shop, and work. Simultaneously SAs and IAs engage in evaluation activities to assess program implementation and outcomes—that is, they observe, collect, and track data that can later be used to assess their achievements and progress toward statewide goals and objectives. This phase

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3 Internal FY 2018 EARS data provided by FNS
4 Published annually by FNS, the SNAP-Ed Plan Guidance provides policy guidance for States on the operation of SNAP-Ed and includes templates for the State plan and the annual report.
culminates in the form of a SNAP-Ed annual report that describes SNAP-Ed project activities, outcomes, and expenditures for the prior year, and standardized data on programmatic outputs submitted through the Education and Administration Reporting System (EARS). In most cases EARS data are due to FNS by December 31, while the annual report data are due to FNS by January 31. State plans, annual reports, and standardized data submitted through EARS are the primary sources of SNAP-Ed data.

Finally, once the data are compiled, SAs and IAs engage in important dissemination activities. They share information with partners and stakeholders about program achievements and outcomes through impact reports and other means.

**Figure 1.1. SNAP-Ed Data Life Cycle**

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**Statement of the Problem**

Although all SAs must collect and report program data, and reporting methods have evolved considerably in recent years, the ability to aggregate SNAP-Ed data and assess the impact of SNAP-Ed programs at the national level remains elusive. Several known challenges have limited the use of SNAP-Ed data, particularly for assessing program performance and effectiveness at the national level, and helped to guide the direction and focus of this project:

1. **SAs measure and report on different outcomes.** SAs have considerable leeway in designing, evaluating, and reporting on their SNAP-Ed programming. This flexibility enables an SA to design SNAP-Ed efforts and evaluation approaches that align with the needs of its population and available resources. The SNAP-Ed Evaluation Framework\(^5\)—a menu of 51 indicators and related evaluation tools used to measure the effectiveness of SNAP-Ed activities—have helped SAs and IAs improve their data collection and reporting practices and, to some extent, increase data consistency. However, the flexibility that allows SAs to choose from among indicators and outcome measures also creates substantial variation in available outcome data across agencies.

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2. **Outcome definitions and data collection methods vary across SAs.** Even when SAs select and report on the same outcome measures, and FNS provides further guidance on those measures, individual data or reporting elements may be defined differently, making it difficult to construct reliable national estimates. For example, when measuring and reporting on fruit consumption, agencies might assess change over time in terms of cups or frequency of consumption. Variation in data collection methods can also introduce inconsistencies and bias into the estimates.

3. **Reporting templates do not support valid data aggregation.** The primary purpose of data and documents provided throughout the SNAP-Ed data life cycle is to communicate how SNAP-Ed funding will be used in a given FY (i.e., State plan) and then describe how it was actually used (i.e., annual report and EARS data). The templates for these documents—particularly State plans and annual reports—were not designed with a goal of collecting data that would be valid when aggregated to the national level. Data submitted through EARS can be aggregated. However, challenges related to data consistency and concerns about data reliability still exist, especially when certain outputs are aggregated across multilevel interventions.

4. **The data life cycle does not adequately support the use of SNAP-Ed data for program monitoring and continuous improvement.** The data reported in EARS and the annual report should allow SAs and FNS to evaluate whether State-level goals and objectives were met and, in turn, inform program planning and related improvements in subsequent FYs. Unfortunately, the timeline for SNAP-Ed planning and reporting; variation in SA and IA staff resources and capacity; and other limitations, including some of those identified in the Analysis of SNAP-Ed Data for All States Study Final Report, hinder the use of SNAP-Ed data for program monitoring and continuous improvement. For example, annual reports frequently contain IA-level information rather than information aggregated and compiled at the State level. The lengthy narrative format of these documents and lack of standardization when reporting on indicators from the SNAP-Ed Evaluation Framework limit the use of SNAP-Ed data at the national level.

FNS and program partners have long recognized the need for better SNAP-Ed data; the Analysis of SNAP-Ed Data for All States Study Final Report formally documented some of the challenges. The U.S. Government Accountability Office’s (GAO) recent report to Congress titled Nutrition Education: USDA Actions Needed to Assess Effectiveness, Coordinate Programs, and Leverage Expertise also highlighted the need for better data by recommending FNS improve how it gathers information on the effectiveness

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6 The SNAP-Ed Plan Guidance, published annually by FNS, provides policy guidance for States on the operation of SNAP-Ed and includes templates for the State plan and the annual report.


of SNAP-Ed interventions to ensure the interventions meet program goals. This action plan represents a significant and important first step toward the goal of improved SNAP-Ed data.

**Organization of the Action Plan**

The subsequent chapters of this action plan describe the project approach (chapter 2) and outline recommendations for improving SNAP-Ed data collection and reporting. Chapter 3 synthesizes proceedings across TWG discussions and provides broad recommendations to address the following specific requirements of the action plan:

- Data collection protocols that ensure valid and accurate aggregation of each data category at a national level
- A cohesive strategy for data collection and reporting for all phases of the annual program life cycle, including the needs assessment, State plan, and annual report
- Plain-language communication of outcome and impact results so they can be understood by a lay audience without expertise in public health nutrition programs

This plan also presents broad recommendations for rolling out SNAP-Ed data collection and reporting changes that will affect the 53 SAs and more than 150 IAs responsible for delivering SNAP-Ed programming nationally and tracking and measuring SNAP-Ed’s inputs, outputs, outcomes, and impacts.

Chapter 4 synthesizes TWG discussions and provides specific recommendations by SNAP-Ed data category that focus on revised or additional national reporting measures and the data development steps necessary to fully support their consistent and high-quality measurement and reporting.
Chapter 2. Approach

To identify SNAP-Ed data needs and opportunities for both near-term and longer term data improvements, the study team formed a series of expert groups that consisted of a Steering Committee and 12 TWGs, conducted a focused literature review, convened each expert group one to three times, synthesized information across sources, and validated and refined project conclusions. Figure 2.1 summarizes the work accomplished in each of the four project phases.

Figure 2.1. Overview of Four Project Phases

Phase 1. Selected SNAP-Ed Data Categories and Expert Groups

During the first project phase, the study team conducted a focused review of SNAP-Ed literature resources that included program planning and reporting templates, available recent summaries of SNAP-Ed data, and the SNAP-Ed program and policy guidance. The team used an iterative process to select the SNAP-Ed data categories around which TWGs should be formed and then recruited and formed the expert groups. A total of 12 categories were selected: 7 impact-focused and 5 process-focused categories.

- The seven **impact-focused data categories** enabled the TWGs to dive deep into specific areas of measurement (see text box). The TWGs were tasked with recommending output, outcome, and impact measures on which the program should focus, and rigorous yet practical data collection methods that could be widely and consistently implemented for each measure.

- The five **process-focused data categories** allowed for the identification of recommendations that applied to all content areas. As relevant to the data category, process-focused TWGs were tasked with recommending how the output, outcome, and impact measures could and should be reported, aggregated, and analyzed as well as identifying strategies for supporting SAs and IAs to effectively roll out any new data collection and reporting requirements.

A total of 96 SNAP-Ed and other nutrition and research experts were recruited to form the 12 TWGs, which were designed to reflect the diversity in SNAP-Ed roles and perspectives. Volunteers served on one to three TWGs based on their expertise and preferences. The Steering Committee was thoughtfully composed of project champions from each TWG who understood the strategic objectives of the project.
and represented key stakeholder groups. Appendix A provides additional detail on the recruitment process and TWG and Steering Committee membership.

**Phase 2. Identified SNAP-Ed Data Needs, Challenges, and Opportunities**

During the second project phase, the study team held initial meetings with each of the TWGs and the Steering Committee to clarify SNAP-Ed data needs, understand challenges, and identify opportunities for improvement. Prior to the initial Steering Committee meeting, members received a document outlining the problem statement, mission, goal, methods, and expectations for the project. During the meeting the team introduced the project and facilitated a discussion to obtain guidance on project direction. Notably, the Steering Committee advised that Insight outline a common set of objectives and provide the TWGs with relevant materials before each meeting.

Consistent with the Steering Committee’s guidance, TWG members also received materials outlining the objectives, discussion questions, and relevant background information prior to the initial meeting. During initial meetings, the impact-focused TWGs primarily discussed SNAP-Ed data needs (i.e., who asks for the data, and how do they use it) and data measures, while the process-focused groups worked on identifying process improvement opportunities for SNAP-Ed data collection, reporting, and analysis.

**Phase 3. Further Defined Priority Measurement Areas and Data Development Steps**

During the third project phase, key themes and takeaways from the 12 initial TWG meetings were compiled and shared with FNS, Steering Committee members, and the ASNNA evaluation committee which exists to advance evaluation practice, distill learning, and disseminate what works among SNAP-Ed practitioners. Preliminary recommendations were also formulated and shared with FNS and the Steering Committee during its second meeting. Feedback sessions helped to validate most of the preliminary project conclusions and recommendations, refine other recommendations, and narrow the focus of continued collaboration with the TWGs. To this end only 9 of the 12 TWGs were convened for a second time. Members of the Population Results, Data Analysis, and Defining Interventions groups were informed they would not meet for a second time.

Prior to the second meeting with each of the nine TWGs, the Steering Committee received a summary of findings from the first round of TWG meetings and general framework for its upcoming discussion. Impact-focused TWGs further defined priority measurement areas and identified data development steps during the meetings, while processed-focused TWGs concentrated on recommendations to support implementing new data collection approaches, such as technical assistance needs required during the rollout period.

**Phase 4. Synthesized Information Across Sources and Project Phases to Develop and Validate a Data Improvement Agenda**

During the fourth and final phase, information gathered across all the project phases was synthesized to develop an action plan—that is, specific policy and data development recommendations and actions to further the goal of improved SNAP-Ed data. To validate the project conclusions and recommendations, the action plan was presented to and reviewed by the Steering Committee. The feedback from the committee was incorporated into the final action plan delivered to FNS.
Chapter 3. Recommendations by Data Improvement Priority

Many of the priorities and recommendations in this action plan are intended for short-term implementation in the next 6 to 12 months. However, others are meant to build on short-term actions or will simply require longer periods of time to implement. During initial meetings the experts who composed the TWGs and Steering Committee were encouraged to “think big”—i.e., consider ways in which SNAP-Ed data could be improved even if seemingly implausible given current requirements and processes. Some of the ideas that surfaced were worth continued discussion. However, during second meetings with these groups, the study team purposefully shifted the focus to discuss concrete ideas and improvements that could be made in the near term. The reality is that FNS needs to be immediately responsive to requests for data about program outcomes. To support FNS in this effort, Insight categorized broad recommendations as either near term or longer term and organized them around four priority areas—

- Priority 1: Improve SNAP-Ed data collection and reporting.
- Priority 2: Increase continuity of data use across the SNAP-Ed data life cycle.
- Priority 3: Increase data accessibility and transparency.
- Priority 4: Develop an implementation plan for the longer term.

Priority 1: Improve SNAP-Ed data collection and reporting

Standardized SNAP-Ed data captured annually through EARS focuses on program outputs such as the number of participants reached; the number of direct education series and sessions delivered; the number and types of sites and settings where interventions were implemented; the types of programming approaches used (direct education, social marketing, or PSE); and the partnerships developed to support SNAP-Ed programming or its goals. Consistent with the requirements outlined in the Food and Nutrition Act of 2008 as amended in 2018, SAs also conduct a comprehensive analysis of program outcomes and impacts and report on them annually. However, the measures on which they report vary, and these data are buried in lengthy annual reports, which makes it impossible for FNS to summarize them at the national level.

FNS, the Steering Committee, and TWG members concurred quality national data—such as those on SNAP-Ed outcomes and impacts—were essential for communicating to policymakers about the program’s effectiveness. This section presents five broad recommendations from TWG members and project subject matter experts to help FNS achieve this priority. During the project, substantial progress was made toward Recommendations 1.1 and 1.2 relative to program reach, delivery sites and settings, partnerships, PSE, and individual behavior change; related findings are discussed in chapter 4.
Recommendation 1.1: Select measures at the national level that demonstrate outcomes aligned with the program’s mission

TWG experts acknowledged the importance and value of capturing quality program data at the national level. However, they implored FNS to keep required reporting focused only on data that would be used or was useful for the purposes of program monitoring, improvement, and communicating about program effectiveness. The GAO report mentioned in chapter 2 noted, “Agencies that seek to manage an excessive number of performance measures may risk creating a confusing excess of data that will obscure rather than clarify performance issues.” For these reasons among others, it may be in FNS’s best interest to limit the number of measures it tracks and aggregates at the national level. If this approach is taken, FNS will need to assure agencies that by focusing on specific measures for national aggregation, it does not intend to stifle innovation or limit the types of interventions and strategies employed by agencies nationally—a concern raised by experts in several TWGs.

Two specific suggestions offered by the experts may help FNS focus the scope of standardized reporting. First, experts suggested FNS determine what it wants or needs to be able to say about the program and work backward to identify measures and aggregation needs—i.e., start with the end in mind. During initial meetings with each impact-focused TWG, the experts were asked what they thought was most important to say or know about the SNAP-Ed content area on which their TWG was focused. The sentiment across groups was that it was most important to know or say SNAP-Ed—

- Helps low-income individuals and families make healthier choices
- Collaborates with partners and leverages their resources to implement sustainable changes
- Equitably delivers (e.g., in diverse settings and to audiences that reflect the characteristics of the eligible population) evidence-based programming

These statements effectively summarize the core values of SNAP-Ed as expressed by program administrators, implementers, and other SNAP-Ed stakeholders, and should ultimately guide the measurement selection process.

Second, experts recommended FNS better align standardized reporting (e.g., EARS) with the SNAP-Ed Evaluation Framework. For the past 5 years, per SNAP-Ed guidance, FNS has strongly encouraged SAs to measure seven priority indicators and report on them in their annual reports (see text box) from the SNAP-Ed Evaluation Framework. In response, a growing number of SAs have adapted their data collection and reporting approaches to include reporting on the priority indicators. However, because these data are not uniform, they cannot be aggregated across agencies. By revisiting the priority indicators and incorporating associated measures into standardized reporting (e.g., EARS or a new form

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**Seven Priority Indicators From the SNAP-Ed Evaluation Framework**

- ST7: Organizational partnerships
- ST8: Multi-sector partnerships and planning
- MT1: Healthy eating
- MT2: Food resource management
- MT3: Physical activity and reduced sedentary behaviors
- MT5: Nutrition supports
- MT6: Physical activity and reduced sedentary behavior supports

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or system for uniform data collection), FNS would both ensure SA support and improve access to program outcome and impact data at the national level.

**Recommendation 1.2: Develop clear operational definitions and guidelines for each national measure**

Focusing national measures on the outputs, outcomes, and impacts of greatest interest and aligned with the SNAP-Ed Evaluation Framework would be a reasonable first step toward improved data. However, for data to be *useful*, they must also be reliable, valid, and meaningful to policymakers when aggregated to the national level. When selecting national reporting measures, it is therefore important to consider whether the desired data can realistically be collected and, if so, whether the data can be collected in a manner and using methods that will ensure reliable and valid results when aggregated to the national level. It is equally important for measures to be defined and communicated in a way that will be the most meaningful to key stakeholder groups.

To ensure the consistent measurement and estimation of national measures once selected, it is essential for each to be defined as clearly as possible. When discussing specific measures from the SNAP-Ed Evaluation Framework that would be appropriate for national reporting, experts identified operational definitions that might require additional clarity. For example, the current definition for PSE reach reads: “Total potential number of persons who encounter the improved environment or are affected by the policy change on a regular (typical) basis and are assumed to be influenced by it.”

Experts in the TWG Program Reach group noted the terms “exposed,” “regularly,” and “assumed to be influenced by” were subjective or unclear and recommended the terms be revised accordingly. One expert from the Data Analysis TWG may have captured the general sentiment best:

> “The interpretive guide is helpful in setting the stage for defining what people are measuring and how to measure that. Now that people have been using it for several years, perhaps we need to come back to the table and decide if there is ambiguity in a definition. Make sure States are measuring the same.”

In addition to clear operational definitions for each national measure, experts expressed the need for additional guidelines to support consistent measurement and estimation across agencies. For example, related to measuring PSE change adoption, experts suggested providing both written guidelines and a recorded training that both incorporated real-world examples to demonstrate how reach should be measured given different scenarios. Experts also advised that these guidelines be informed by or pretested with a diverse set of agencies to ensure comprehension and applicability for a wide range of programming. It might be advisable to call upon SAs that have successfully created guidelines for consistent measurement and estimation and test those specific models with other agencies for potential nationwide use. Additional information gathering may also be needed to ensure the planned measures will be most meaningful to the intended audience for these data.

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12 In this context, “valid” should be interpreted as statistically and ecologically valid as appropriate for a given measure. For SNAP-Ed, statistical validity is most applicable to measures of individual behavior change assessed via statistical tests.

Recommendation 1.3: Identify opportunities for more meaningful data aggregation

SAs are expected to use comprehensive interventions that reach participants at multiple levels of the Social-Ecological Model for Food and Physical Activity Decisions. Although comprehensive multilevel interventions may offer the greatest potential for influencing behavior, they also complicate the measurement and reporting of related outputs and outcomes. Agencies currently report numerous outputs in EARS by intervention. An intervention is defined as a specific set of evidence-based, behavior-focused activities and/or actions implemented to promote healthy eating and active lifestyles. When reporting information about their interventions in EARS, agencies are encouraged to consider all components (direct education, social marketing, and PSE) and strategies used to affect a behavior-focused objective of their State plans. Experts reported it was particularly challenging to measure and report unduplicated reach for multilevel interventions. According to the Defining Interventions TWG, many agencies have begun defining and naming interventions based on the setting in which they are delivered (e.g., K–12, early childcare, food retail) because this makes it somewhat easier to measure unduplicated reach, although challenges still exist. For example, because identifying information is not collected from program participants, it is impossible to know whether an individual has participated in more than one SNAP-Ed intervention. However, not all States use this approach. Others define or report on an intervention according to its name in the SNAP-Ed Toolkit (e.g., Cooking Matters, Pick-A-Better Snack) or use a hybrid of the two approaches. Variation in how interventions are defined or named makes it impossible to meaningfully aggregate data to the national level.

To address this issue, FNS could outline for agencies how interventions should be defined to ensure consistency, and the data are valid when aggregated to the national level. Defining interventions based on the setting in which they are delivered has some advantages as noted earlier in this section. In addition to better supporting the measurement of unduplicated reach, some experts noted this approach made it easier to plan and ensure SNAP-Ed programming reaches eligible populations across diverse settings. However, experts noted previous attempts had been made to consistently define interventions across agencies, but with limited success. Experts in other TWGs suggested and seemed to prefer a model that aggregated certain program outputs and outcomes (or indicators) differently. For example, experts generally agreed reach should be aggregated by approach or intervention type (direct education, social marketing, and PSE), while PSE adoption should be aggregated by setting. Aggregating and reporting by approach would not yield reliable counts of unduplicated reach; however, experts argued these data would be more reliable and could be used to tell a different but important story about SNAP-Ed’s reach. Some experts argued accurate estimates of unduplicated reach are not possible for the reasons already described.

Experts across the TWGs also noted how SNAP-Ed program reach, dose, sites and settings, partnerships and coalitions, and other metrics submitted via EARS were somewhat siloed and would be more useful if they could be combined or summarized in different ways. This sentiment led to discussions about the extent to which data should be aggregated or disaggregated when reported to FNS. Data that is already aggregated in meaningful ways may be easier for some agencies to report and for FNS to manage with less sophisticated reporting and analysis tools. Disaggregated data, on the other hand, may require a more sophisticated reporting system but if well managed can be queried and summarized in a variety of ways, allowing FNS and its stakeholders to draw meaningful insights. Of interest was disaggregated data reported for each SNAP-Ed site to enable it to be mapped and further aggregated by different

geographic indicators (e.g., Census tract, ZIP Code, congressional district, county) as long as privacy could be ensured.

**Recommendation 1.4: Develop protocols and tools to support consistent data aggregation**

Regardless of approach, to avoid some of the pitfalls mentioned earlier, it is essential for FNS to provide agencies with clear and specific protocols for aggregating national reporting measures. Without clear protocols for each national measure, agencies will inevitably interpret guidance and report differently, resulting in data that is unreliable or invalid when aggregated and thus not useful at the national level. To avoid this pitfall protocols should include specific real-world examples that demonstrate consistent ways to aggregate data for each measure.

To support SAs and IAs, especially those with limited resources or less capacity for data collection and evaluation, FNS should subsequently consider developing or sharing tools informed by IA experience and that could be used to track data for national reporting. During the TWG meetings, experts discussed a variety of tools and systems they had used or developed for this purpose. While some of these tools and systems were proprietary, others were developed by SAs and IAs, and with their permission, might be appropriate for broad dissemination and use. Of course, any tools disseminated for widespread use should be capable of producing the information desired for national reporting and be accompanied by adequate live and/or recorded trainings and written instructions.

These types of supports are important for all national measures. However, they are perhaps most important relative to measuring and reporting on individual behavior changes because there is currently great variation in how these data are collected. To ensure consistent, high-quality outcome data, the Data Aggregation TWG favored the use of aggregation protocols like those recently used in the Southeast and Mountain Plains Regions, through which outcomes were broadly defined and inclusion criteria for data aggregation were clearly outlined. More detail on the specific findings and recommendations related to aggregating individual behavior change data are described in chapter 4.

**Recommendation 1.5: Develop a revised form and new system for collecting standardized national data measures that supports timely data review and aggregation**

A frequent topic of discussion during many of the TWG meetings was data systems. When discussing revisions or additions to current measures and guidelines and protocols to ensure consistency, experts frequently described how data were captured and could be aggregated in their data “systems.” Many experts noted their SAs or IAs used the Program Evaluation and Reporting System (PEARS) developed and coordinated by Kansas State Research and Extension, while others reported using the SNAP Education Evaluation and Database System (known as SEEDS) developed by the University of Minnesota Extension. SNAP-Ed IAs that are land grant universities use the Web-Based Nutrition Education Evaluation and Reporting System (known as WebNEERS), which is designed, hosted, and maintained by Clemson University. Others have developed their own systems and tools for tracking data. Each system has different features and functionality, but they all have one thing in common—they provide a single place for an agency to systematically record, track, and store data. This is yet another important component of improved SNAP-Ed data. As one TWG expert noted:

“There needs to be a place to put the data. Process and methods are important, but what we need is a systematic place to store that data.”
Although some experts said it was not critical for all agencies to use the same system, they acknowledged the importance of having some type of system in place for tracking and storing data. Experts were sensitive to the fact many agencies did not have the resources required to use a third-party system like those mentioned earlier. Without a “systematic place to store” data, the quality and consistency of data reported by these agencies may suffer. At a minimum, the form currently used by FNS to capture EARS data will need to be updated to accommodate revisions to current measures or new measures. However, it may be advisable to develop a new online system altogether to support consistent data reporting and more timely access to SNAP-Ed data, and potentially to layer SNAP-Ed data with data from other publicly available datasets such as Census data and the Behavioral Risk Factor Surveillance System. One TWG member noted an online data system could also allow for real-time data entry and quarterly data reviews for quality control purposes. The need for an online system and the sophistication of that system will likely depend on the specific measures selected for national reporting and, more importantly, the level of desired disaggregation. The more detailed the desired data, the more important it will be to provide agencies, especially those with limited resources, with a data system for tracking and reporting SNAP-Ed data.

Priority 2: Increase continuity of data use across the SNAP-Ed life cycle

SAs are required to submit an annual or multiyear State plan and annual report to FNS. The SNAP-Ed Plan Guidance provides the minimum content requirements, instructions, and templates for these documents. The State plan must be a single submission that includes a summary of the State’s needs assessment, State-level goals and measurable objectives, descriptions of all interventions or programming planned to be implemented by all IAs and other entities contracted by the SA to provide SNAP-Ed services, a summary of evaluation plans, detailed information on program staffing, and a line-item budget and narrative.

For the annual report, SAs have significant discretion in how to document outcomes for SNAP-Ed activities conducted during the reporting period (i.e., the prior FY). However, the SNAP-Ed Plan Guidance specifies at a minimum, the following must be included: (1) a one-page summary of SNAP-Ed activities, outcomes, progress toward achieving goals, and major achievements and setbacks, if any; (2) a breakdown of administration expenditures; (3) a summary of project evaluations conducted (with the full report as an attachment); and (4) planned program improvements.

While State plans and annual reports are designed to meet program management and oversight needs, and comply with legislative mandates, FNS also intends for them to be a useful tool for SAs and IAs to use to analyze data each year to build on past successes and make improvements as needed in both program reach and outcomes. However, several Data Life Cycle TWG members suggested SAs and IAs needed more training, guidance, and other resources to help them use these documents in a meaningful way for program management, planning, and improvement. FNS staff also indicated there were significant challenges to extracting the needed information from States’ annual reports because of their length and other factors, which included that they were often submitted as unsearchable PDF.

Priority 2 Recommendations and Supporting Strategies

Near term
- Recommendation 2.1: Provide enhanced guidance and support on SNAP-Ed needs assessment.
- Recommendation 2.2: Encourage annual reporting of success stories on national priority areas to provide richness to quantitative data.

Longer term
- Recommendation 2.3: Revise State plan and annual report templates to promote continuous data use, analysis, and visualization to inform planning and reduce burden.
documents. To improve the continuity and use of data across the SNAP-Ed planning and reporting cycle, experts recommended targeted enhancements and supports in three areas as described below.

**Recommendation 2.1: Provide enhanced guidance and support on SNAP-Ed needs assessment**

The FY 2020 *SNAP-Ed Plan Guidance* recognizes the needs assessment is a crucial component of the SNAP-Ed planning process. For their State plans, SAs are asked to assess the population health-related nutrition and physical activity needs of the State’s target audience, discuss the implications of these findings, and describe how the findings informed planned programming and related activities. The needs assessment must be valid and data-driven; present the nutrition, physical activity, and obesity prevention needs of the target population as well as their barriers to accessing healthy foods and physical activity; consider the diverse characteristics of the target population; consider the needs of Tribal populations; and indicate the rationale for choosing specific population segments for intervention(s). During TWG meetings, experts shared how in some States, needs assessments incorporated diverse primary and secondary data sources and actively engaged IAs in goal setting and collaborative program planning. However, experts also acknowledged this was not the norm; many SAs needed more guidance on needs assessment expectations and execution. SAs would benefit from additional information and training on the data types and sources most useful for needs assessment and on how to access and use these data and other pertinent information to vision and shape program improvements. Experts suggested FNS implement the following complementary strategies to address these needs:

- Facilitate peer-to-peer learning opportunities, such as via webinars or in-person trainings, and provide a technical assistance manual on needs assessment to supplement the SNAP-Ed Toolkit.
- Enhance guidance and tools to help more SAs and IAs access and use data from population surveys and administrative data relevant to SNAP-Ed from other agencies within their States. These resources should reference data available at the State and local jurisdiction levels from the SNAP-Ed Engagement Network site, leverage the expertise available from the University of Missouri (through the Engagement Network) to use geographic information system (GIS) data in their needs assessments, and include model data-sharing agreements that SAs can use when obtaining administrative data from other agencies within the State.

Like other Federal programs, comprehensive needs assessments should be conducted every 3 to 5 years rather than annually. Data from population-based surveys are updated less often than annually, so many of the data points used in the needs assessments remain unchanged year to year. Likewise, agencies may need to track and analyze program data for several years before they can truly assess the outcomes of their multiyear interventions or interventions involving public health approaches, including PSE initiatives. State plans could and should still address annually emerging issues or needs that are identified. Conducting a quality needs assessment can take substantial effort; therefore this recommendation would effectively reduce SA burden.

Recommendation 2.2: Encourage annual reporting of success stories on national priority areas to provide richness to quantitative data

Throughout the TWG meetings, many experts noted qualitative SNAP-Ed success stories were critically important for communicating to legislators and other policymakers about how the program worked and affected communities. FNS currently encourages SAs and IAs to submit success stories on a voluntary basis through the SNAP-Ed Connection website. The site provides a systematic way for agencies to submit these stories, which are subsequently reviewed using a rubric or score card. Experts suggested success stories be incorporated into annual reports. In the words of one TWG member:

“[By focusing on narrative stories in the annual report,] we can answer some critical questions FNS has around innovation and areas of real impact. [The current structure] gets at what we are doing and what the outcomes and impacts may be. We are missing the description of people doing the important work.”

Experts also suggested FNS could identify priority topics for the success stories annually. For example, a priority topic for FY 2021 might relate to the creative channels SAs and IAs used during the COVID-19 pandemic to effectively promote healthy eating and physical activity to a rapidly expanding SNAP-eligible population.

Recommendation 2.3: Revise State plan and annual report templates to promote continuous data use, analysis, and visualization to inform planning and reduce burden

Experts from the Data Life Cycle TWG recommended State plan and annual report templates more closely align with each other and the SNAP-Ed Evaluation Framework and support streamlined reporting and analysis. For example, some suggested State goals, objectives, and proposed activities outlined in the State plan should be submitted in an online format to enable automation across templates in the data life cycle (e.g., automation of this information into the agency’s annual report form) and aggregation of this information across agencies. Others suggested SAs evaluate and report on their progress toward planned objectives using indicators from the Framework. Experts agreed these and similar changes would effectively reduce the length and burden and increase the utility of annual reports for performance management purposes.

Experts also suggested the annual report be viewed as a companion document to more extensive standardized reporting, and SNAP-Ed guidance place greater emphasis on the inclusion of narrative success stories about partnerships and innovative programming, including at the local level. While experts recognized the need for and encouraged SAs to continue requesting more detailed reports from their IAs for the purposes of monitoring and program improvement, they acknowledged much of the project-specific information contained in annual reports need not be submitted to FNS.
Even if revised templates improve the utility of these documents, searching and compiling information contained within them will remain a challenge unless the data are made more accessible for this purpose. Again, to this end FNS should consider revising the format of State plan and annual report submissions to an online form to ensure the narrative and quantitative data contained within them can be searched and compiled more easily (e.g., through an online submission process).

**Priority 3: Increase data accessibility and transparency**

There is a growing trend across Federal agencies toward increased accessibility and transparency for the data their programs collect. This is primarily driven by a variety of legislation that requires agencies to show the “return on investment” generated by their programs through more detailed reporting on program outputs and outcomes made directly available to funders, stakeholders, and the general public. The 2018 Farm Bill’s requirement for FNS to provide additional technical assistance to support the evaluation of SNAP-Ed and this project’s focus on the identification of measures that will allow for the aggregation of data at the national level are tightly connected to similar efforts across the Federal Government.

Reflecting this broader trend, a common theme across the TWG discussions was the importance of making SNAP-Ed data directly available to funders, partners, broader networks of community-based organizations and advocates, and the general public. The reasons for this included the importance of using data to make the case for SNAP-Ed to policymakers at all levels, building awareness of the program in communities, strengthening partnerships with other service providers, and supporting program improvement efforts. Descriptions of three recommendations made by TWG members and project subject matter experts to help FNS achieve this priority follow.

**Recommendation 3.1: Develop a communication plan**

Implementation of a new approach to SNAP-Ed data collection will require extensive collaboration and clear communication at the Federal, Regional, State, and local levels. To better facilitate this process, the Rollout TWG recommended the development of a communication plan that would establish clear procedures for how FNS would communicate changes in data collection to Regions, SAs, IAs, and other key stakeholders such as software providers. The plan should create a central point of contact to ensure consistent messaging and make it easier for stakeholders at all levels to ask and receive answers to questions during the rollout phase. Members of multiple TWGs also stressed the importance of using “plain language” when communicating about SNAP-Ed data to funders, community partners, the general public, and other key stakeholders. To this end the communication plan should also include next steps to build the capacity of FNS, SAs, and IAs through technical assistance and training to effectively communicate about SNAP-Ed data to diverse audiences. This might also include the use of methods such as focus groups to collect feedback on program products such as reports and websites.
Recommendation 3.2: Develop an annual report that includes selected data on SNAP-Ed outputs and outcomes

While SNAP-Ed currently provides an annual Federal report to Congress on coordination among Federal nutrition education programs, the report is not publicly available. Likewise, information contained in the report is formatted to conform with reporting requirements and not framed for dissemination to a broader audience. Development of an annual “impact report” intended for diverse stakeholders could leverage improved SNAP-Ed data to tell the program’s story. The report would highlight key results from nationally aggregated data to inform the public about SNAP-Ed programs and activities with an emphasis on program successes that would be most meaningful to policymakers; additional information gathering may be needed to fully assess the latter. Importantly, the impact report should acknowledge behavior change often takes more than 1 year to achieve. Quantitative data would be supplemented by short case studies, descriptions of innovative service delivery strategies, and program participant stories that would provide compelling examples of the impact SNAP-Ed had on the communities it served. The impact report and complementary executive summary or one-pager would also serve as a common resource for SAs and IAs to use in outreach and other communication efforts. Ideally, the impact report would be used to complement a public-facing website (discussed under Recommendation 4.3) that would include more comprehensive quantitative data to serve as a technical resource to practitioners, researchers, and program stakeholders.

Recommendation 3.3: Incorporate SNAP-Ed data into SNAP-Ed Connection

Many Federal programs now make significant amounts of data available through public-facing websites. Such sites increase the transparency of programs by showing basic information such as how funding is allocated by State, the demographics of populations served, and the cost per unit of service. These sites also make it easier for policymakers, researchers, advocates, and the general public to access data for publicly funded programs. Another benefit of such platforms is their ability to support data visualization tools such as dashboards and geographic information systems. Such a website would allow for both the display of nationally aggregated data in a user-friendly format and the ability to disaggregate data by State and, in some cases, down to the Census tract and ZIP Code levels as long as privacy could be ensured. Indeed, a common theme in the TWG discussions was how a new data collection system should support the improved access and use of information by SNAP-Ed stakeholders and the importance of being able to query data from the local to national levels. A common national website for SNAP-Ed data would provide a “one-stop shop” for stakeholders at all levels to support program improvement. A next step would be to outline protocols related to how data would be vetted, who would have data access privileges, and how frequently data would be updated on the website.
Priority 4: Develop an implementation plan for longer term improvements

The Rollout TWG estimated a period of 3 to 5 years for the full implementation of a new SNAP-Ed data collection and reporting system. To balance the need for improved data as soon as possible with a realistic timeframe for full implementation, it is important for FNS to consider options for a longer term plan that will leverage more immediate efforts. Descriptions of four recommendations from TWG members and project subject matter experts to help FNS achieve this priority follow.

Recommendation 4.1: Engage other Federal agencies that have undergone similar efforts to improve data collection and reporting system

Because efforts to improve SNAP-Ed data collection will continue beyond short-term actions, FNS would benefit from structured peer-to-peer engagement with other agencies who have undergone similar changes to identify best practices, discuss lessons learned, and use existing resources. Such efforts have the added benefit of being low cost and relatively easy to implement. TWG members identified the Centers for Disease Control and Prevention’s (CDC) programs on nutrition and obesity as programs similar to SNAP-Ed and recognized for the rigor and reliability of their data collection frameworks. Learning from CDC’s process could help the rollout for SNAP-Ed be more efficient, effective, and successful. Other Federal agencies with parallel efforts include the Community Service Block Grant and the Maternal and Child Health Bureau, both under the U.S. Department of Health and Human Services.

Recommendation 4.2: Develop a pilot testing plan for new data collection measures

Members of the Rollout TWG stressed the importance of pilot testing changes to SNAP-Ed data collection measures in advance of final implementation. Pilot testing would include a diverse group of SAs and IAs, with the latter ideally organized by type (e.g., university, nonprofit service provider) and data tracking capacity to identify any issues with data collection methods, reporting procedures, challenges with capacity, and technical assistance needs. The greater the extent of the planned changes, the more important it would be to gather feedback through pilot testing. The Rollout TWG also explained the importance of conducting pilot testing as early as possible; the testing phase would require a minimum of 1 year, followed by a year of rollout support (e.g., communication and training), with full implementation of the new system in the third year.

Recommendation 4.3: Develop a technical assistance and training plan

Related to the recommendation for pilot testing, the Rollout TWG also emphasized the importance of providing adequate training and technical assistance to support the implementation of a new data collection system. One concern raised was about the capacity of some SAs, especially those with limited staff, to adequately support their IAs. Another concern was about the consistency of communication and the importance of providing a single unified message about the proposed changes. Rollout TWG members recommended the creation of a single point of contact to manage communication and technical assistance efforts, which could be provided by FNS or an external contractor in close
coordination with ASNNA. The Rollout TWG also advised technical assistance and training would likely require multiple methods—i.e., a menu of opportunities—that could include additional resources (e.g., archived trainings, manuals) posted to the already robust SNAP-Ed Connection website; webinars; learning communities or peer-to-peer learning opportunities; and in-person trainings. Although not explicitly recommended by the Rollout TWG, FNS should also develop a graphically oriented logic model or performance management framework to illustrate how components of the SNAP-Ed data life cycle—i.e., needs assessment, plans, activities, evaluation, and reports—work together for performance management and to track and improve behavioral outcomes.

Recommendation 4.4: Develop a timeline for a longer term rollout plan

As discussed in this chapter, the recommendations in Priority 5 would likely require 3 to 5 years to implement, a period far beyond the scope of this contract. While many of the recommendations in this action plan could be implemented in the short term, any substantial changes to SNAP-Ed data collection measures would likely require longer term efforts and substantial advanced planning. As a result, FNS should consider the development of a longer term rollout plan to work through issues such as roles and responsibilities among key stakeholders and the sequencing of activities such as pilot testing and technical assistance.
Chapter 4. Recommendations by Data Category

Substantial progress was made by the TWGs and Steering Committee to identify candidate measures for national reporting and specific data development actions that would help ensure SNAP-Ed data were reliable and statistically valid when aggregated to the national level. Recommendations in this section are specific to, and thus organized by, data category. More specifically, findings and recommendations are presented for five content areas identified as high priority for national aggregation of program outputs, outcomes, and impacts:

1. Program reach
2. Program delivery sites and settings
3. Partnerships and coalitions
4. PSE change adoption
5. Individual behavior change

Findings related to program dosage and population results are presented in appendices B and C because, although important, may not be as useful or feasible for national reporting and aggregation.

Program Reach

Recommendations for Improving Data on SNAP-Ed Program Reach

1. Continue to include reach measures in standardized reporting, but have agencies report the following by SNAP-Ed approach rather than by SNAP-Ed intervention:
   - Unduplicated direct education reach by age and sex and by race and ethnicity (EARS items 2 and 3)
   - PSE reach (based on modified MT5f)
   - Social marketing reach (not yet defined)

2. Refine the definition of PSE reach and provide templates with instructions for tracking and reporting.

3. Revise or develop guidance for measuring PSE reach in different types of settings and for changes that occur at the jurisdictional level rather than the site or organizational levels.

4. Clarify when PSE reach should be reported and/or whether PSE reach should be tracked beyond the year when the change is initially adopted.

5. Work with social marketing experts to identify appropriate and meaningful measures of SNAP-Ed social marketing outputs, outcomes, and impacts and identify additional data development steps.

Current Measures

Program reach is defined in EARS as “the audience that experiences the intervention or encounters an improved environment on a regular (typical) basis and is assumed to be influenced by it.” All SAs and IAs report information on the reach of their SNAP-Ed programming in EARS in three different ways: (1) unduplicated number of SNAP-Ed participants reached by direct education programming, by age group
and sex; (2) unduplicated number of SNAP-Ed participants reached by direct education programming, by race and ethnicity; and (3) the estimated number of SNAP-Ed participants reached by intervention type (with intervention types defined at the discretion of each State).

**Key Findings**

TWG experts emphasized reliable data on program reach was critically important for SNAP-Ed and a priority for diverse stakeholders outside of SNAP-Ed. When asked who needed information about program reach and why, experts in this TWG explained reliable reach numbers were widely understood, commonly requested, and important in a variety of ways, which included the following:

- FNS needs reach data to respond to policymakers’ requests for the number of people overall and the number of SNAP participants served by the program nationally; in specific States; and, in some cases, using specific approaches or interventions.
- Elected officials, decisionmakers, program administrators, and other program funders need reach data to determine and justify the level of resources allocated to the program.
- FNS Regional Offices, SAs, and IAs need reach data for program accountability—for example, to assess how well program resources are being spent and the extent to which implemented activities reach SNAP participants and the SNAP eligible target populations identified in the State plan or in a contract or memorandum of understanding.
- While experts emphasized the importance of documenting reach in a reliable way for all types of programming, they also noted reach data should be presented alongside program outcomes and impacts to provide a full picture of how SNAP-Ed was influencing the lives of those served.

**Opportunities for data improvement**

Current measures of program reach have strengths and weaknesses. SAs and IAs are generally able to report unduplicated reach for direct education as required because these interventions usually consist of a discrete series of classes or sessions that individuals attend; however, it is possible for individuals to participate and be included in the reach counts for multiple interventions. IAs have systems in place to document the age, sex, race, and ethnicity of each direct education participant and can easily aggregate the data for reporting in EARS.

Reporting unduplicated reach by intervention, however, is particularly challenging for SAs and IAs to measure and report when the intervention includes multiple approaches (direct education and social marketing or PSE). As previously discussed (see Priority 2 in chapter 3), SA flexibility in defining an intervention makes it even more challenging to aggregate reach to the national level. To address this limitation, experts generally agreed reach should be tracked, reported, and aggregated by approach (direct education, social marketing, and PSE) rather than by intervention. Aggregating and reporting by approach still would not yield counts of unduplicated reach; however, most experts agreed these data would be more reliable and could be used to tell a different but important story about SNAP-Ed’s reach. Having reliable national estimates of SNAP-Ed’s reach through social marketing and PSE are important because these approaches touch many lives. Some experts argued accurate estimates of unduplicated reach were not possible for the reasons already described.

While most experts agreed reporting reach by approach rather than by intervention would be an improvement, they acknowledged PSE and social marketing reach were more challenging to estimate. Doing so will require clear definitions and instructions to ensure agencies collect and report the
Experts also noted PSE reach could be more challenging to estimate in some settings than others and when the change was adopted at the jurisdictional level rather than at a specific site or with an organization. In contrast to direct education or social marketing, PSE changes often have sustained reach because individuals are exposed to the policy changes indefinitely (e.g., healthy vending machines in schools or healthy food guidelines for food pantries). For this reason, the experts recommended the guidance make clear when PSE reach should be measured. For example, should agencies report PSE reach only during the year in which the change was adopted, or continue to report it for as long as the change is sustained? The latter would increase—and perhaps appropriately so—the reported reach of PSE changes, but it would also be extremely labor intensive to track (e.g., whether and how long PSE changes are maintained, the number of people potentially exposed each year). Doing so would also most certainly lead to duplicate counts because individuals would likely be exposed to multiple PSE changes over time. Moving forward it will be important to obtain input from other agencies that have funded PSE efforts designed to promote healthy eating and physical activity to learn how they are measuring reach for this kind of programming.

Related to social marketing, TWG experts noted social marketing reach had unique attributes, further emphasizing the importance of keeping these counts separate. For example, social marketing reach is often tracked and reported in terms of marketing impressions, not the number of SNAP-eligible people exposed to the campaign. Reporting on impressions can increase reach estimates substantially because each individual likely (ideally) experiences multiple impressions. Because many of the social marketing outcomes identified in the SNAP-Ed Evaluation Framework are not useful for national reporting and aggregation, additional time and thought leadership will be required to identify measures that best capture and communicate the reach of SNAP-Ed’s social marketing campaigns. In developing measures of social marketing reach, it will be important to obtain input and experience from experts who have developed measures of social marketing reach for similar programming, including health promotion and disease prevention programming funded by CDC.

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Delivery Sites and Settings

Recommendations for Improving Data on SNAP-Ed Delivery Sites and Settings

1. Continue to capture data on the number of SNAP-Ed sites and settings through standardized reporting:
   - Option 1: Number of SNAP-Ed sites aggregated by setting
   - Option 2: Key attributes of each SNAP-Ed site (e.g., address, intervention types)

2. Develop improved guidance for categorizing site setting type when setting types are nested (e.g., food pantry within a church) or SNAP-Ed is delivered in several settings within the same physical site (e.g., classrooms, pantry, and health clinic at the same school).

3. Obtain broader feedback on current setting types and revise as needed to reduce redundancy and enhance communication about sector-specific SNAP-Ed engagement (e.g., agriculture, education).

4. Consult with a diverse group of SAs and IAs that do not currently capture SNAP-Ed data by site to assess the feasibility of doing so.

Current Measures

SAs and IAs are asked to report on the setting type(s) in which each SNAP-Ed intervention was delivered, and for each setting type, report the number of sites in which the intervention was delivered. For the purpose of standardization, agencies can select from 34 precoded setting categories, including several “other” codes grouped into six broad setting domains (eat, learn, live, play, shop, and work).20

Key Findings

Experts in this TWG emphasized the importance of having reliable data to describe the diversity of sites and settings in which SNAP-Ed was delivered. They also suggested these data were key to assessing and improving the equity of program access. As clearly expressed by one Sites and Settings TWG expert—

“Getting good information on where SNAP-Ed is occurring is key to tell the SNAP-Ed story and promote equity…. Sites and settings are where we do the work of SNAP-Ed so that it becomes a more accessible program.”

Experts said data on SNAP-Ed sites and settings were frequently requested by a variety of stakeholders that wanted to know the extent to which SNAP-Ed programming was delivered in certain setting types, counties, congressional districts, Tribal jurisdictions, or other geographical areas of interest. They also noted these data were important for planning and coordinating SNAP-Ed programming and assessing the extent to which implemented activities were reaching the target populations identified in a SNAP-Ed State plan or in a contract or memorandum of understanding.

Opportunities for data improvement

SAs and IAs frequently seek guidance from FNS about categorizing the setting type of an intervention (for reporting purposes) when it is occurring in different setting types at the same physical site. For example, experts reported some interventions occurring within schools were taking place in the classroom, an onsite food pantry, and in the health clinic. Similarly, interventions implemented by or in partnership with an Indian Tribal Organization (ITO) likely fit into more than one setting type (e.g., Indian reservation or ITO and school, health clinic or senior nutrition center). These findings suggest the need for additional written guidance on coding setting type when programming is delivered in a setting that is nested within another setting.

Experts also noted for social media interventions targeted to individual households, the setting type was typically reported as “individual homes,” and each home was subsequently counted as a separate site. By design, large numbers of eligible households are reached through social media (e.g., online channels). As a result counting each household accessed through online channels makes it appear as though most SNAP-Ed programming is delivered in individual homes, which is of course far from the truth. Experts suggested as part of a broader examination of reporting output and outcome data for social marketing, there might be an opportunity to reexamine the sites and settings as they were counted and categorized for interventions that primarily use social media channels.

Finally, experts from several large SAs and IAs explained they have developed reporting systems for SNAP-Ed that go beyond EARS to capture in-depth information at the site level. They explained requiring implementers to input the address of each SNAP-Ed intervention has provided important information for internal planning and coordination and allowed for the creation of maps and reports and various data dashboards able to display information customized for different stakeholders. These experts suggested reporting data by site, combined with GIS analysis, would allow FNS to map the locations of SNAP-Ed programming in every State, visualize where multilevel approaches were being used, and identify where unmet needs required new resources or capacity building. Although experts emphasized the potential advantages of site-level reporting (rather than reporting on the number of sites by setting), they also acknowledged moving to this type of detailed reporting would require intensive training, technical assistance, tools, and other supports to ensure the data were effectively managed and consistently reported. If the data were to be incorporated into a public-facing website, experts cautioned against sharing sensitive information or information that could be detrimental to the program if taken out of context; therefore detailed data would likely need to be aggregated or appropriate levels of masking applied. Because this approach would require additional vetting with a diverse group of SAs and IAs and the development of appropriate supports and protocols, it was viewed as a longer term data improvement strategy.
Partnerships and Coalitions

Recommendations for Improving Data on Partnerships

1. Continue to include partnership measures in standardized reporting with a focus on the following refined measures:
   - Number of active partnerships
   - Number of active partnerships that provide financial support for SNAP-Ed activities
   - Qualitative success stories of active partnership accomplishments

2. Refine the definition of active partnerships (ST7) to clarify the term “regularly.”

3. Consider revising the list of active partnership types to enhance data aggregation and best meet stakeholder information needs.

4. Improve guidance to include examples of correct and incorrect reporting on active partnerships by type.

5. Consider narrowing the list of assistance types in EARS or substituting it with a new measure focused on the financial support partners provide for SNAP-Ed work.

6. Identify and promote exemplary narratives on partnership accomplishments from annual reports and the SNAP-Ed Connection website.

Current Measures

SAs and IAs do their work in large part by building partnerships with diverse types of community organizations. For SNAP-Ed reporting purposes, “A partnership refers to the relationship with an entity that receives no direct SNAP-Ed funding but is involved in SNAP-Ed programming. Partners may have a formal or informal agreement, which may include the use of services, locations, advice, or other financial or non-financial contributions.”

All SNAP-Ed SAs and IAs report information annually in EARS about the partners with which they worked. Data are reported by partner type (e.g., agricultural organizations, faith-based groups, schools). Specifically, agencies report on the number of partners with which they worked, the type of assistance provided or received by partner organizations, and the types of intervention (direct education, social marketing, and PSE) implemented with partner involvement. Because this information is entered in an aggregated form by partner type, FNS can easily tally this information at the national level. For example, summary EARS data supplied by FNS for this project indicated 10,762 schools and 3,977 early care and education facilities partnered with SNAP-Ed in FY 2018, accounting for approximately 29 and 11 percent of all SNAP-Ed partnerships, respectively.

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All SAs are also strongly encouraged to report on the organizational partnerships and/or multisector coalitions priority indicators in the SNAP-Ed Evaluation Framework:

- **Organizational Partnerships (ST7).** This indicator measures or describes partnerships with service providers, organizational leaders, and SNAP-Ed representatives in settings where people eat, learn, live, play, shop, and work in terms of depth of relationship, accomplishments, and lessons learned.

- **Multisector Partnerships and Planning (ST8).** This indicator measures community capacity by assessing the readiness of multisector partnerships or coalitions to plan and achieve the changes in nutrition, physical activity, food security, and/or obesity prevention policies and practices that are evaluated as subsequent indicators in the Sectors of Influence level of the Framework.

Organizational partnerships are defined as “the number of active partnerships that regularly meet, exchange information, and identify and implement mutually reinforcing activities that will contribute to the adoption of one more nutrition or physical activity system changes or policies at the organization level.” To be considered multisector, partnerships must be composed of at least five diverse sector representatives.

**Key Findings**

When asked who needed information about SNAP-Ed partnerships and why, experts in this TWG suggested data on SNAP-Ed partnerships were important to—

- Share with policy officials, program funders, and program administrators who want to know whether and with whom SNAP-Ed is partnering to leverage resources
- Demonstrate capacity for sustainable and long-lasting program impacts
- Provide SAs, IAs, program staff, and partners with information about where partnerships have been established and whether they are effective

**Opportunities for data improvement**

Experts concurred the standardized data reported in EARS about SNAP-Ed partnerships has been useful for illustrating the diverse types of partners with which SNAP-Ed is working. At the same time, some experts suggested it might not be necessary for SAs and IAs to track and report all types of partnerships but instead to narrow the focus on partner types that are of greatest interest to FNS and other stakeholders.

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Experts also noted how for reporting purposes many agencies counted every SNAP-Ed delivery site and every organization with which they had a memorandum of understanding as a partner, even if no other resources or strategic efforts were contributed. Not only does this approach result in potentially duplicative reporting—i.e., if agencies are reporting on sites and partners as if the two were synonymous—but it also devalues true partnerships as defined in the SNAP-Ed Evaluation Framework. To address this issue and improve partnership data in general, experts recommended standardized reporting focus only on active organizational partners as defined in the Framework. While this approach would seemingly reduce the total number of partnerships reported in EARS, it would provide better data on the extent to which SNAP-Ed was working with diverse organizations at the State and local level to build sustainable changes. The group also noted, however, that some improved instructions would be needed if the language from ST7 were used to define active partnerships, including a clarification of the qualifying term “regularly” in this context.

Experts emphasized partner engagement outcomes would be a new area of measurement for SNAP-Ed and therefore require further development. Some SAs and IAs are using the partner and collaboration assessment tools provided in the SNAP-Ed Evaluation Framework to measure the quality or strength of partner engagement. Experts acknowledged this information was very useful for accountability and improvement purposes but primarily at the State and local levels as these data could not be easily aggregated to the national level. Instead, experts suggested financial resources contributed by SNAP-Ed partners toward the program or shared goals may be viewed by Federal policymakers as the most important partner outcome. Perhaps for this reason the SNAP-Ed Evaluation Framework includes leveraged resources as an outcome measure for ST7. Because the Framework does not define this measure or provide measurement tools for this outcome, experts suggested new measures with clear definitions and tools were needed to adequately document the financial resources (monetary or in-kind) contributed by active partners.

Finally, the TWG members recommended IAs be strongly encouraged to provide qualitative descriptions (short writeups) of their most successful partnerships in the annual report or other standardized reporting. Those who have shared success stories with their SAs and submitted writeups to the SNAP-Ed Connection website (https://snaped.fns.usda.gov/success-stories) explained this kind of qualitative information was very powerful in communicating with policymakers and bringing the program to life and suggested all agencies be encouraged to report on their partnership successes. These narratives illustrate how organizations are working together with SNAP-Ed to improve access to healthy foods and encourage and support individual-level behavioral changes in healthy eating, food resource management, physical activity, and reduced sedentary behavior.
Policy, Systems, and Environmental Change Adoption

Recommendations for Improving Data on PSE Changes

1. Add the following PSE measures to standardized reporting:
   - Number and proportion of sites/organizations that made at least one change in writing or practice (MT5a)
   - Total number of policy changes (MT5b)
   - Total number of systems changes (MT5c)
   - Total number of environmental changes (MT5d)
   - Total number of promotional efforts for a PSE change (MT5e)
   - Qualitative or descriptive examples of PSE changes

2. Consider whether PSE measures should be reported in aggregate by setting or for each SNAP-Ed delivery site. If the former, determine the setting types by which agencies would report PSE changes. (Note: This action is interdependent on decisions made relative to reporting on SNAP-Ed delivery sites and settings).

3. Develop guidance on how to count PSE change adoption; for example, if 10 changes were made to a school district policy, clarify whether agencies should report the number of changes as 1 or 10.

4. Develop guidance with example reporting for each type of PSE change (policy, systems, and environment) and in different settings.

5. Encourage the use of plain-language communication when describing PSE change adoption (e.g., “healthy community changes,” “producing lasting change,” “changes in the environment”).

6. Develop guidance on how long to track an adopted PSE; consider reporting but not aggregating long-term PSE indicators.

Note

Current Measures

All SAs and IAs report information about their PSE change initiatives and adoption annually. Through EARS, agencies characterize interventions implemented during the FY as direct education, social marketing, PSE, or some combination of the three intervention types. Agencies also indicate through EARS the types of interventions delivered with partner involvement, again selecting from the same three intervention types. All SAs and IAs are strongly encouraged to measure and report in their annual reports on priority indicator MT5: Nutrition Supports Adopted in Environmental Settings, from the SNAP-Ed Evaluation Framework. MT5 is a multicomponent indicator of the adoption and reach of nutrition PSE changes and promotion across the environmental settings where SNAP-Ed eligible populations eat, learn, live, play, shop, and work.


Key Findings

When asked to explain who needed information about PSE initiatives and why, experts in this TWG said PSE data could help—

- Communicate to elected officials, decisionmakers, and program funders that SNAP-Ed is more than an education program—it uses public health approaches to improve the nutrition and physical activity environments of SNAP-eligible populations so that the healthy choice is the easiest choice for them to make.
- Provide local organizations and collaborators with evidence that our partnerships with them are either effective or need work
- Ensure accountability and encourage implementers to focus more on PSE initiatives

Opportunities for data improvement

Uniform data submitted through EARS provide some information about the role of PSE initiatives in SNAP-Ed interventions but do not paint a full picture. Although agencies are strongly encouraged to report on MT5 in their annual reports, these data cannot be easily aggregated; therefore little can be said nationally about SNAP-Ed’s positive community impacts. Overall, experts agreed the MT5 outcome measures were important and feasible to collect and report, especially since so many IAs were already doing so, but emphasized reporting and sharing only the number or quantity of PSE changes adopted was not valuable. Doing so provides no sense of scale or quality of the changes implemented. Rather, some combination of quantitative data and qualitative examples of the PSE changes adopted would be useful to a variety of stakeholders, especially because PSE initiatives are an otherwise difficult concept to understand. Rich examples bring to light the importance of PSE work and help demonstrate substantial time and strong partnerships are required to influence PSE adoption.

Along with recommended measures, experts also discussed whether and how PSE measures should be aggregated. Most feasible, perhaps, would be for PSE measures to be reported by setting type (e.g., schools, farmer’s markets). Paired with qualitative data, counts of PSE changes by setting type would yield valuable data that could be used for program monitoring and improvement purposes as well as telling SNAP-Ed’s story on a national scale. Because many SAs and IAs use tracking and reporting systems that capture data on each PSE change initiative, experts also discussed the feasibility of reporting PSE data for each SNAP-Ed site. Although more detailed data would be valuable, this option might be overly burdensome for some agencies. Likewise, capturing more detailed data from all agencies for the purpose of national aggregation might require more sophisticated reporting tools and systems. Experts identified important data development actions consistent with those described under Priority 1 that would support consistent data collection and reporting on PSE change adoption.
### Individual Behavior Change

#### Recommendations for Improving Data on Individual Behavior Change

1. Measure and report on select broadly defined outcomes related to healthy eating, food resource management, and physical activity:
   - Percentage of SNAP-Ed participants with increased fruit and vegetable consumption (MT1)
   - Percentage of SNAP-Ed participants with reduced sugar-sweetened beverage intake (MT1)
   - Percentage of SNAP-Ed participants who made healthier choices while shopping on a budget (MT2)
   - Percentage of SNAP-Ed participants who prepared or cooked healthier foods on a budget (MT2)
   - Percentage of SNAP-Ed participants who reduced screen time (MT3)
   - Percentage of SNAP-Ed participants who increased their level of physical activity (MT3)

2. Develop a question bank or menu of validated survey questions by population (e.g., youth, adults).

3. Establish inclusion criteria and clear protocols for data aggregation (e.g., minimum number of lessons, pre/post or retrospective design).

4. Develop guidelines and templates to support data collection, data processing, and data management.

### Current Measures

All SAs and IAs are strongly encouraged to measure and report on the following three priority indicators in their annual report:

- **Healthy Eating (MT1).** Changes in individual and family healthy eating behaviors on the pathway to achieving the current Dietary Guidelines for Americans recommendations

- **Food Resource Management (MT2).** Changes in individual and family behaviors that reflect smarter shopping and food resource management strategies, enabling participants to stretch their food resource dollars to support a healthier diet

- **Physical Activity and Reduced Sedentary Behavior (MT3).** Two-part indicator measuring behavioral changes to increase physical activity and/or reduce sedentary behavior

 Agencies are also strongly encouraged to measure and report on the indicator for population-level fruit and vegetable consumption; this indicator and related project findings are discussed in appendix C. Regarding the three indicators focused on individual behavior change, agencies have leeway to decide upon the specific outcome measures and methods that will be used to track these indicators. The SNAP-Ed Evaluation Framework and Interpretive Guide outlines 13 outcome measures and 11 data collection instruments for MT1 to assess the variety, frequency, and number of cups of various items consumed. Similarly, the guide outlines 13 outcome measures and 4 data collection instruments for MT2, and 10 outcome measures and 17 data collection instruments for MT3. Although this flexibility helps SAs pick and choose measurement approaches that work best for their programming, population, and resources, it may introduce bias into estimates when aggregated across agencies and up to the national level. Data related to priority indicators MT1, MT2, and MT3 are important for assessing and communicating about SNAP-Ed’s outcomes and impacts but are challenging and resource intensive to collect.
Key Findings

When asked to identify the outcome measures most important to include in national reporting, experts in this TWG cited fruit and vegetable consumption, sugar-sweetened beverage consumption, purchasing and cooking healthy foods on a budget, and physical activity.

Opportunities for data improvement

To address the issue of outcomes being measured and defined differently when aggregating data to the national level, the TWG favored an approach like that recently used in the Southeast and Mountain Plains Regions, through which outcomes were broadly defined. For example, any measured increase in fruit and vegetable consumption frequency or quantity would be considered an improvement and allow for estimating the percentage of SNAP-Ed participants with an improvement in fruit and vegetable consumption. Experts agreed this may be the best way to balance rigor with feasibility.

To reduce bias and increase rigor, experts in this TWG agreed FNS should establish and clearly outline inclusion criteria for aggregating individual behavior change outcome data, and only data meeting these criteria should be aggregated and reported to FNS. The criteria should establish parameters for the following:

- **Subpopulations.** Although individual behavior change outcome data might be easiest to collect from an adult population, experts agreed youth were an important SNAP-Ed subpopulation; therefore criteria should accommodate the aggregation of data collected from or on behalf of this group. Experts also noted it might be important to further segment youth group by school-based age groups or to measure and report outcomes only for youth in grades 4 and above as several of the agencies represented on the TWG reportedly have done.

- **Approved survey question bank.** Experts in several TWGs discussed the benefits of selecting and requiring the use of approved survey instruments or questions when measuring outcomes for national reporting. In addition to decreased bias and improved data quality, narrowing the universe would make it easier for agencies and reduce the burden associated with selecting measurement tool(s). There was perhaps greater support for developing an approved survey question bank rather than an approved list of survey instruments because this approach would help to reduce bias while still allowing agencies some flexibility to choose questions appropriate for their programming and population. Further discussion would be needed to determine whether agencies should be required to use questions from an approved question bank, or if use of approved survey questions should be used only as a limiting criterion for data aggregation—i.e., only data collected using an approved survey question should be aggregated and reported to FNS. Either way, it may be valuable to identify which questions and surveys in the bank are most frequently used. It would also be important to ensure the question bank included questions that were appropriate and valid when used with various subpopulations; languages in which the questions were validated would also need to be noted.
Minimum number of lessons in a series. SNAP-Ed direct education interventions range from single lessons (e.g., delivered during a store tour in a retail store setting) to a series of multiple lessons (e.g., delivered in school classrooms). MT1, MT2, and MT3 indicators are described in the Framework as “behavioral changes resulting upon completion of a series of evidence-based direct nutrition education and physical activity lessons;” therefore experts generally agreed outcomes should be measured and reported only for direct education series that include some minimum number of lessons. However, determining the minimum number of lessons and/or total exposure time would be challenging and require more discussion. Experts noted the minimum number of lessons should balance inclusion—i.e., ensure most SNAP-Ed programming would be included—with the likelihood of measurable behavior change as determined from the literature.

Survey methodology. Because MT1, MT2, and MT3 measure individual behavior change resulting from participation in a SNAP-Ed direct education series, experts generally agreed pre/post surveys should be utilized. However, opinions varied about acceptable methodologies. Additional discussion would be required to determine whether only data collected using a matched pre/post design should be aggregated or if unmatched data and data collected using a retrospective pre/post survey should be included. While some experts believed retrospective pre/post survey design held a lot of promise for SNAP-Ed because they could be less biased (e.g., when surveying participants about concepts they might not be familiar with until after completing the SNAP-Ed lesson series); be more affordable; and have reduced administrative burden compared with matched pre/post surveys, other experts believed matched pre/post designs were less biased (e.g., less likely to produce socially desirable responses), and therefore more appropriate.
Appendix A. Steering Committee and TWG Members

Between mid-September and early October 2019, TWG volunteers were recruited via meeting announcements and email. Insight first recruited from among the membership of ASNNA. To ensure representation from important stakeholder groups, we also recruited FNS Regional Office SNAP-Ed Coordinators and from the Land Grant University SNAP-Ed Program Development Team and the SNAP-Ed Strategy Group led by The Food Trust. Experts from other stakeholder groups (e.g., other Federal agencies) were identified by the study team, the FNS National Office, and other experts on the volunteer list. These individuals were recruited exclusively via email. Authors of the *SNAP-Ed Framework and Interpretive Guide* were also recruited via email.

The 12 TWGs were composed of 96 experts. An additional 7 volunteers agreed to serve as alternates and were called upon as needed. When assembling TWGs, the study team aimed to create groups that reflected the diversity in SNAP-Ed roles and perspectives (see table A.1). Volunteers were selected to serve on one to three TWGs based on their expertise and preferences, and each TWG met either one or two times over the project period. A small, representative subset of volunteers was selected to also serve on the Steering Committee as shown in table A.1.

**Table A.1. TWG Volunteers by Stakeholder Group**

<table>
<thead>
<tr>
<th>Stakeholder Group</th>
<th>Count of Volunteers</th>
</tr>
</thead>
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<tr>
<td>FNS National Office*</td>
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<tr>
<td>Other Federal agencies*</td>
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<td>State SNAP agencies</td>
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<td>SNAP-Ed implementing agencies*</td>
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<tr>
<td>Nutrition researcher/Evaluator*</td>
<td>13</td>
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<tr>
<td>Other nonprofit or business partner*</td>
<td>5</td>
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<tr>
<td><strong>Total</strong></td>
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</tr>
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</table>

Note
* Volunteers included experts who were identified as researchers or evaluators.

**Steering committee**

The Steering Committee was thoughtfully composed of project champions who understood the strategic objectives of the project and the value experts bring; this group fostered the ultimate success of the project. The final Steering Committee included one member from each TWG and represented key stakeholder groups. The committee met three times between October 2019 and May 2020. Table A.2 provides the name, affiliation, and stakeholder group represented by each TWG member.
### Table A.2. All TWG Contributors by Stakeholder Group

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation</th>
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<tbody>
<tr>
<td><strong>USDA, FNS National Office</strong></td>
<td></td>
</tr>
<tr>
<td>Anita Singh</td>
<td>SNAP Research and Analysis Division, Office of Policy Support</td>
</tr>
<tr>
<td>Donna Johnson-Bailey</td>
<td>Office of Policy Support</td>
</tr>
<tr>
<td>Lisa Mays*</td>
<td>SNAP-Ed</td>
</tr>
<tr>
<td>Michael Burke*</td>
<td>SNAP Research and Analysis Division, Office of Policy Support</td>
</tr>
<tr>
<td>Usha Kalro*</td>
<td>SNAP-Ed</td>
</tr>
<tr>
<td><strong>USDA, FNS Regional Office</strong></td>
<td></td>
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<tr>
<td>Brittany Souvenir*</td>
<td>FNS Southeast Regional Office</td>
</tr>
<tr>
<td>Doris Chin</td>
<td>FNS Mid-Atlantic Regional Office</td>
</tr>
<tr>
<td>Dregory Jones</td>
<td>FNS Southwest Regional Office</td>
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<tr>
<td>Pam Griffin</td>
<td>FNS Northeast Regional Office</td>
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<tr>
<td>Star Morrison</td>
<td>FNS Mountain Plains Regional Office</td>
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<tr>
<td><strong>Other Federal Agency</strong></td>
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</tr>
<tr>
<td>Alanna Moshfegh</td>
<td>Agricultural Research Service, USDA</td>
</tr>
<tr>
<td>Christopher Dykton*</td>
<td>Maternal and Child Health Bureau, Health Resources and Services Administration, HHS</td>
</tr>
<tr>
<td>Helen Chipman*</td>
<td>Division of Nutrition, Nutrition Institute of Food and Agriculture, USDA</td>
</tr>
<tr>
<td>Joanne Guthrie*</td>
<td>Food Assistance Research Branch, Food Economics Division, Economic Research Service, USDA</td>
</tr>
<tr>
<td>Laura Kettel Khan*</td>
<td>Division of Nutrition, Physical Activity, and Obesity, CDC</td>
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<tr>
<td><strong>State SNAP Agency</strong></td>
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<tr>
<td>Connie Dixon</td>
<td>North Carolina Department of Human Services</td>
</tr>
<tr>
<td>Jessica Rochester</td>
<td>Minnesota Department of Human Services</td>
</tr>
<tr>
<td>Kristin Matthews</td>
<td>Idaho Department of Health and Welfare</td>
</tr>
<tr>
<td>Latresh Davenport*</td>
<td>Georgia Department of Children and Families</td>
</tr>
<tr>
<td>Lisa Irving</td>
<td>Office of Temporary and Disability Assistance, New York State</td>
</tr>
<tr>
<td>Max Young</td>
<td>Colorado Department of Human Services</td>
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<tr>
<td>Penny McGuire</td>
<td>Massachusetts Department of Transitional Assistance</td>
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<tr>
<td>Sean Hayes</td>
<td>Office of Temporary and Disability Assistance, New York State</td>
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<td><strong>SNAP-Ed Implementing Agency</strong></td>
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<tr>
<td>Amy Branham</td>
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<td>Angela Abbott*</td>
<td>Purdue Health and Human Services Extension</td>
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<tr>
<td>Barbara McNelley</td>
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<td>Becky Hene</td>
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<tr>
<td>Caroline Kurtz</td>
<td>California Department of Public Health</td>
</tr>
<tr>
<td>Carrie Draper*</td>
<td>University of South Carolina</td>
</tr>
<tr>
<td>Cindy Conway</td>
<td>Extension Department of Family and Consumer Sciences, The Ohio State University</td>
</tr>
<tr>
<td>Dawn Earnesty</td>
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</tr>
<tr>
<td>Denise Wall</td>
<td>Pennsylvania State University</td>
</tr>
<tr>
<td>Diana Romano</td>
<td>Oklahoma State University Community Nutrition Education Programs</td>
</tr>
<tr>
<td>Divyani Pendleton*</td>
<td>Rocky Mountain Prevention Research Center, University of Colorado Anschutz</td>
</tr>
<tr>
<td>Erin Reznicek</td>
<td>Alabama Extension at Auburn University</td>
</tr>
<tr>
<td>Name</td>
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<td>Gina Crist</td>
<td>University of Delaware</td>
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<td>Heidi LeBlanc</td>
<td>Utah State University</td>
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<td>Hyunjun Kim</td>
<td>University of Minnesota Extension</td>
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<td>Jason Forney</td>
<td>Michigan Fitness Foundation</td>
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<tr>
<td>Jean Butel</td>
<td>Children's Healthy Living Project, University of Hawai‘i at Mānoa</td>
</tr>
<tr>
<td>Julie Atwood</td>
<td>Rocky Mountain Prevention Research Center, University of Colorado Anschutz</td>
</tr>
<tr>
<td>Jung Sun Lee</td>
<td>University of Georgia</td>
</tr>
<tr>
<td>Justine Hoover</td>
<td>Iowa State University Extension and Outreach</td>
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<tr>
<td>Karen Franck</td>
<td>University of Tennessee</td>
</tr>
<tr>
<td>Karla Pagan Shelnutt</td>
<td>University of Florida</td>
</tr>
<tr>
<td>Katie Funderburk</td>
<td>Alabama Cooperative Extension System</td>
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<tr>
<td>Kayla Welch</td>
<td>Durham County Public Health Department</td>
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<tr>
<td>Kerri Vasold</td>
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<tr>
<td>Kimberly J.M. Keller</td>
<td>University of Missouri Extension</td>
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<td>Kristin McCartney</td>
<td>West Virginia University Extension</td>
</tr>
<tr>
<td>Laura Downey</td>
<td>Mississippi State University Office of Nutrition Education</td>
</tr>
<tr>
<td>Laurel Jacobs</td>
<td>Department of Nutritional Sciences, The University of Arizona Extension</td>
</tr>
<tr>
<td>Lauren Whetstone</td>
<td>California Department of Public Health</td>
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<tr>
<td>Lila Gutuskey</td>
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<tr>
<td>Lindsey Haynes-Maslow</td>
<td>North Carolina State University</td>
</tr>
<tr>
<td>Lisa Frazen-Castle</td>
<td>Nutrition and Health Sciences Department, University of Nebraska-Lincoln</td>
</tr>
<tr>
<td>Lisa Lachenmayr</td>
<td>University of Maryland Extension SNAP-Ed</td>
</tr>
<tr>
<td>Marci Scott</td>
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</tr>
<tr>
<td>Marisa Stevenson</td>
<td>Ideas for Cooking and Nutrition, New Mexico State University</td>
</tr>
<tr>
<td>Mary Caskey</td>
<td>University of Minnesota Extension</td>
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<td>Mary Marczak</td>
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</tr>
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<td>Mike Metzler</td>
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</tr>
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<tr>
<td>Nicole Walker</td>
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<td>Pamela Bruno</td>
<td>University of New England</td>
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<tr>
<td>Rebecca Bailey</td>
<td>DC Health</td>
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<tr>
<td>Renda Nelson</td>
<td>Texas A&amp;M AgriLife Extension Service</td>
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<td>Sara Beckwith</td>
<td>DC Health</td>
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<td>Sarah Panken</td>
<td>Michigan Fitness Foundation</td>
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<tr>
<td>Shayna Russo</td>
<td>Cornell Cooperative Extension</td>
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<tr>
<td>Sofia Sanchez</td>
<td>Alabama Cooperative Extension, Auburn University</td>
</tr>
<tr>
<td>Sondra Parmer</td>
<td>Alabama Cooperative Extension System</td>
</tr>
<tr>
<td>Stephany Parker*</td>
<td>Oklahoma Tribal Engagement Partners LLC</td>
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<tr>
<td>Sue Sing Lim</td>
<td>Kansas State Research and Extension</td>
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<tr>
<td>Susan Furbish</td>
<td>University of Connecticut Center for Population Health</td>
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<tr>
<td>Sydney Land</td>
<td>Down East Partnership for Children</td>
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<tr>
<td>Theresa LeGros</td>
<td>Department of Nutritional Sciences, The University of Arizona Extension</td>
</tr>
<tr>
<td>Name</td>
<td>Affiliation</td>
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<tr>
<td><strong>Nutrition Research/Evaluator</strong></td>
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<tr>
<td>Alison Gustafson</td>
<td>School of Human Environmental Sciences, University of Kentucky</td>
</tr>
<tr>
<td>Amy DeLisio</td>
<td>Public Health Institute Center for Wellness and Nutrition</td>
</tr>
<tr>
<td>Beth Racine</td>
<td>College of Health and Human Services, University of North Carolina Charlotte</td>
</tr>
<tr>
<td>Brenda Wolford</td>
<td>Altarum</td>
</tr>
<tr>
<td>Celeste Doerr</td>
<td>Public Health Institute Center for Wellness and Nutrition</td>
</tr>
<tr>
<td>Dan Perales</td>
<td>Department of Health Science, San José State University</td>
</tr>
<tr>
<td>Gail Woodward-Lopez</td>
<td>Nutrition Policy Institute, University of California</td>
</tr>
<tr>
<td>Hilary Seligman</td>
<td>University of California San Francisco</td>
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<tr>
<td>Justin Fast</td>
<td>Public Sector Consultants</td>
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<tr>
<td>Kathleen M. Cullinen</td>
<td>Rutgers</td>
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<tr>
<td>Lorenzo Almanda</td>
<td>Georgia State University</td>
</tr>
<tr>
<td>Marlene Schwartz</td>
<td>Rudd Center for Food Policy &amp; Obesity, University of Connecticut</td>
</tr>
<tr>
<td>Melissa Laska</td>
<td>School of Public Health, University of Minnesota</td>
</tr>
<tr>
<td>Sheri Cates</td>
<td>RTI International</td>
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<tr>
<td><strong>Other Nonprofit or Business Partner</strong></td>
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<tr>
<td>Aaron Schroeder</td>
<td>Kansas State University</td>
</tr>
<tr>
<td>Allison Teeter</td>
<td>Office of Educational Innovation and Evaluation, Kansas State University</td>
</tr>
<tr>
<td>Andrew Naja-Riese*</td>
<td>Agricultural Institute of Marin</td>
</tr>
<tr>
<td>Sandy Sherman*</td>
<td>The Food Trust</td>
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<tr>
<td>Susan Foerster</td>
<td>ASNNA Evaluation Committee Director</td>
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**Note**
* Indicates Steering Committee member
Appendix B. Summary of Findings on Program Dosage

All SAs and IAs are required to report annually on program dosage through EARS. Program dosage is currently assessed in terms of direct education session format, delivery, time, and use of interactive media.

Key Findings

When asked to explain who needs information about program dosage and why, experts in this TWG said dosage data were primarily used to assess program effectiveness—i.e., how much programming is needed to influence the behavior of the target audience. This information helps funders and implementers make decisions about program delivery and the most efficient and effective use of program funding. Experts strongly felt program dosage was not meaningful outside the context of impact and measurement of program effectiveness. FNS indicated it needed to know how different SNAP-Ed strategies worked together (and whether different combinations were more effective) and how much exposure to these strategies was needed to influence behavior. Key findings from meetings with this TWG included the following:

- Experts described dosage as the amount, strength, and intensity of programming delivered to or received by participants and explained “dosage” might not be the best term to use.
- Experts felt current measures of program dosage were too narrow. With SNAP-Ed’s substantial shift in recent years toward comprehensive community and public health approaches, program dosage needs to capture exposure to all SNAP-Ed approaches, including social marketing and PSE changes, not just direct education programming. However, the group acknowledged there was not an easy solution to this problem.

Conclusion

Although several concepts and approaches were discussed for improving measures of program dosage, including the use of mapping to “see” how interventions overlap in different geographic areas or attempting to measure the cumulative dose of SNAP-Ed interventions in a controlled environment (e.g., schools), it is clear a substantial investment of time and thought leadership would be required to develop more meaningful measures of program dosage.
Appendix C. Summary of Findings on Population Results

All SAs and IAs are strongly encouraged to measure and report on the following priority indicator in their annual report:

- **Fruits & Vegetables (R2).** Changes in fruit and vegetable consumption, including subgroups of underconsumed vegetables, over time, from year to year, among the low-income populations of the State

Although MT1 and LT1 also measure increases in fruit and vegetable intake, R2 is specifically a population-level surveillance measure for the proportion of the SNAP-Ed population who achieves the current Dietary Guidelines for Americans recommendations. The *SNAP-Ed Evaluation Framework and Interpretive Guide* outlines two outcome measures for R2 to assess fruit and vegetable consumption separately. SAs may report consumption by either number of times consumed (i.e., one or more times per day or median number of times) or cups consumed daily. While the ability to report consumption multiple ways allows data collection to be tailored to each SA’s population, these units cannot be merged for aggregation to the national level.

**Key Findings**

Key findings from one meeting with this TWG included the following:

- Population results data are important to show the impact/effectiveness of SNAP-Ed and identify future needs. Experts identified key nutrition-related indicators as sugar-sweetened beverage intake and fruit and vegetable consumption. Diet quality, food security, health-related quality of life, and physical activity were additional indicators of interest.

- Population results data are collected by some SAs and IAs but also through multiple Federal surveys.

- Experts identified the Behavioral Risk Factor Surveillance System (BRFSS) as the strongest option and reported aligning some of their data collection efforts with this tool. BRFSS data are publicly available and collected annually in all States, the District of Colombia, and four U.S. territories. These data are appropriate for use at the State level and can be used to compare between levels (e.g., local compared with State). Importantly, BRFSS includes data for multiple indicators in the *SNAP-Ed Evaluation Framework and Interpretive Guide* (e.g., fruit and vegetable consumption, physical activity) but some modules rotate and are asked every 2 years. States that wish to have certain data available annually may add a module to their survey. Additional data sources for population results are summarized in figure C.1.

- Experts from California—a State with robust funding—reported collecting primary data on population results through the California Family Health Survey and Fitnessgram. These data could be used to track and potentially attribute to SNAP-Ed observed changes in population results over time.
Conclusion

When considering the varying capacity of SAs and IAs, this TWG determined it would not be feasible for most agencies to collect primary data at this level. Instead, experts suggested using BFRSS data as a cost-effective way to monitor population results.

This TWG’s conclusion does not represent a devaluation of SNAP-Ed population results. It simply recognizes primary data collection for population results may not add value beyond what BRFSS already provides. SAs and IAs should continue to monitor and report on population results but, in a setting of limited resources, consider focusing data collection efforts on other areas.