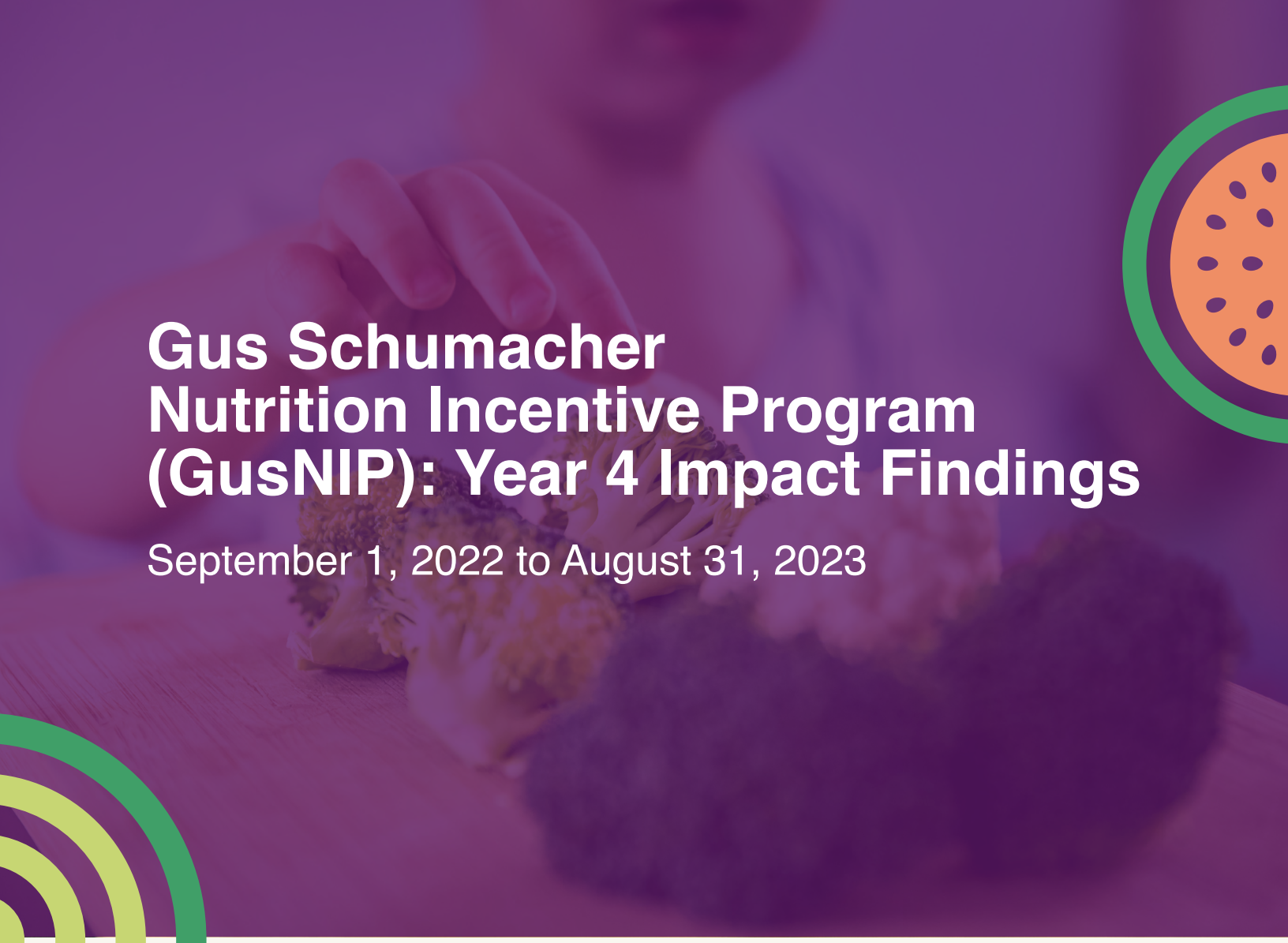

Gus Schumacher Nutrition Incentive Program (GusNIP): Year 4 Impact Findings

September 1, 2022 to August 31, 2023

Nutrition Incentive Hub

CREATED BY GUSNIP NTAE CENTER

Developed by the Center for Nutrition and Health Impact in collaboration with Fair Food Network and U.S. Department of Agriculture, National Institute of Food and Agriculture.

The Nutrition Incentive Program Training, Technical Assistance, Evaluation, and Information Center (NTAE) is supported by Gus Schumacher Nutrition Incentive Grant Program grant no. 2019-70030-30415/project accession no. 1020863 and grant no. 2023-70435-38766 / project accession no. 1029638 from the USDA National Institute of Food and Agriculture.

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Overview

Gus Schumacher Nutrition Incentive Program (GusNIP)

The Gus Schumacher Nutrition Incentive Program (GusNIP) portfolio aims to increase food and nutrition security among communities with low income while improving local economies and food and healthcare systems in the United States (U.S.). GusNIP provides funding for grantees to develop and conduct projects that distribute incentives to individuals with low income or living in historically underserved communities for fruit and vegetable (FV) purchases and FV prescriptions. GusNIP is a collection of three competitive grant programs funded through the United States Department of Agriculture (USDA), **National Institute of Food and Agriculture (NIFA)** with support from USDA, **Food and Nutrition Service (FNS).** GusNIP supports:

1. **Nutrition Incentive (NI)** projects that provide incentives to individuals using USDA's Supplemental Nutrition Assistance Program (SNAP) or Nutrition Assistance Program (NAP) benefits to purchase FVs.
2. **Produce Prescription (PPR)** projects that coordinate with a healthcare entity, such as a clinic, to provide incentives in the form of prescriptions for fresh FVs.
3. **The Nutrition Incentive Program Training, Technical Assistance, Evaluation, and Information Center (NTAE),** which provides training, technical assistance, reporting, and evaluation support to GusNIP grantees and applicants.

More specifically, NI and PPR projects aim to positively impact FV intake, food and nutrition security, and the local economy among priority populations[1] and communities. PPR projects have the added goal of aiming to decrease healthcare utilization and associated cost among eligible individuals.[2] **This report highlights the national impact of NI and PPR projects as well as the accomplishments of the NTAE and Nutrition Incentive Hub during GusNIP year four (Y4; September 1, 2022 to August 31, 2023).**

What is an Incentive?

In the context of GusNIP, an incentive is a financial or non-financial encouragement to purchase more FVs. **In NI projects**, a SNAP participant receives an incentive when they make a purchase at a food retail outlet. This incentive is often a discount or coupon for FVs. For instance, in some project models an NI participant pays $10 for $20 worth of FVs, effectively doubling their purchasing power. **In PPR projects**, incentives are referred to as prescriptions for FVs. PPR participants can redeem their prescriptions at food retail outlets or clinics and do not need to purchase anything to receive the prescription.

Findings from GusNIP Y4 are reported in aggregate and include GusNIP awards as well as those supported by the Gus Schumacher Nutrition Incentive Program COVID Relief and Response (GusCRR) grants program and USDA's American Rescue Plan Act (ARPA) funding.

In Y4, the USDA NIFA funded eight NI awards totaling $38.7M. Also during Y4, USDA NIFA supported 72 PPR awards totaling $34.4M.[3] ARPA PPR awards included three types: 1) PPR Meritorious (highly ranked, unfunded applications from FY21), 2) PPR Enhancement (additional funding to existing PPR awards), and 3) PPR Standard (funded applications from FY22). In addition, the GusNIP NTAE received $9M from USDA NIFA, which included almost $2M in ARPA enhancement funding to support the large increase in number of PPR grantees. The NTAE onboarded new grantees and **supported 185 active awards**, including awards supported by the additional GusCRR and ARPA funding. **Table 1** below displays the count of awards by program year, award type (PPR vs. NI), and award mechanism.

[1] Priority populations are population groups at risk of socially produced health inequities.

[2] Eligible individuals include people who report low income and are at risk for a diet-related chronic disease.

[3] One PPR grantee returned their funding prior to implementing their award and did not submit data for this report.

Table 1. Number of New and Active GusNIP Awards in Year 4 by Award Mechanism

Award Mechanism	New Awards in Y4	Active Awards from Y1-Y3	Total Active Awards in Y4
GusNIP NI	8	43	51
GusNIP PPR	0	26	26
GusCRR NI	--	19	19
GusCRR PPR	--	17	17
ARPA PPR Meritorious	17	--	17
ARPA PPR Enhancement	12	--	12
ARPA PPR Standard	43	--	43
Total	**80**	**105**	**185**

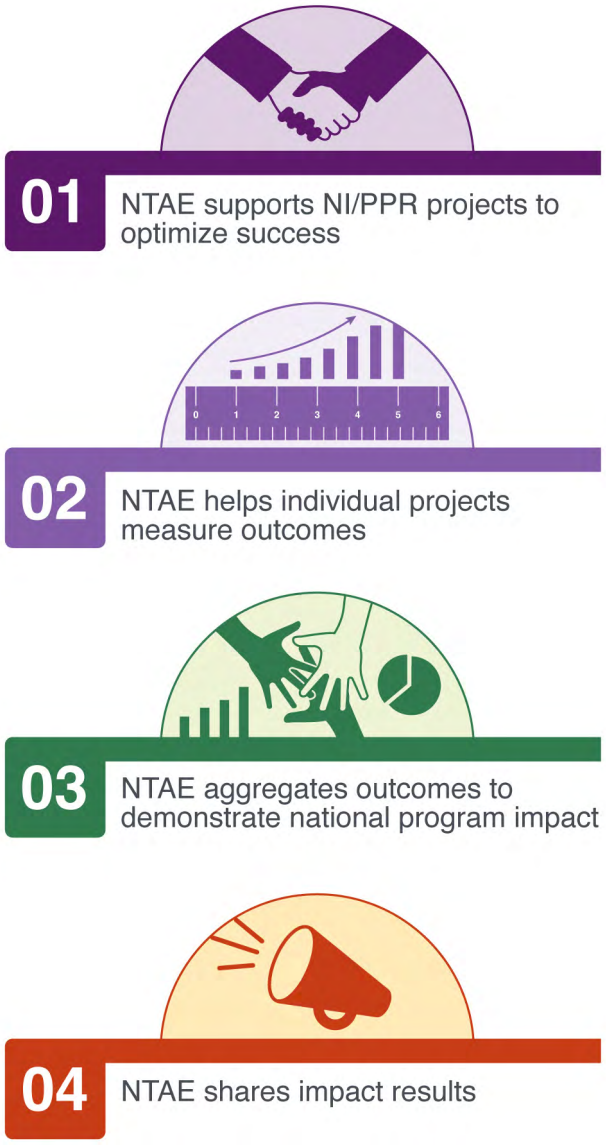
Moving forward, this report will present aggregate results from projects funded by all award mechanisms and will refer to all projects as NI or PPR projects. For a glossary of acronyms/abbreviations used in this report, see **Appendix 1**.

GusNIP Training, Technical Assistance, Evaluation, and Information Center (GusNIP NTAE)

The Center for Nutrition and Health Impact (CNHI), formerly the Gretchen Swanson Center for Nutrition, is a nonprofit nutrition research center and the lead awardee of the GusNIP NTAE cooperative agreement with USDA NIFA. CNHI partners with **Fair Food Network** and a coalition of national partners, referred to as the **Nutrition Incentive Hub** to provide comprehensive reporting, evaluation, technical assistance, and information support to GusNIP applicants and grantees (**Appendix 2**). This coalition of specialists provides tailored guidance for successful project implementation while measuring the impact of GusNIP using a set of shared measures across NI and PPR projects.[4] The primary goal of the GusNIP NTAE and Nutrition Incentive Hub is to amplify and assess the total impact of GusNIP, GusCRR, and ARPA funding on key outcomes of interest. In this report, the GusNIP NTAE and the Nutrition Incentive Hub are referred to collectively as "the NTAE."

The NTAE's services are tailored to differing NI and PPR approaches. As illustrated in **Figure 1**, the NTAE supports individual NI and PPR projects to optimize GusNIP impact and to measure and report on key outcomes. The NTAE aggregates the findings from individual projects to share the nationwide impact of GusNIP with USDA NIFA, USDA FNS, Congress, and other interested parties.

Figure 1. The NTAE's Role in Supporting NI and PPR Projects and Demonstrating Impact



[4] In this report, the term "project" refers to a set of activities and deliverables funded by an NI or PPR award.

Core Measures: Nutrition Incentive and Produce Prescription Projects

As a requirement of funding, NI and PPR grantees collaborate with the NTAE to implement core measures in order to evaluate key outcomes of interest. Core measures assess participant-level and site-level outcomes. For both NI and PPR projects, enrollment, incentive distribution, and incentive redemption occur at food retail outlets and clinics (i.e., sites).[5] Sites are divided into three types: farm direct (FD), brick-and-mortar (B&M), and healthcare clinics.

Participant-level core measures (**Appendix 3**) assess the impact of NI and PPR projects on FV intake, food security, and other indicators of health. Participant-level core measures are assessed via a cross-sectional survey for NI projects and a pre/post follow-up survey for PPR projects. See **Appendix 3** for a detailed explanation of the methods used to collect and analyze participant-level core measures data. Site-level core measures (**Appendix 4**) provide descriptive information about project delivery, incentive utilization patterns, and project reach. All grantees for both NI and PPR projects submit site-level data through a secure portal on the **Nutrition Incentive Hub website**. See **Appendix 4** for a detailed explanation of the methods used to collect and analyze site-level core measures data.

Site Definition

Sites are locations where GusNIP projects are administered and are divided into three types:

FD sites: farmers markets, farm stands, community supported agriculture (CSA), mobile markets

B&M sites: grocery stores, supermarkets, corner stores, wholesale

Healthcare clinics: Federally Qualified Health Centers (FQHC), primary care offices, hospitals

NI and PPR projects include FD and B&M sites where participants receive and redeem incentives. PPR projects also include healthcare clinics where participants receive and/or redeem incentives.

[5] Sites are referred to as "firms" in the GusNIP Request for Applications. All NI sites are SNAP-authorized food retail outlets.

Results

This report builds on the NTAE's previous annual reports and demonstrates continued promising results across many areas: growth in reach to U.S. geographies and participants, increase in both the dollar amount of incentives distributed to families in need and the proportion of those incentives redeemed for FVs, increased economic impact for local communities, and improvements across key participant outcomes (e.g., increased FV intake, improved food security, and better perceived health). Presented first are the combined incentive distribution, incentive redemption, and economic impact results for both NI and PPR projects. Separate results sections for NI and PPR projects follow thereafter.

Combined Results for NI and PPR Projects

Description of 2022-2023 Grantees

USDA NIFA awarded GusNIP grants to a wide array of NI and PPR projects. NI awards ranged from $99,000 over one year to $14.2M over four years. PPR awards ranged from $80,000 over one year to $500,000 over three years. NI and PPR awards were awarded to organizations based in 36 states and Washington, D.C. Most grantees (N = 80) were community-based organizations (63%; **Appendix 5**) while others included healthcare organizations, state and local government agencies, universities, and organizations serving tribal populations. The model used to distribute incentives or prescriptions varied greatly across grantees. For example, PPR projects used vouchers, debit cards, produce boxes, and other mechanisms to distribute prescriptions with benefits ranging from $20 per month to $100+ per month depending on household size. All NI projects awarded in Y4 used a 1:1 match with a range of benefits up to $20 per day. Details about the funding amount, geographic reach, site counts/types, project models, and links to initial descriptions for projects awarded in Y4 are available in **Appendix 5**.

Photo courtesy of the USDA

GusNIP Reach: Growth Over Time

Since the launch of GusNIP in 2019, there has been considerable growth in the number of active NI and PPR sites across the country. Specifically, there were 773 sites in Year 1 (Y1) and 4,612 sites in Y4. **Figure 2** depicts the location and number of GusNIP sites that were operational in Y1 (2019-2020). **Figure 3** shows the data for Y4 (2022-2023) and indicates a substantial increase in the number of GusNIP sites offering programming to communities across the country. From Y1 to Y4, the reach to diverse communities across local, county, tribal, and state levels has also increased. Y4 demonstrates added GusNIP sites across the Midwest and South and many other locations that were not previously reached by NI and PPR programming. See **Appendix 6** for visual representations of GusNIP sites during Year 2 (Y2) and Year 3 (Y3).

Figure 2. Number of GusNIP Sites and Locations in Year 1[6]

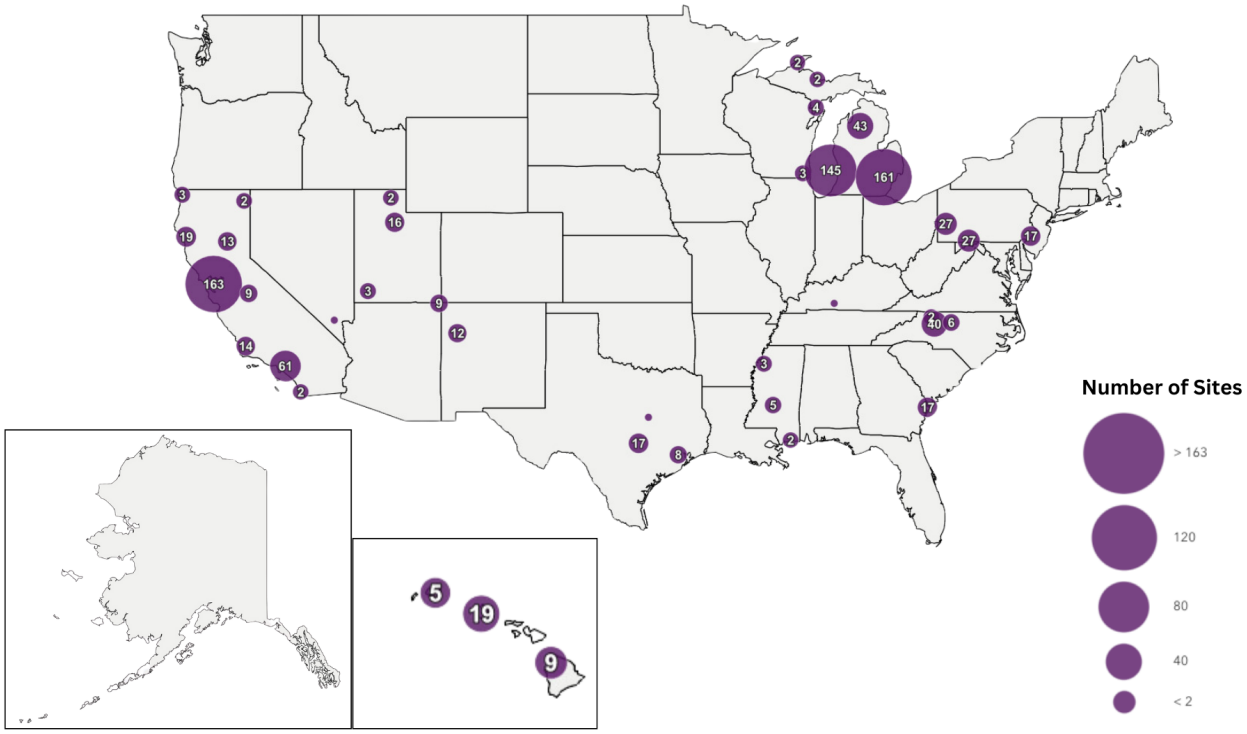
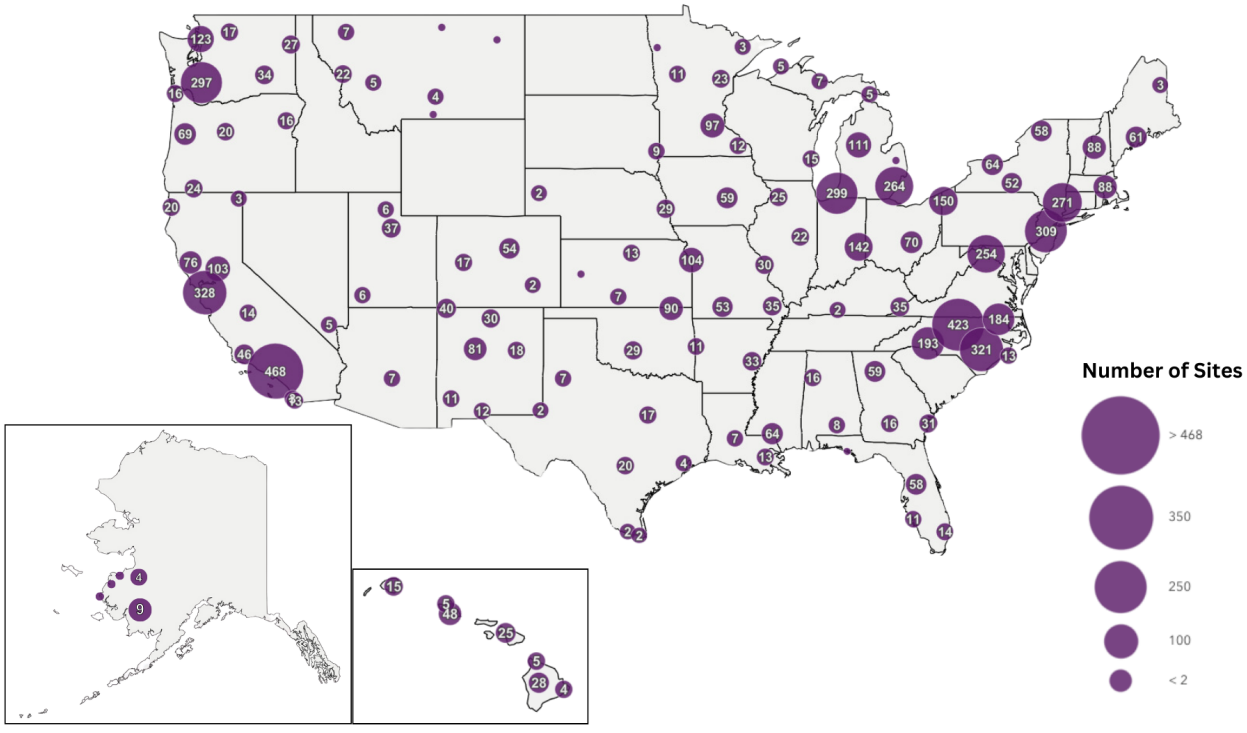


Figure 3. Number of GusNIP Sites and Locations in Year 4[6]



[6] This map is a national view of the number of GusNIP sites within a given geographic area. The ArcGIS online aggregation tool was used to create medium size clusters of sites which are represented by circles in the map. Circles display the number of sites contained within a given geographic area.

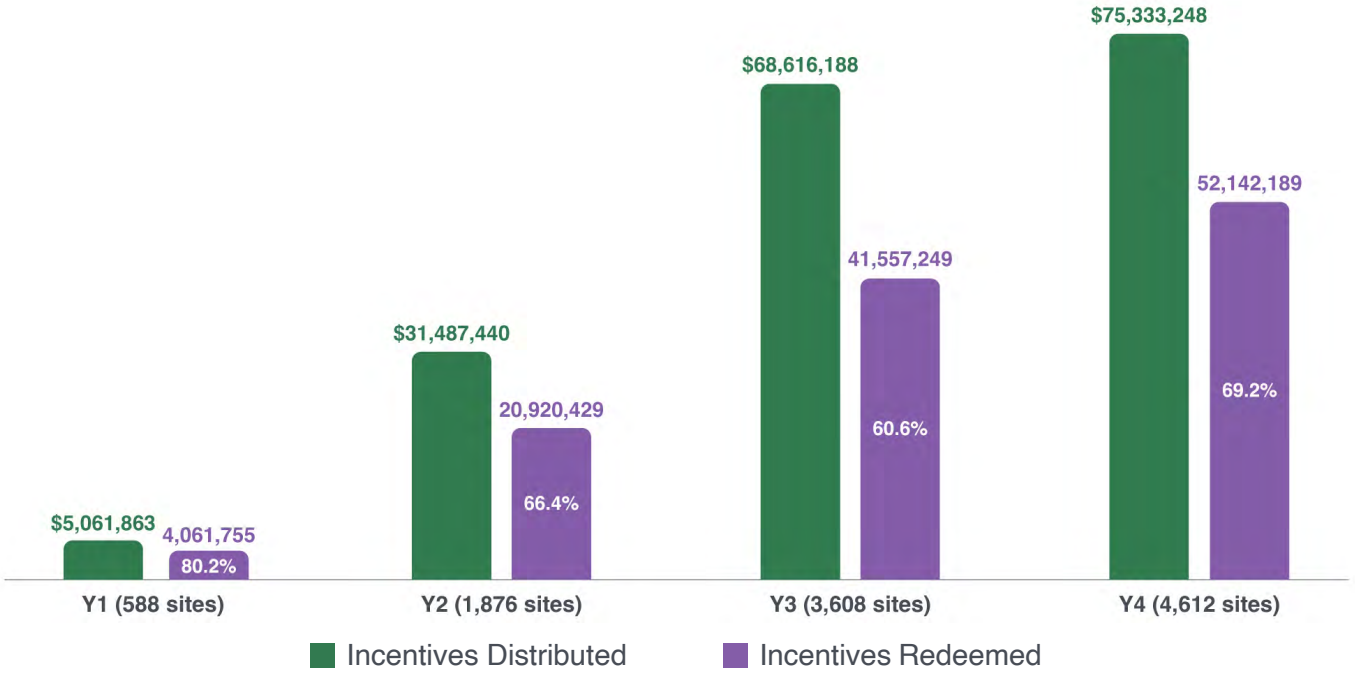
GusNIP Incentives Distributed and Redeemed

Since 2019 (GusNIP Y1), grantees have reported **steady growth in the dollar amount of incentives distributed and redeemed**[7] to acquire FVs. This means, with each successive year of GusNIP, more FVs are acquired at participating food retail outlets and clinics by individuals and families who need them.

Figure 4 displays the dollar amount of incentives distributed and redeemed, the total redemption rate, and the number of active sites during each year of GusNIP. Compared to Y3, Y4 grantees reported a **10% increase** in the overall dollar value of incentives distributed ($75,333,248 in Y4 vs. $68,616,188 in Y3) and a **25% increase** in the overall dollar value of incentives redeemed ($52,142,189 in Y4 vs. $41,557,249 in Y3). Total annual incentive redemption rate is another measure of GusNIP implementation success.[8]

It is the percentage of distributed incentives that participants use to acquire FVs over one year. A higher annual incentive redemption rate indicates that more incentives were used on FVs, and fewer incentives were left unused. Across all projects, the total annual incentive redemption rate increased from 60.6% in Y3 to 69.2% in Y4 after declining in Y2 and Y3 (**Figure 4**). This suggests that projects focused on distributing more incentives in Y2 and Y3 and improved marketing and/or redemption efficiency during Y4, which resulted in a higher annual incentive redemption rate.

Figure 4. Incentives Distributed and Redeemed and Total Annual Incentive Redemption Rate by Year of GusNIP



[7] Incentives redeemed include both federal grant dollars and match funding. Dollar-for-dollar match funding is required for all GusNIP-funded NI projects. Grantees may meet their match requirement through cash and/or in-kind contributions, including third-party in-kind contributions fairly evaluated, including facilities, equipment, or services.

[8] Total Annual Incentive Redemption Rate equals the sum of incentives redeemed divided by the sum of incentives distributed across all grantees in one year.

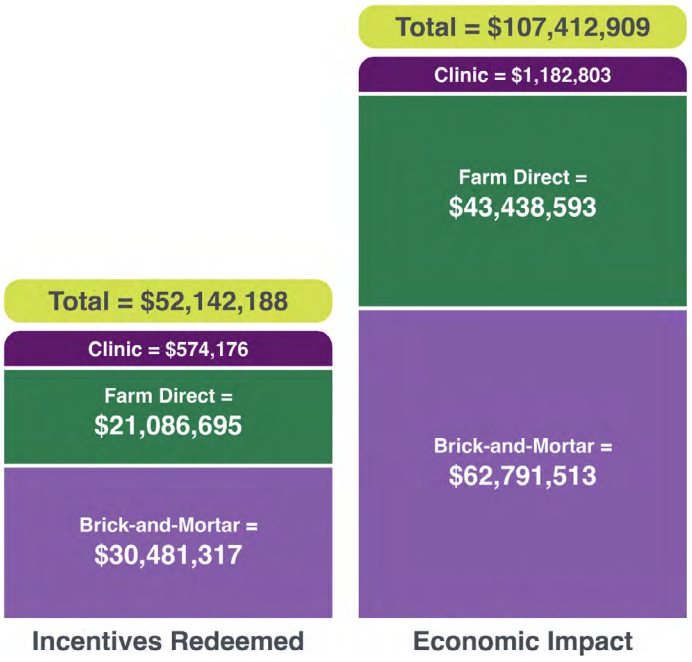
Note that the dollar amount of incentives distributed and redeemed includes federal grant funding and match funding.[7] This is distinct from the dollar amount of federal funding spent on all project costs, which does not include match funding. In Y4, grantees spent $43,587,519 in federal funding on all project costs and allocated $25,740,779 in federal funding as direct incentives. In other words, **59% of federal funding for GusNIP was allocated to providing direct incentives for FVs to people with low income or living in historically underserved communities in the U.S.** The proportion of funding spent on incentives was lower than in previous years (68% in Y1; 75% in Y2; 73% in Y3) likely due to many new ARPA-funded PPR projects awarded in Y4. In the first year of their award, ARPA PPR projects prepared to launch their initiatives and therefore spent a higher proportion of their budgets on administrative costs rather than on distributing incentives. We expect ARPA PPR projects to spend a higher proportion of their funding on direct incentives in future years.

Economic Impact of NI and PPR Projects

In total, **NI and PPR projects generated $107,412,909 in economic benefit for surrounding local economies** ($43,438,593 for FD; $62,791,513 for B&M; $1,182,803 for clinics; **Figure 5**). This value represents the dollar amount generated from total incentive redemption ($52,142,188) for the communities surrounding the 4,612 sites that reported data (**Figure 5**).

Although both NI and PPR projects are intended to promote economic equity in local communities, most of the economic impact attributed to GusNIP is generated from NI projects. While there was greater parity in the total dollar value of NI and PPR project awards initiated in Y4 (NI = $38.7M; PPR = $34.4M), the economic impact of NI projects is greater due to match funding requirements[9] and because PPR projects reach fewer people through a more intensive intervention.

Figure 5. GusNIP's Local Economic Impact in Y4 by Site Type (2022-2023)



> **"I experienced an increase in crop cash sales this year from last year.** It was great to be able to sell my produce to those that otherwise wouldn't think of buying things at a farmers market. Customers were thrilled when they learned and took advantage of tripling their purchasing power during August, September and October."
>
> *—Northeastern region farmers market vendor*

[9] Values reported here are federal grant dollars. NI projects are required to secure 1:1 match funding thereby increasing the total money spent by NI projects and the total economic impact on local communities.

Both NI and PPR projects share a goal of distributing incentives for FVs to consumers with low income or living in historically underserved communities. Beyond this shared goal, NI projects emphasize distributing incentive dollars to communities that need them the most, which generates significant economic impact. Similarly, PPR projects aim to reduce healthcare cost and utilization at the clinic level and have other core components (e.g., nutrition education), that do not yield an immediately visible economic impact. As with previous years, more than 90% of the Y4 economic impact is generated by incentives redeemed from NI projects. Most PPR projects active in Y4 were in the first year of their award. As a result, these PPR grantees spent a majority of funding setting up projects rather than distributing prescriptions. As PPR programs continue to grow and expand, a greater immediate economic impact is anticipated in future years.

To summarize the total economic impact of NI *and* PPR projects and maintain year-to-year consistency, the NTAE utilized the same methodologies in this report as in previous impact findings reports by using the **Local Economic Impact Calculator**. The estimated impact includes both direct effects (e.g., incentive redemption at participating sites) and indirect effects (e.g., how sites spend the extra revenue on hiring, marketing) and is indicative of the upper bound of economic impact an initiative may generate.

Notably, in Y4 the NTAE developed **The GusNIP NTAE Nutrition Incentive Economic Impact Calculator** that specifically addresses economic factors attributed to NI projects and estimates a geographically precise economic impact. The GusNIP NTAE Nutrition Incentive Economic Impact Calculator empowers practitioners to more precisely estimate and communicate the economic impact of NI projects.

Nutrition Incentive Program Outcomes

NI Site-Level Outcomes

GusNIP site-level outcomes are used to evaluate project implementation and to identify project characteristics that increase the redemption of participant incentives. NI grantees awarded during 2019, 2020, 2021, or 2022 and active during Y4 were required to report site-level core measures.[10]

In total, grantees submitted site-level data for 70 NI awards via the **Nutrition Incentive Hub** secure portal. See **Appendix 4** for a description of the methods and measures used for site-level reporting and **Appendix 7** for all NI site-level outcome tables.

Where Did NI Projects Operate?

There were **3,660** sites (FD = 2,143; B&M = 1,517) across all NI projects active in Y4 (**Figure 6**) that helped to expand access to FVs through incentives. Over the prior three years, the proportion of B&M NI sites steadily increased (Y1 = 25.0%; Y2 = 30.8%; Y3 = 36.8%); this increase continued in Y4 (41.4%; **Figure 6**). NI sites continued to reach a mix of populations. The vast majority (79.5%) of NI sites served urban populations, 20.5% served rural populations, and 1.2% of NI sites served tribal populations (**Figure 7**).

Figure 6. NI Project Site Types (2022-2023; n = 3,660)

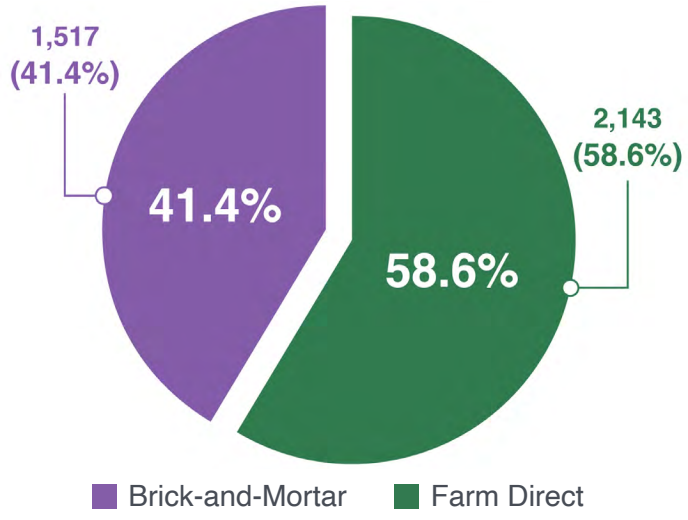
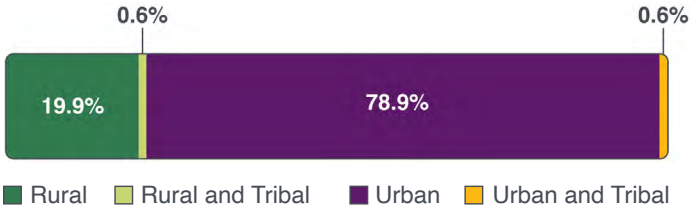


Figure 7. Populations Served by Site Service Areas Among NI Projects (2022-2023; n = 3,652)



[10] GusNIP Pilot Projects were not required to report core measures data.

During GusNIP Y4, the number of active NI sites increased (3,660 in Y4 vs. 2,928 in Y3) (**Figure 8**). The number of FD sites was higher in the fall, spring, and summer than the winter months. The number of B&M sites grew across the year with a larger increase in winter 2022. The number of sites increased as grantees launched projects in the fall, leveled off during the winter months, increased in the spring, and then leveled off again during the summer months (**Figure 8**).

These patterns are consistent with previous years and reflect the seasonal nature of incentive distribution and redemption observed across many NI projects. Seasonal variation in incentive distribution and redemption is particularly significant at FD sites due to changes related to growing and harvesting seasons.

How Many People Did NI Projects Reach?

Reach is defined as the number of participants that NI projects serve at a given time. To estimate reach, sites were asked to indicate the number of unique participants served monthly. Understanding unique reach is challenging due to point-of-sale system limitations and confidentiality requirements associated with SNAP/Electronic Benefits Transfer (EBT). For example, some cash register point-of-sale systems do not store unique customer data (e.g., number of shopping trips per month). In addition, redemption of incentives reaches families at the household level through increased purchasing of FVs.

Therefore, the NTAE developed reach "proxy estimates" that are based on reports from sites that can report unique participants *as well as* the dollar amount of incentives redeemed. To improve accuracy, these proxy estimates are categorized across groupings of site types.[11] In total, 29% of NI sites provided reach estimates that were used to extrapolate reported proxy estimate reach data across all sites.

Figure 8. Total Number of Sites Participating in NI Projects by Month of Operation (2022-2023; n = 3,660)

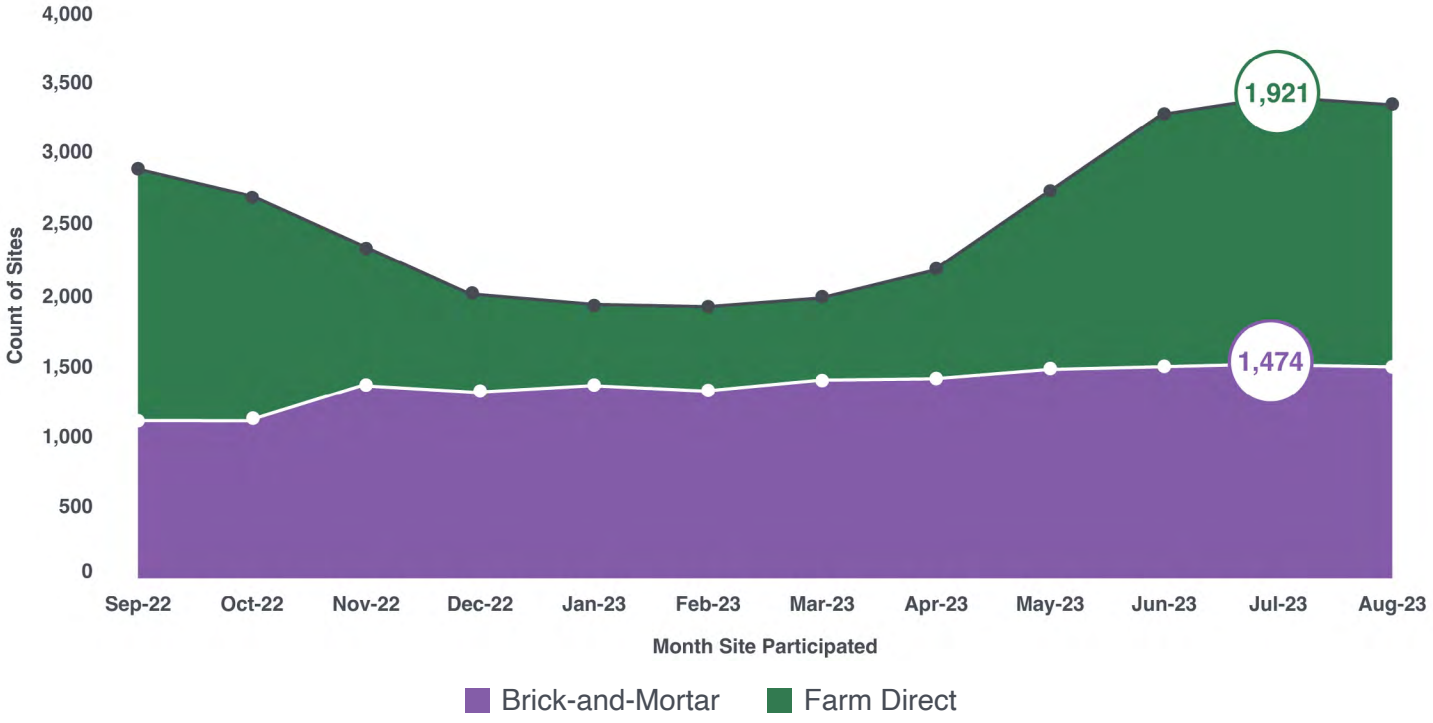
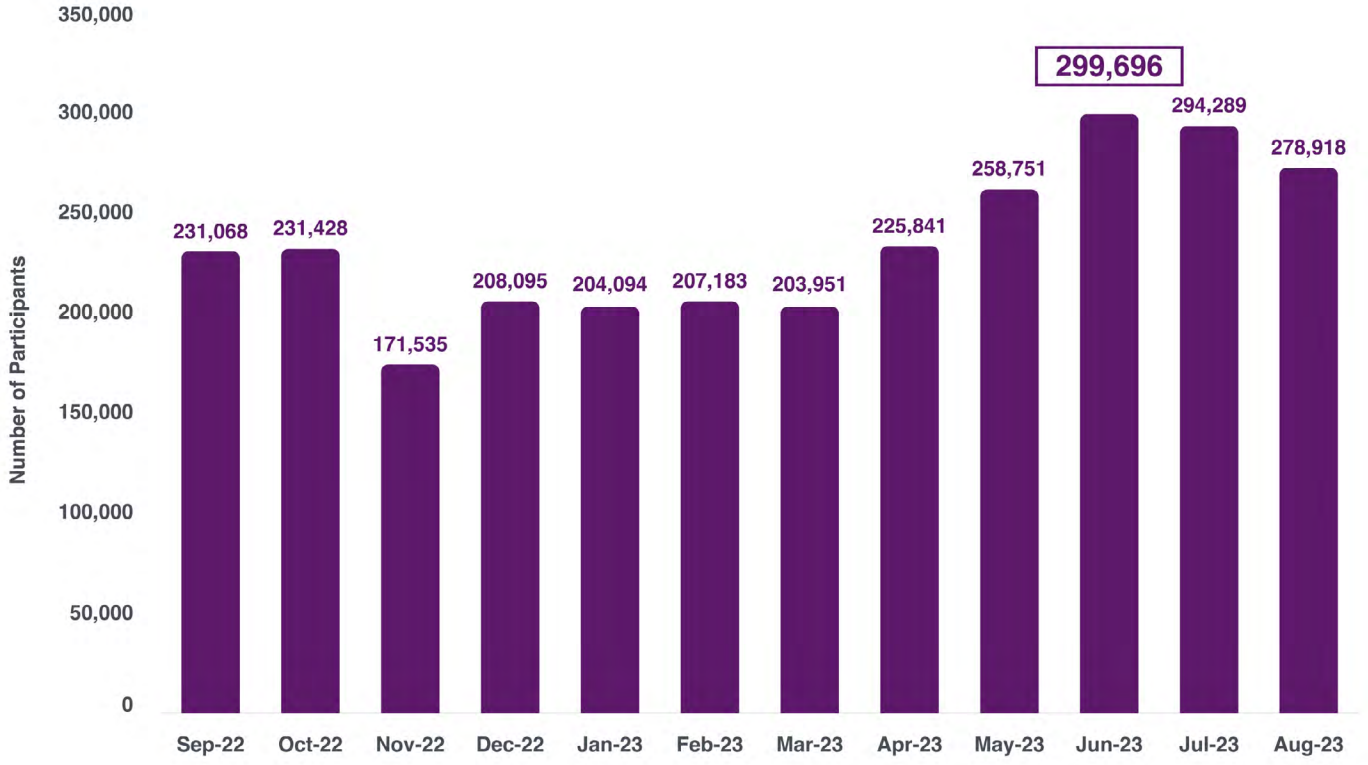


Figure 9 provides estimates of NI participants reached each month. The NTAE estimates that an average of 234,571 NI participants were reached monthly during Y4. The highest estimated number of participants reached was during June 2023 (n = 299,696; **Figure 9**). This is a significant increase from Y3, when an estimated 146,146 NI participants were reached monthly (26% of sites provided estimates). See **Table A1** for the estimated number of NI participants reached each month by award mechanism.

> **"We have one [person who is blind] that comes to the market when he can.** He emails vendors ahead of time asking if we will have certain items and place an order. Getting to the market a few times a season is truly an event for him that he greatly enjoys."
>
> *—North Central region farmers market manager*

Figure 9. Total Estimated Number of Participants Across NI Projects in Y4 by Month (2022-2023)



[11] Site type groupings include traditional B&M, smaller B&M, farmers markets, and farm stands.

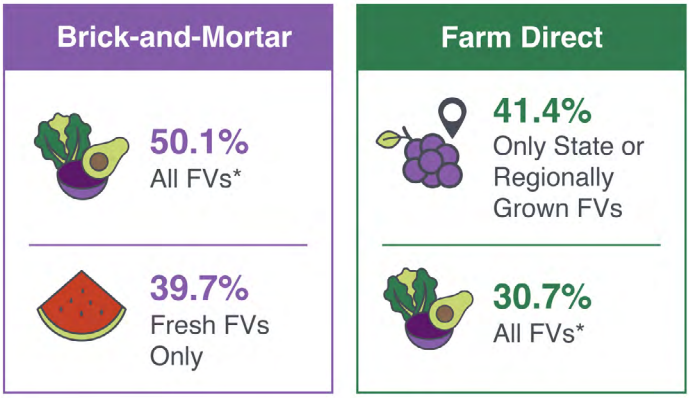
How Did Participants Redeem NIs?

NI grantees designate certain foods and/or beverages as eligible items that initiate or earn distribution of the incentive. NI grantees also designate certain FVs as eligible for incentive redemption. These designations are then implemented within B&M or FD sites. In other words, NI participants must purchase eligible items to receive the incentive and they may use or redeem the incentive on certain eligible FVs at participating sites.

Models for earning incentive *distribution* differed by site type. Among B&M sites (n = 1,213) "all SNAP eligible items" most often earned an incentive (32.5%), closely followed by "fresh FVs only" (32.4%) and "all FVs (fresh, canned, frozen, dried, plants, and/or seeds)" (25.6%; **Table A2**). Among FD sites (n = 2,028), "all SNAP eligible items" most often earned an incentive (81.7%), followed by "fresh FVs only" (9.7%) and "only state or regionally grown FVs" (6.9%; **Table A2**). It is understandable that "all SNAP eligible items" most often earned the incentive at FD sites since items available at these sites tend to include FVs *and* other locally produced items.

Per GusNIP RFAs (2019-2022), dried, fresh, frozen, and/or canned FVs without added sugars, fats, oils, or salt are eligible for incentive *redemption*. Grantees may choose to further limit redemption eligibility based upon project specifics such as limiting redemption to local or regional FVs. See **Appendix 8** for definitions and examples of products designated eligible for receiving and redeeming incentives. Among all NI sites (n = 3,241), the most common items eligible for redeeming incentives were "all FVs (fresh, canned, frozen, dried, plants, and/or seeds)" (38.0%; **Table A3**). This is a significant change from Y3 when the most common item eligible for redeeming incentives was "fresh FVs only" (41.1%). A summary of the most common items eligible for incentive redemption across site types is displayed in **Figure 10**. B&M sites were more likely than FD sites to specify "all FVs" (50.1%) and "fresh FVs only" (39.7%) for redeeming incentives. FD sites were more likely to specify "only state or regionally grown FVs" (41.4% at FD sites vs. 10.1% at B&M sites; **Figure 10**; **Table A3**).

Figure 10. Foods Most Commonly Eligible for Incentive Redemption among NI Projects by Site Type (2022-2023)



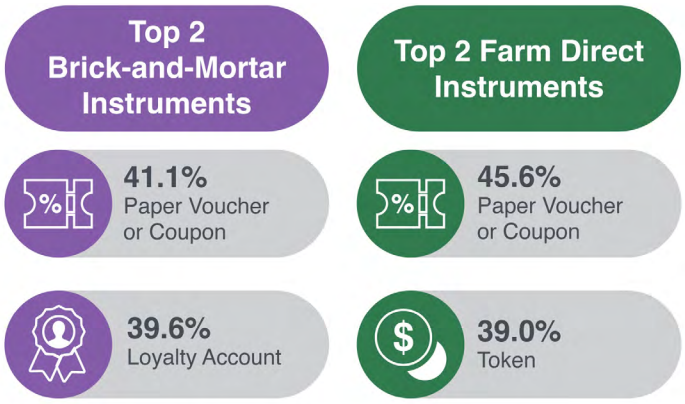
*All FVs include fresh, canned, frozen, dried, plants, and/or seeds

GusNIP incentives are distributed and redeemed using different financial instruments, including loyalty cards, tokens, and paper vouchers. See **Appendix 8** for definitions and examples of financial instruments. Across NI projects (n = 3,241 sites), "paper vouchers or coupons" remained the most commonly used financial instrument for incentive distribution and redemption (43.1%), followed by "token" (24.5%), "discount at register" (15.2%), and "loyalty account" (16.9%; **Table A4**). A small proportion of NI projects reported using other financial instruments for incentive distribution and redemption such as "CSA share or produce box" (1.7%) and "EBT card" (0.8%; **Table A4**).

FD sites used tokens considerably more often compared to B&M sites (39.0% vs. 0.1%, respectively).[12] B&M sites used loyalty accounts more often compared to FD sites (39.6% vs. 3.4%, respectively). Differences in the financial instrument used to distribute and redeem incentives by site type are reported in **Table A2** and summarized in **Figure 11**, on the next page. The high prevalence of using "paper vouchers or coupons," "tokens," and "loyalty accounts" to distribute incentives likely reflects the feasibility of using these financial instruments among sites and the acceptability of these financial instruments among NI participants.

[12] Tokens were most often used at FD sites because FD sites tend to use central EBT terminals where tokens are dispersed.

Figure 11. Most Common Financial Instruments Used in NI Projects by Site Type (2022-2023)



Understanding project characteristics such as models for incentive distribution helps inform implementation strategies for NI projects and drives research about what strategies work best under what conditions. For instance, researchers at the NTAE who analyzed data from previous grant years found that B&M sites utilizing automatic discounts at the register had 3.5 times the incentives redeemed compared to physical incentives such as coupons and loyalty cards.[13]

How Many NI Incentive Dollars Were Issued and Redeemed?

In Y4, $69,313,547 in incentives were distributed to NI project participants (**Table A5**). In total, $47,652,862 in incentives were redeemed across 3,660 NI project sites. An average of $11,845 in incentives were redeemed per site (**Table A5**). As a result, Y4 had a 68.8% total annual redemption rate, a clear increase from the 61.0% total redemption rate for NI projects in Y3 (**Table A5**).

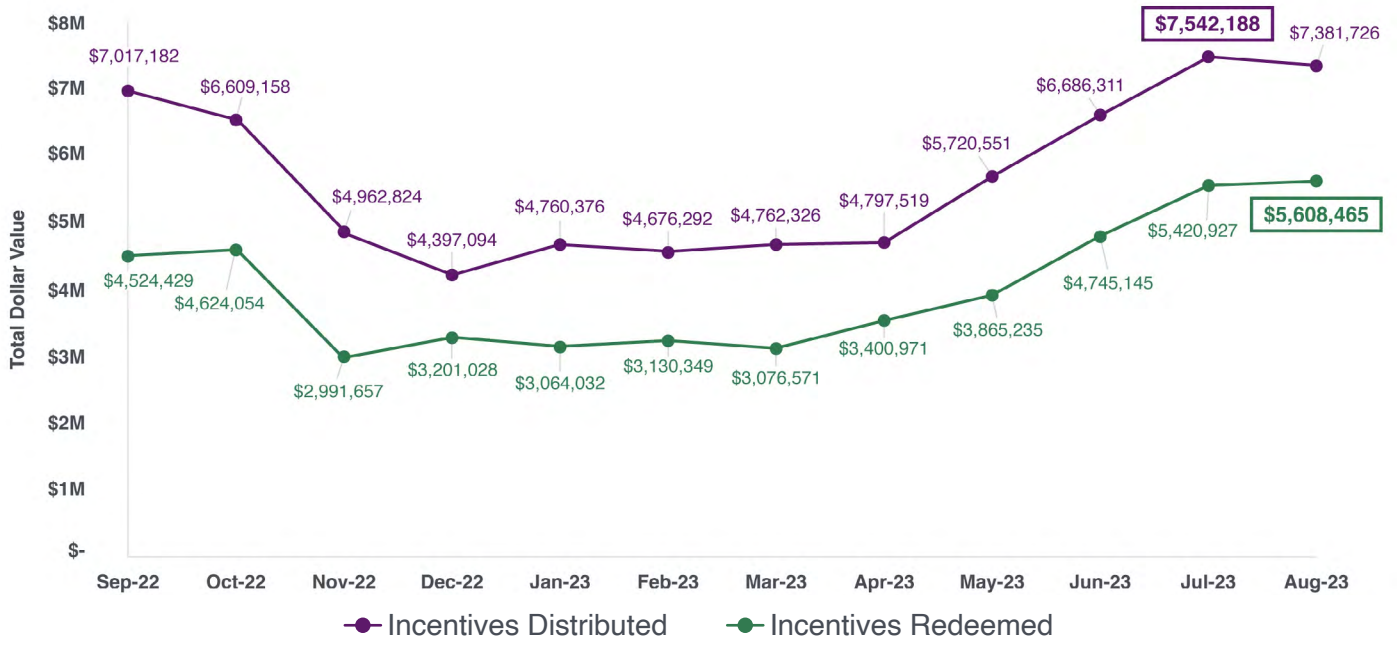
Incentives may not be redeemed by participants for a variety of reasons. Participants may not spend the full dollar amount of incentives earned on FVs, misplace incentives, lack awareness that incentives were received, or have transportation barriers to use incentives at participating sites.

Among NI projects, incentive distribution was lowest in December 2022 ($4,397,094) and incentive redemption was lowest in November 2022 ($2,991,657; **Figure 12**). Incentive distribution was highest in July 2023 ($7,542,188) and incentive redemption was highest in August 2023 ($5,608,465; **Figure 12**). The summertime peak for incentive distribution and redemption is expected given that NI projects include 58.5% FD sites, which operate seasonally to align with growing and harvesting seasons.

> "We are always happy to help the community. **These incentives allow SNAP shoppers to buy more vegetables, which help people stay healthy, especially in winter.** We look forward to participating next year."
>
> *—North Central region grocery store manager*

[13] Parks CA, Mitchell E, Shanks CB, et al. Which Program Implementation Factors Lead to more Fruit and Vegetable Purchases? An Exploratory Analysis of Nutrition Incentive Programs across the United States. Curr Dev Nutr. 2023;7(12):102040.

Figure 12. Incentive Distribution and Redemption in Dollars for NI Programs (2022-2023)



What Other Services Did NI Sites Offer?

Many NI sites offer other services beyond incentives, such as nutrition education, support services, and marketing activities. Understanding these other services is important to help researchers, practitioners, and policymakers support program models that lead to improved outcomes. The NTAE's prior analyses of NI projects have demonstrated that other services influence incentive redemption.[13]

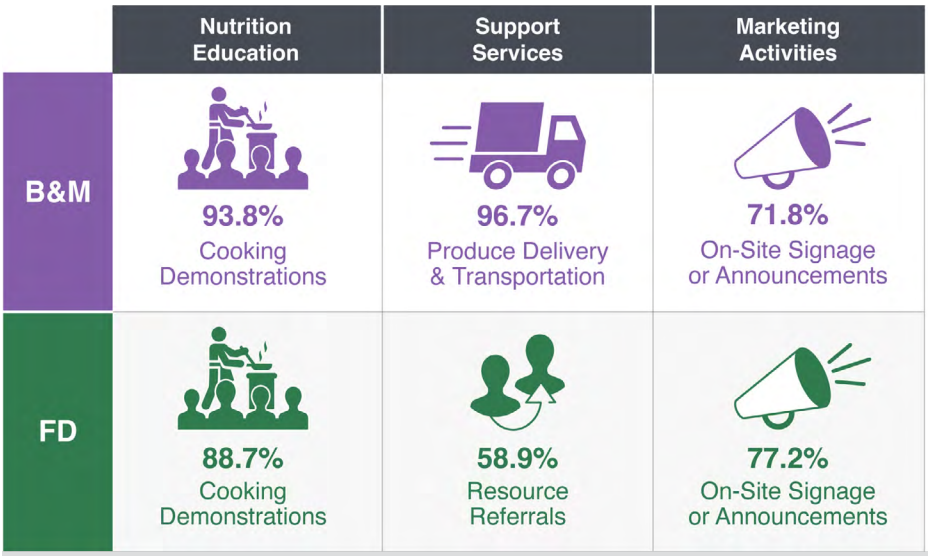
As in previous years, many Y4 NI projects paired incentives with nutrition education resources, support services, and/or marketing activities (see **Appendix 8** for definitions):

- A total of 1,467 sites offered various types of nutrition education in combination with NI projects (**Table A6**). Among NI sites that offered nutrition education, the most common nutrition education activities included "cooking demonstrations" (89.8%), "partnering nutrition education" (25.9%), and "food navigation or tours" (15.1%; **Table A6**).
- A total of 1,102 sites offered various types of support services (**Table A7**). Among the NI sites offering support services, "produce delivery and transportation" (63.8%) was the most common, followed by "resource referrals" (36.8%), "voter registration and other civic engagement" (9.6%), and "COVID testing or vaccination" (7.4%; **Table A7**).
- Marketing activities were used to promote NI projects at 2,862 sites (**Table A8**). The most common marketing activities included "on-site signage or announcements" (75.5%), "direct promotions distributed by direct mail, email, phone" (66.4%), and "online advertisements" (60.8%; **Table A8**).

Figure 13 summarizes the most commonly offered nutrition education, support services, and marketing activities across NI projects.[14] "Cooking demonstrations" was the most common nutrition education provided at both FD and B&M sites. The most common marketing activity at both FD and B&M sites was "on-site signage or announcements." However, FD and B&M sites differed in the most common type of support service offered. B&M sites most often offered "produce delivery and transportation" (96.7%) and FD sites most often offered "resource referrals" (58.9%).

[14] Percentages displayed are out of sites that offered any nutrition education, support services, or marketing activities respectively. Percentages do not add up to 100% as some NI sites offer multiple services.

Figure 13. Most Common Nutrition Education, Marketing, and Support Services among NI Sites that Provided These Offerings (2022-2023; n = 1,467)



B&M **Nutrition Education** (n = 308)

B&M **Support Services** (n = 498)

B&M **Marketing Activities** (n = 887)

FD **Nutrition Education** (n = 1,159)

FD **Support Services** (n = 604)

FD **Marketing Activities** (n = 1,975)

NI Participant-Level Outcomes

Fifty-six NI grantees with active projects[15] collected participant-level data in Y4. NI participant results in this report include data collected during Y4 only.

What Were the Characteristics of NI Program Participants?

NI grantees collected surveys from a total of 9,157 participants (Y3 = 7,646).[16] The sample size collected from each active NI project ranged from as few as two to as many as 762 participants, with an average of 164 surveys collected per active NI project. The resulting participant-level data represent all four regions of the U.S. as **defined by USDA NIFA**, with the greatest number of surveys collected in the Western region (39.2%; **Table 2**).[17]

Table 2. Number of NI Surveys Collected Across U.S. Regions (Defined by USDA NIFA)

Region	N (%)
Western	3,586 (39.2%)
North Central	2,248 (24.6%)
Northeast	2,091 (22.8%)
Southern	1,232 (13.5%)
Total	**9,157**

> **"The [NI] program expands my family's food budget.** Having this extra spending power helps me afford food I wouldn't otherwise buy. It allows me to experiment, to try something new, without worrying. It feels like such a gift to be able to support farmers that I care about in a context where I know the food is good. This program multiplies the good, for my family's health, for our budget, and for our community."
>
> *—Southern region NI participant*

[15] All NI grantees with active projects, except GusNIP Pilot Projects, are expected to collect participant-level surveys each year.

[16] NI surveys are collected annually by grantees using a repeated cross-sectional design. This means the same individuals are not followed over time, rather a convenience sample is collected annually.

[17] Distribution of surveys across geographic regions is influenced by the number of active NI projects in each region and by projects providing different sample sizes based on their award type and capacity.

Sociodemographic characteristics of NI participants surveyed during Y4 are displayed in **Table A9**. The participant-level data yielded a diverse sample of NI participants. Most NI participants identified as female (74.5%), White (48.0%) or Black or African American (16.6%), and non-Hispanic or Latino/a/x (70.5%), with an average age of 46 years. A small percentage (2.9%) of NI participants identified as non-binary, third gender, or "preferred to self-describe" their gender.

For comparison, the NI sample included a greater proportion of females (74.5%) than the overall U.S. population (50.5%),[18] as well as a greater proportion of individuals of color (38.9%) than the U.S. population.[19] Additionally, national data on the characteristics of shoppers using SNAP in 2020 revealed that the overall SNAP population[20] was 37.9% White, 25.5% Black or African American, 15.1% Hispanic, and between 36 and 59 years old (22.9%). Sociodemographic comparisons across the NI population, the U.S. population, and the SNAP population reflect the aim of NI projects to support communities of color with low income and household grocery shoppers who tend to be female.[21]

How Did We Analyze the Impact of NI Participation?

It is important to ensure all NI projects and participants have equal representation in the impact results. Since the sample size varied greatly among NI projects, weighting was applied to analyze key participant-level outcomes including FV intake, food security, perceived health, and program satisfaction. Specifically, these outcome data were down weighted for projects that collected more than the expected number of participant surveys.[22] Without weighting, one or a few projects with very large sample sizes could bias the results.

How Did NI Projects Impact Household Food Security?

NI projects are intended to support participant food security. Household food security was assessed using the U.S. Household Food Security Survey Module: Six-Item Short Form.[23] Of the 5,838 NI survey participants who completed the household food security questions, 2,425 (41.5%) participants were found to be food secure and 3,413 (58.5%) were food insecure (**Table A10**).

Household food security among the NI sample was very low compared to all U.S. households in 2022, of which 87.2% reported household food security.[24] Household food security among the NI sample was also very low compared to the overall SNAP population, reported by one study to be 78.6% in 2021.[25]

When food security levels were examined by dose[26] (**Figure 14**), **those with longer participation in the NI project (six months or more) were more likely to report household food security (45.5%) when compared to those with less than six months of participation (42.3%) and first-time participants (32.5%).**

---

[18] American Community Survey 2020 vintage 5-year estimates.

[19] 24.2% of the U.S. population is non-white according to the American Community Survey 2020 vintage 5-year estimates.

[20] Cronquist K, Eiffes B. *Characteristics of Supplemental Nutrition Assistance Program Households: Fiscal Year 2020*. U.S. Department of Agriculture, Food and Nutrition Service, Office of Policy Support; 2022.

[21] The reported sociodemographic characteristics of the NI participant sample reflect the sociodemographic characteristics of those who completed the survey and may not reflect the sociodemographic characteristics of NI program participants overall.

[22] Down weighting results means that we applied a value to outcomes that is the expected number of surveys for a grantee divided by the actual number of surveys received. Note that for weighted outcomes cell counts may not be whole numbers, and these have been rounded to whole numbers for ease of interpretation.

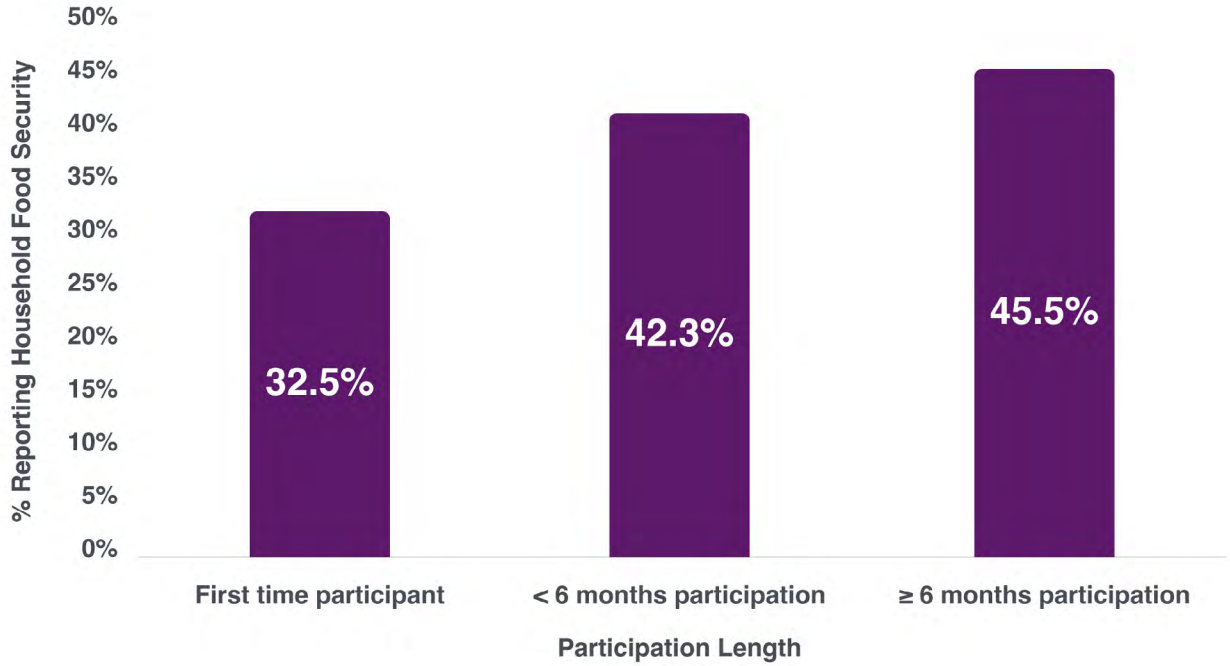
[23] Food security includes participants reporting high food security or marginal food security. Food insecurity includes participants reporting low food security or very low food security.

[24] United States Department of Agriculture, Economic Research Service. *Key Statistics & Graphics*. Accessed February 2, 2024. https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/.

[25] Brady PJ, Harnack L, Widome R, Berry KM, Valluri S. Food security among SNAP participants 2019 to 2021: a cross-sectional analysis of current population survey food security supplement data. *J Nutr Sci*. 2023;12:e45. Published 2023 Apr 11. doi:10.1017/jns.2023.32.

[26] Length of participation in NI is used as a proxy to measure dose and assesses whether participants are using an NI program for the first time, and if not, how long they have been using the program.

Figure 14. Percentage of NI Participants who Reported Household Food Security Increased with Longer Participation in NI Projects (2022-2023; n = 5,395)*



*Percentages reported are compared against food insecure households within the same participation length category.

In the Y4 NI sample, there were several sociodemographic groups that reported lower household food security than the overall rate of food security (41.5%; **Table A10**). Individuals aged 45 to 64 reported lower household food security (37.5%) when compared to other age groups. In addition, NI participants who identified as Hispanic or Latino/a/x reported lower household food security (35.1%) compared to participants identifying as Non-Hispanic or Latino/a/x and those who "preferred not to answer" when asked about their ethnicity (**Table A10**). Those identifying as American Indian or Alaskan Native had the lowest reported household food security (20.8%) when compared to other racial categories, including participants identifying as multi-racial or another race not listed (**Table A10**). **Table A10** has details on the distribution of household food security rates across all sociodemographic characteristics.

For comparison, 63.3% of U.S. households living at or below 100% of the federal poverty limit are food secure and 36.7% are food insecure. Furthermore, disparities in racial categories exist such that Hispanic or Latino/a/x and Black or African American households are less likely to be food secure than White, Non-Hispanic households.[27] This means that the NI participant sample included people with relatively low household food security and indicates NI projects reached households in need of food assistance.

How Did NI Projects Impact Fruit and Vegetable Intake?

A secondary goal of NI is to increase participant FV intake through increased FV purchases. Achieving adequate FV intake can be challenging for households with low income, especially due to the increasing cost of purchasing FVs.[28] FV intake for all NI survey respondents was calculated using the 10-item Dietary Screener Questionnaire (DSQ; described in **Appendix 3**).

[27] United States Department of Agriculture, Economic Research Service. Key Statistics & Graphics. Accessed February 2, 2024. https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/#householdtype.

[28] United States Government Accountability Office. Food Prices: Information on Trends, Factors, and Federal Roles. Published March 28, 2023. Accessed January 25, 2024. https://www.gao.gov/products/gao-23-105846.

On average, NI participants reported higher intake of vegetables (1.64 cups/day) versus fruit (1.10 cups/day) for a total of 2.72 FVs cups/day (**Table A11**). As in Y3,[29] these values are greater than the average reported intake levels for FVs among U.S. adults (vegetables = 1.57 cups/day; fruit = 0.96 cups/day).[30] Total FV intake reported among NI participants (2.72 FV cups/day) was 0.19 FVs cups/day more than the total average intake of U.S. adults (2.53 FV cups/day). These values are also greater than the average reported intake levels for FVs among the general population with low income (2.21 FVs cups/day).[31] For context, the 2020-2025 U.S. Dietary Guidelines for Americans (DGA) recommends adults eat 2 to 3 cups of vegetables and 1.5 to 2 cups of fruits each day for a total of 3.5 to 5 cups of FVs per day.[31]

Participants identifying as male reported higher FV intake (3.08 FVs cup/day) than participants who identified as female (2.63 FV cups/day). Participants identifying as Other Pacific Islander reported the highest FV intake across racial and ethnic groups (2.88 FV cups/day), while participants identifying as Black or African American reported the lowest (2.62 FV cups/day). Participants aged 18 to 24 reported the lowest FV intake among all groups (2.57 FV cups/day). Participants located in the Western region of the U.S. reported the highest intake of FVs (2.8 FV cups/day) compared to other regions (range = 2.59 - 2.77 FV cups/day; **Table A11**). FV intake among non-binary or third gender participants are presented as frequencies in **Table A12**.[32] Among non-binary or third gender NI participants (n = 257), 18.3% reported eating fruit "2 or more times per day" and 26.5% reported eating vegetables "2 or more times per day" (**Table A12**).[33]

NI participants who shopped at FD sites reported higher amounts of FV intake (2.75 FV cups/day) when compared to B&M sites (2.64 FV cups/day).

These data are consistent with Y3 findings and align with previous research that demonstrates slightly higher FV intake from participants associated with FD sites when compared to B&M sites.[34,35]

Across all retail sites, NI participants who reported redeeming incentives for six months or more reported higher FV intake (2.83 FV cups/day) than those who reported redeeming incentives for less than six months (2.61 FV cups/day) or redeeming incentives for the first time (2.62 FV cups/day). As in Y2 and Y3, **the GusNIP Y4 results demonstrate a higher FV intake among those utilizing the program for six months or more when compared to first-time participants (+0.21 FVs cups/day at all retail sites).**

[29] Y3 vegetable intake = 1.65 cups/day, Y3 fruit intake = 1.10 cups/day.

[30] Young S, Guthrie J, Lin B-H. Food consumption and nutrient intakes. United States Department of Agriculture, Economic Research Service; 2021. https://www.ers.usda.gov/data-products/food-consumption-and-nutrient-intakes/.

[31] United States Department of Agriculture and United States Department of Health and Human Services. *Dietary Guidelines for Americans, 2020-2025*. 9th Edition. Published December 2020. Accessed February 2, 2024. DietaryGuidelines.gov.

[32] The NTAE is actively working to address issues of diversity, equity, and inclusion in shared measures, which includes that the DSQ algorithm excludes the calculation of non-female/male responses.

[33] When asked about gender, a subset of NI participants identified as non-binary or third gender, preferred to self-describe their gender, or preferred not to answer. These NI participants also reported FV intake data. However, the DSQ algorithm requires identification of male or female gender to derive cup equivalents.

[34] Jilcott Pitts SB, Gustafson A, Wu Q, et al. Farmers' market use is associated with fruit and vegetable consumption in diverse southern rural communities. *Nutr J*. 2014;13,1.

[35] Hu X, Clarke LW, Zendehdel K. Farmers' market usage, fruit and vegetable consumption, meals at home and health–evidence from Washington, DC. *Sustainability*. 2021;13(13):7437.

These FV intake results are particularly meaningful given that prior research demonstrates a dose-response relationship between FV intake and health where incremental increases in FV intake are health protective.[36] In other words, even moderate increases in FV intake result in better health. As the GusNIP program continues to grow, it is encouraging to see the continued association between NI participation and increased FV intake. Additionally, the DSQ only assesses impact on individual FV intake, but the impact on FV intake could extend to the whole household. **Figure 15** displays differences in FV intake by site type and length of participation.

Figure 15. Average Daily FV Intake Increases by Participation Length at All Retail Sites Across NI Projects (2022-2023; n = 7,064)

How Did NI Projects Impact Perceived Health?

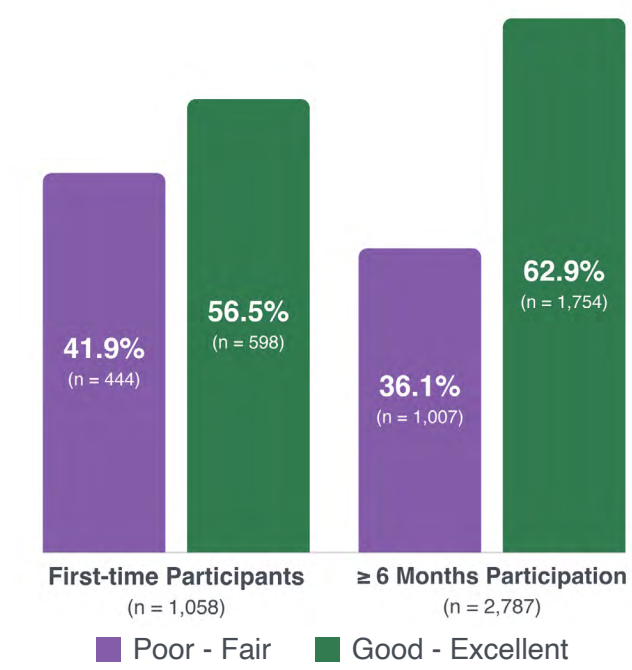
Previous research has established that FV intake is associated with improved health outcomes.[37] In other words, as FV intake increases, death and disease decrease. Therefore, NI participants (n = 5,596) were asked to self-report on their health, as either "poor," "fair," "good," "very good," or "excellent." NI participants were most likely to perceive their health as "good" (37.5%), followed by "fair" (29.7%) and "very good" (17.8%) (**Table A13**). Individuals who participated in NI projects for six months or more reported "good," "very good," or "excellent" health at a higher rate (62.9%) than first-time participants (56.5%; **Figure 16**).

These results, consistent with Y2 and Y3, continue to indicate that **longer-term participation in NI projects is associated with improved perceived health among participants.**

[36] Bellavia A, Larsson SC, Bottai M, et al. Fruit and vegetable consumption and all-cause mortality: A dose-response analysis. *Am J Clin Nutr.* 2013;98(2):454-9.

[37] Wallace TC, Bailey RL, Blumberg JB, et al. Fruits, vegetables, and health: A comprehensive narrative, umbrella review of the science and recommendations for enhanced public policy to improve intake. *Crit Rev Food Sci Nutr.* 2020;60(13):2174-211.

Figure 16. Perceived Health Improves with Longer Participation Across NI Projects (2022-2023)



NOTE: This figure does not include the following categories: don't know/prefer not to answer and missing.

"I suffer from anemia and osteoporosis, and this program has allowed me to get a more vitamin-rich diet...and it's making such an improvement in my overall health...this program has also done more than feed us...**the store went from selling tobacco products, t-shirts, and everything unhealthy...now a crown jewel of the neighborhood where children come and they're running off with mango instead of chips."**

—Western region NI participant

The positive impact of NI projects on self-perceived health is promising. Reporting worse perceived health on this assessment has been consistently associated with morbidity[38] and mortality[39] risk, and the assessment is used as a proxy for actual health in public health monitoring.[40] Nationally, households living below the poverty level experience health disparities[41] and report "fair" or "poor" health status more often than households with higher incomes.[42] NI projects support households living below the federal poverty level that experience health disparities. In the NI Y4 sample, perceived health improved with longer participation in NI projects. Moreover, across three years of GusNIP results, participants tend to have higher perceived health the longer they participate in NI projects.

How Satisfied Were Participants With NI Projects?

Among NI participants who reported program satisfaction (n = 5,739), 88.5% of participants indicated they felt "positively" or "very positively" about the NI project (**Figure 17**). This high satisfaction rate was maintained from Y3 when 87.8% of participants reported feeling "positively" or "very positively" about the NI project. Program satisfaction was slightly higher among FD participants, with 92.8% reporting they felt "positively" or "very positively" about the NI project they participated in, compared to 86.2% of B&M participants (**Table A14**).

[38] Latham K, Peek CW. Self-rated health and morbidity onset among late midlife U.S. adults. *J Gerontol B Psychol Sci Soc Sci*. 2013;68(1):107-116.

[39] DeSalvo KB, Bloser N, Reynolds K, et al. Mortality prediction with a single general self-rated health question. *J Gen Intern Med*. 2006;21:267-75.

[40] Centers for Disease Control and Prevention. *Measuring Healthy Days*. Published November 2000. Accessed November 2023 https://stacks.cdc.gov/view/cdc/6406.

[41] Braveman PA, Cubbin C, Egerter S, Williams DR, Pamuk E. Socioeconomic Disparities in Health in the United States: What the Patterns Tell Us. *Am J Public Health*. 2010;100(Suppl 1):S186-S196.

[42] Center for Disease Control and Prevention. *Health Status - Health, United States*. Published August 8, 2022. Accessed February 2, 2024. https://www.cdc.gov/nchs/hus/topics/health-status.htm.

This difference may be due to setting characteristics rather than the NI project itself. In other words, FD sites may have different features compared to B&M sites that contribute to positive feelings and program satisfaction such as family activities, community events, and vendors selling non-food items. A small proportion (0.69%) of NI participants reported "very negative" experiences with NI projects (**Table A14**). These responses indicate NI projects are very well perceived overall.

Figure 17. Majority Positive Program Satisfaction among NI Project Participants (2022-2023; n = 5,739)*

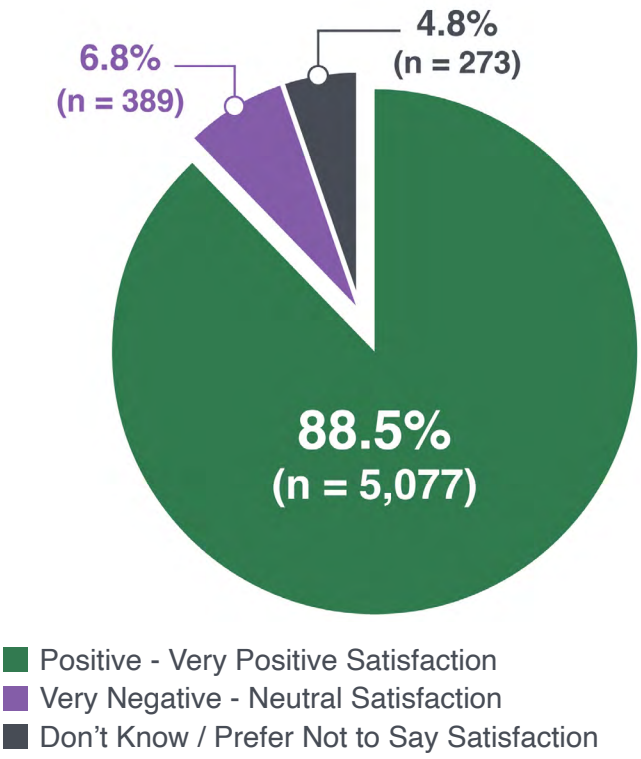


*Figure excludes missing responses.

Produce Prescription Program (PPR) Outcomes

PPR Site-Level Outcomes

GusNIP site-level outcomes are used to evaluate project implementation and to identify project characteristics that increase the redemption of participant incentives. As with NI projects, all PPR projects awarded during 2019, 2020, 2021, or 2022 and active during Y4 were required to report site-level core measures to the NTAE. Consequently, grantees submitted site-level data for 115 PPR awards via the Nutrition Incentive Hub secure portal. See **Appendix 4** for a description of the methods and measures used for site-level reporting and **Appendix 9** for all PPR site-level outcome tables.

Where Did PPR Projects Operate?

Unlike NI, PPR participants do not need to purchase a food or beverage item to initiate an incentive. Rather, PPR participants receive a produce "prescription" from a clinic site which they can "fill" or redeem for free FVs at FD, B&M, and clinic sites. In PPR projects, the incentive is viewed as a way to treat or prevent diet-related chronic disease. In the context of PPR projects, the terms "incentive" and "prescription" are used interchangeably.

A total of 1,425 PPR sites (FD = 196; B&M = 915; clinic = 314) expanded access to FVs with the shared goal of improving the nutrition and health status of participating households (**Figure 18**).[43] A majority of PPR sites (85.6%) served urban populations, while 14.4% served rural populations and 1.6% were in areas serving tribal populations (**Figure 19**). Most often, participants were screened and recruited at clinic sites where prescriptions were also distributed. However, prescriptions were most often redeemed at FD or B&M sites.

[43] Operating PPR sites are defined as locations where incentives were distributed/redeemed or where participants were enrolled.

Nearly two-thirds of Y4 PPR sites were B&M sites (62.2%). The remaining sites were clinics (22.0%) and FD (12.8%; **Figure 18**). These percentages, like those from Y3, indicate the growing popularity of PPR projects working with B&M sites as places where participants can redeem produce prescriptions.

Figure 18. PPR Project Site Types (2022-2023; n = 1,425)

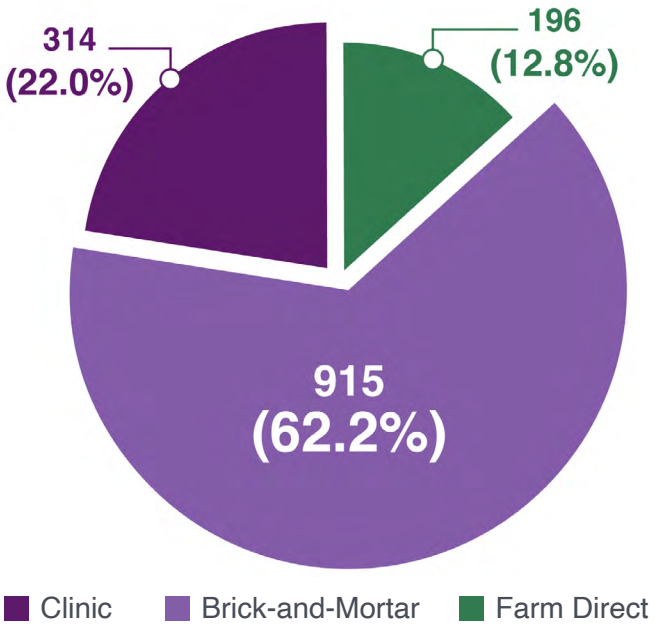
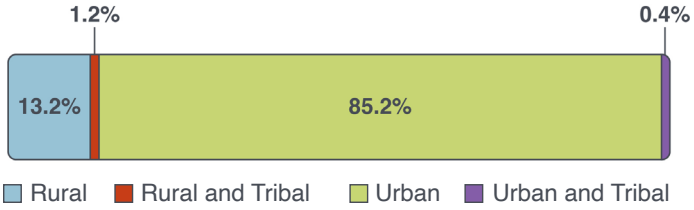


Figure 19. Rural, Tribal, and Urban Populations Served by PPR Projects (2022-2023; n = 1,423)*



*Two sites were missing census tract.

How Many People Did PPR Projects Reach?

Reach is the number of participants that PPR projects serve at a given time. To estimate reach, PPR sites were asked to report the number of newly enrolled participants each month (see "Who Was Eligible to Participate in PPR?" for details about enrollment). During Y4, a total of 22,571 PPR participants were enrolled, equaling an average monthly enrollment of 1,881 PPR participants.

> "One homebound participant with a few chronic conditions loved the social and educational aspect of our program. **She had not been a part of a program to help with nutrition education and was very excited when she had lost some weight and her A1c had decreased."**
>
> *—Northeastern region PPR practitioner*

This total is similar to Y3 when 23,823 participants were enrolled. With new PPR projects, it often takes a year or more to prepare for participant enrollment. PPR projects must establish partners, train staff, develop technology, plan support services, and gain Institutional Review Board approval, among other steps, before enrollment can begin. Therefore, PPR enrollment will continue to grow in future years of GusNIP. Growth in enrollment will be especially pronounced when ARPA-funded projects start enrolling participants.

How Did Participants Redeem PPRs?

Typically, only fresh FVs are eligible for redemption within PPR projects, as specified by the PPR RFA. However, grantees may seek an exemption from USDA to allow prescription redemption for non-fresh FVs. Such exemptions are granted to accommodate cultural preference, seasonality, and/or accessibility of fresh FVs in a project's geographic area.[44]

[44] United States Department of Agriculture, National Institute of Food and Agriculture. *Request for Applications: The Gus Schumacher Nutrition Incentive Program Produce Prescription Program (Fiscal Year 2023)*. Accessed August 9, 2023. https://www.nifa.usda.gov/sites/default/files/2023-02/FY23-GusNIP-PPR-RFA-508.pdf.

Grantees can further limit what is eligible for redemption within their project beyond fresh FVs (e.g., emphasizing regional or local FVs). These designations are then implemented within PPR sites, resulting in a variety of items eligible for PPR incentive redemption, including:

PPR sites (n = 993) most commonly designated "fresh FVs only" (58.0%) and "all FVs (fresh, canned, frozen, dried, plants, and/or seeds)" (33.3%) as eligible for incentive redemption (**Table B1**).

A smaller number of PPR sites designated "only state or regionally grown FVs" as eligible for incentive redemption (7.2%; **Table B1**).

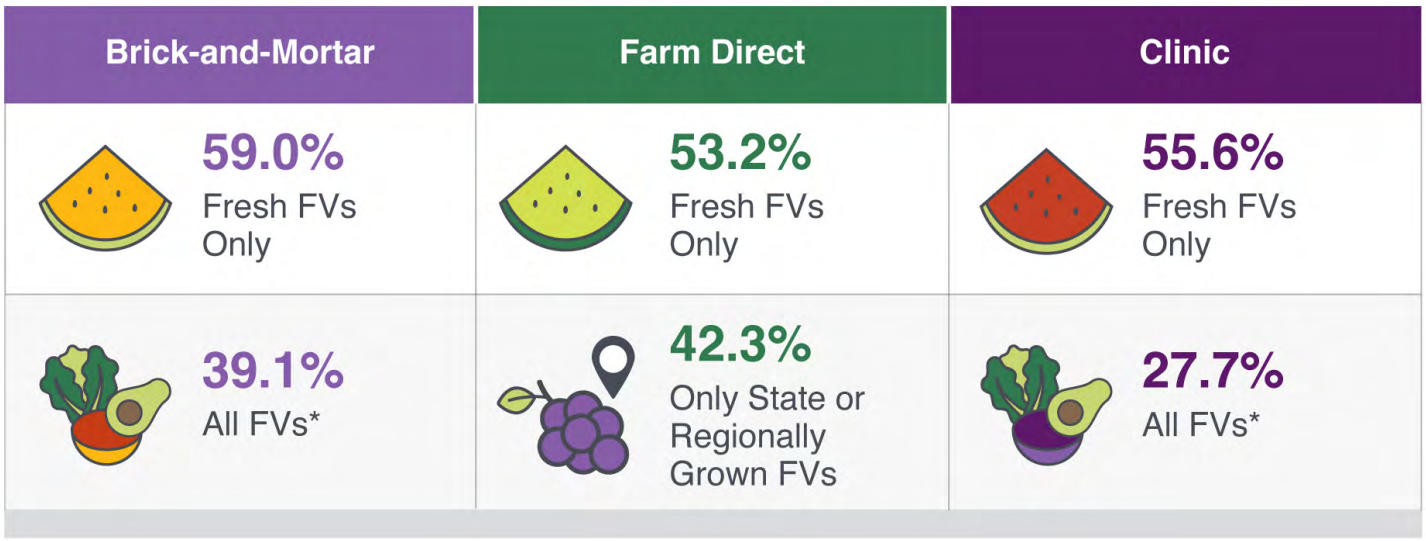
Figure 20 summarizes the most common FV types eligible for incentive redemption among the three types of PPR sites. Each PPR site type designated "fresh FVs only" as the most common food eligible for incentive redemption (B&M = 59.0%; FD = 53.2%; clinic[45] = 55.6%). However, site types differed in the second most common food eligible for incentive redemption: 39.1% of B&M sites and 27.7% of clinic sites designated "all FVs" as eligible. However, 42.3% of FD sites designated "only state or regionally grown FVs" as eligible for incentive redemption (**Figure 20**). FD sites such as farmers markets sell more local FVs than B&M or clinic sites and therefore could more often restrict incentive redemption to "only state or regionally grown FVs."

PPR incentives/prescriptions are distributed and redeemed using different financial instruments, including loyalty cards, tokens, vouchers, and CSA boxes (see **Appendix 8** for definitions and examples of financial instruments). Across all PPR projects (n = 296 sites), the most common financial instrument for incentive distribution and redemption was "paper voucher or coupon" (46.3%), followed by "debit card" (25.7%)[46] and "CSA share or produce box" (20.6%; **Table B2**). A smaller proportion of PPR projects reported using other financial instruments such as "token" (15.5%) and "loyalty account" (9.5%; **Table B2**).

[45] PPR clinic sites sometimes hosted mobile markets or "farmacies" where participants could redeem incentives.

[46] Some PPR projects load incentives onto an electronic debit card at regular intervals (e.g., monthly). Debit card financial instruments were recategorized from the "other" category. Due to the increased frequency of PPR projects using this financial instrument, a new category was created in Y4.

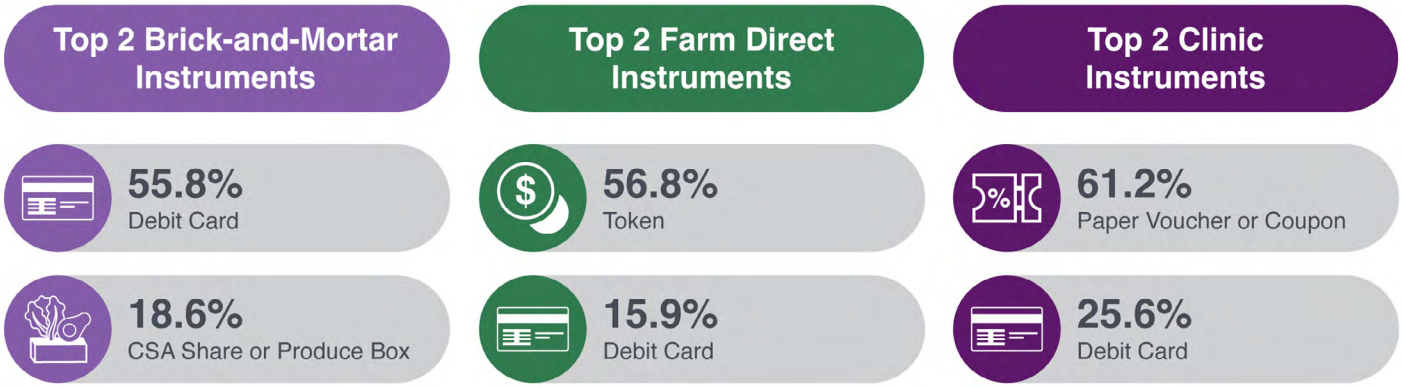
Figure 20. Most Common Foods Eligible for Incentive Redemption by PPR Site Type (2022-2023)*



*All FVs include fresh, canned, frozen, dried, plants, and/or seeds.

The most common types of financial instrument used to distribute or redeem incentives varied among FD, B&M, and clinic sites (**Figure 21**). Using debit cards to distribute/redeem incentives was common among all sites, but most often used at B&M sites (55.8%). FD sites most often used "tokens" (56.8%) and clinics most often used "paper voucher or coupon" (61.2%; **Figure 21**).

Figure 21. Most Common Financial Instruments Used across PPR Projects by Site Type (2022-2023)



PPR researchers, practitioners, and policymakers benefit from understanding the landscape of project models implemented by PPR projects. As evidenced by the results presented in this section, PPR projects use a wide range of models to distribute and redeem prescriptions for fresh FVs. Many implementation strategies are feasible for PPR projects, and some may work better in certain rural, tribal, or urban contexts. In the future, the NTAE will utilize these data to explore which project models lead to improved incentive distribution, redemption rate, and participant outcomes.

How Many PPR Incentive Dollars Were Distributed and Redeemed?

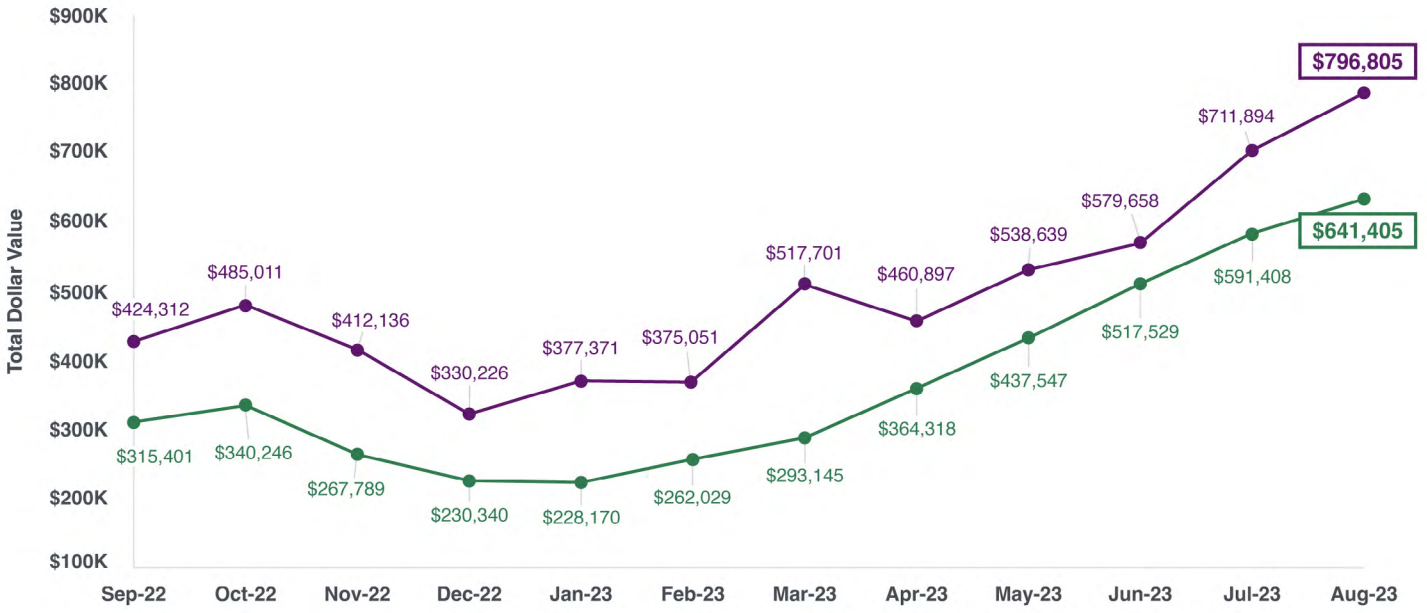
During Y4, a total of $6,019,701 in incentives were distributed via prescription. Across active PPR project sites, a total of $4,489,327 of incentives were redeemed, with an average of $3,107 in incentives redeemed per month. This is more than double the dollar amount redeemed in Y3. The significant increase in dollars redeemed reflects the increase in the number of PPR projects awarded in Y4. Overall, this equals a 74.6% total annual redemption rate during Y4 (**Table B3**). This is an increase from the 53.4% total annual redemption rate in Y3.

Among all PPR projects, incentive distribution ($330,226) was lowest in December 2022 and incentive redemption ($228,170) was lowest in January 2023 (**Figure 22**). Both PPR incentive distribution ($796,805) and redemption ($641,405) were highest in August 2023 (**Figure 22**).

> "In the first four months [of the PPR project], we distributed over 6,000 pounds of local produce to over 560 clients. **We sourced over 65% of this produce from [Black, Indigenous, and people of color]-led farms**, and over 40% from organic farms."
>
> *—Western region PPR grantee*

Distribution and redemption may peak in summer months. This is because PPR projects are timed to take advantage of increased availability of fresh produce at FD outlets, like farmers markets and CSA programs. As additional clinics were onboarded in early 2023 and FD sites became more active with increased availability of fresh FVs, there was a steady increase in incentive distribution and redemption during the spring and summer months of 2023.

Figure 22. Incentive Distribution and Redemption in Dollars for PPR Projects (2022-2023; n = 115)



What Other Services Did PPR Sites Offer?

Many PPR projects paired incentives with nutrition education resources, support services, and/or marketing activities. See **Appendix 8** for definitions and examples of nutrition education, support services, and marketing activities.

A total of 348 PPR project sites offered one or more nutrition education activity in Y4 (**Table B4**). Nutrition education in PPR projects often focused on purchasing, preparing, and eating FVs. The most common nutrition education activities offered at PPR sites (n = 348) included "cooking demonstrations" (88.5%), "one-on-one or small group nutrition education" (37.1%), "partnering nutrition education" (24.1%), "e-interventions" (23.9%), and "food navigation or tours" (15.2%; **Table B4**).

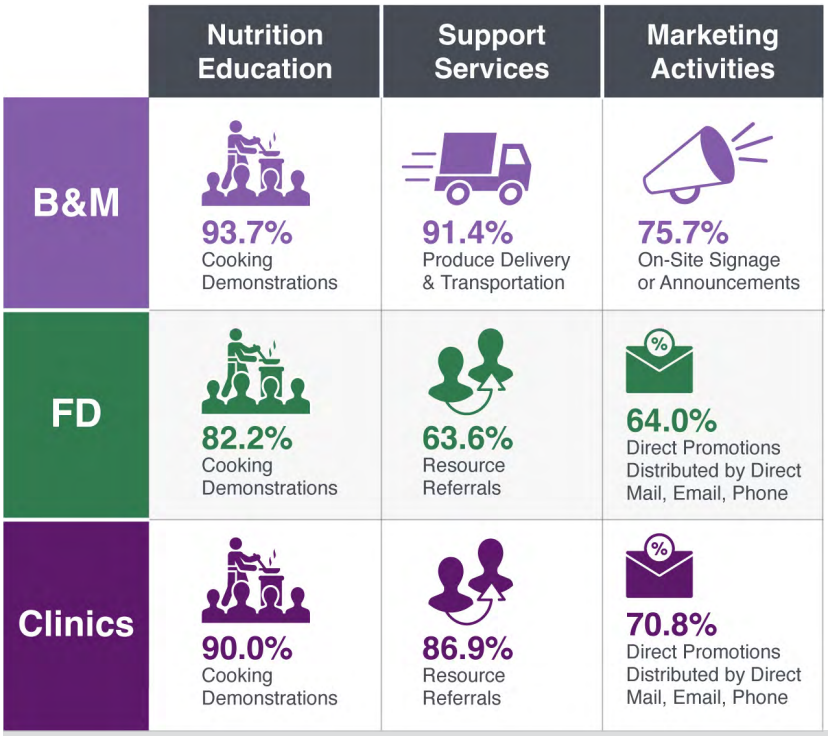
Many PPR projects (n = 335 sites) offered support services that complemented produce prescriptions. Support services included "resource referrals" (73.1%), "produce delivery and transportation" services (54.6%), "COVID-19 testing and vaccination" (43.6%), "health fairs and other community building activities" (11.9%), and "voter registration and other civic engagement" (4.2%; **Table B5**).

Marketing activities encouraged eligible audiences to enroll and promoted ongoing participation in a PPR project. Of the 346 PPR sites that offered marketing activities, the most common was "on-site signage or announcements" (65.3%), followed by "direct promotions distributed by mail, email, or phone" (60.4%), "online advertisements" (26.6%), and "multilingual promotions" (19.9%; **Table B6**).

Figure 23 summarizes the most commonly offered nutrition education, support services, and marketing activities across PPR projects.[47] FD and clinic sites both commonly provided "cooking demonstrations," "resource referrals," and "direct promotions distributed by direct mail, email, or phone." However, B&M sites most commonly provided "produce delivery and transportation" and "on-site signage or announcements."

[47] Percentages displayed are out of sites that offered any nutrition education, support services, or marketing activities respectively.

Figure 23. Most Common Nutrition Education, Marketing, and Support Services Among PPR Sites that Provided These Offerings



B&M **Nutrition Education** (n = 80)

B&M **Support Services** (n = 82)

B&M **Marketing Activities** (n = 70)

FD **Nutrition Education** (n = 107)

FD **Support Services** (n = 77)

FD **Marketing Activities** (n = 125)

Clinics **Nutrition Education** (n = 161)

Clinics **Support Services** (n = 176)

Clinics **Marketing Activities** (n = 151)

Understanding the various types of services offered alongside incentives in PPR projects helps inform implementation strategies. At a basic level, this information can help discern which services are feasible to offer. It is clear that PPR projects incorporate a variety of other services to provide a holistic PPR intervention. Future research at the NTAE will examine which services are most likely to enhance the effects of incentives on PPR outcomes.

Who Was Eligible to Participate in PPR?

PPR project participants must be eligible for SNAP or enrolled in medical assistance (e.g., Medicaid) and currently at risk for a diet-related health condition. Beyond these eligibility requirements, PPR projects can define further eligibility criteria as they choose. For example, many PPR projects also include screening positive for food insecurity as an indicator of risk for diet-related health conditions.

PPR sites often used multiple criteria to identify participants who were eligible to enroll in the PPR project. All projects are required to screen for a diet-related chronic disease and all projects are required to screen for a form of income eligibility (i.e., SNAP eligible or Medicaid enrolled).

Photo courtesy of the USDA

Among the 211 clinics that reported details of the chronic health conditions used as an eligibility criterion, the following conditions were included: “diabetes” (75.4%), “prediabetes” (75.4%), “cardiovascular disease” (74.4%), “hypertension” (68.3%), and “obesity” (54.0%; **Table B7**). Taken together, the eligibility criteria reported by PPR sites indicate successful project implementation with respect to reaching the intended audience through this valuable intervention.

PPR Participant-Level Outcomes

During Y4, 64 PPR grantees with active projects collected participant-level data. This section describes characteristics of participants that completed a baseline survey during Y4 as well as the impact on participants of those projects that completed their awards during Y4.

> "This [PPR] program has allowed me to change my diet... **I am happier and have taken control of my stress!"**
>
> *—Southern region PPR participant*

What Were the Characteristics of PPR Program Participants?

In total, 1,062 baseline surveys were collected from 64 PPR projects in Y4. Baseline surveys are completed by a sample of participants around the time they enroll in a PPR project. The number of baseline surveys collected per project ranged from as few as nine to as many as 552, with an average of 97 baseline surveys collected per project. This variability is mostly related to the time that has elapsed since each project's start date (e.g., whether it is in its first vs. third year) and whether or not the project has reached its participant recruitment goal.[48]

The resulting data represents all four USDA NIFA regions. The highest percentage of baseline surveys were collected from the Southern region (57.0%; **Table 3**). Distribution of surveys across geographic regions is influenced by the number of active PPR projects in each region and by projects providing different sample sizes based on their award type and capacity.

Table 3. Number of PPR Surveys Collected Across U.S. Regions (Defined by USDA NIFA)

Region	N (%)
Southern	605 (57.0%)
Western	254 (23.9%)
Northeast	141 (13.3%)
North Central	62 (5.8%)
Total	**1,062**

According to baseline surveys, most participants were 45 years of age or older (51.3%) with an average age of 46.8 years, female (86.9%), Black (46.2%), and Non-Hispanic or Latino/a/x (86.4%; **Table B8**). Many participants described themselves as White (20.2%), American Indian or Alaskan Native (18.8%), and/or Hispanic or Latino/a/x (9.3% **Table B8**).

Of the 819 participants who completed the baseline U.S. Household Food Security Survey Module: Six-Item Short Form in Y4, 28.8% reported household food security and 71.2% reported experiencing household food insecurity within the previous 30 days (**Table B9**). Comparatively, USDA reports 17.3% of all U.S. households in 2022 experienced food insecurity in the past 12 months.[49] The relatively high prevalence of household food insecurity among PPR participants at baseline is anticipated. Food insecurity is strongly associated with low income[50] and PPR participants must be eligible for SNAP or enrolled in medical assistance.

[48] PPR projects enroll a cohort of eligible participants and collect baseline and follow-up participant-level data over the course of their award.

[49] USDA ERS - Key Statistics & Graphics. Accessed January 29, 2024. https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/.

[50] Rabbitt MP, Hales LJ, Burke MP, Coleman-Jensen A. *Household food security in the United States in 2022* (Report No. ERR-325). U.S. Department of Agriculture, Economic Research Service; 2023.

Of the 787 participants who completed the baseline DSQ for daily FV intake in Y4, the average FV intake was 2.43 cups/day (**Table B10**). These baseline results fall below the 2020 to 2025 DGA recommendation of 3.5 to 5 total FVs cups/day. Baseline PPR participants' average reported vegetable intake (1.50 cups/day) and fruit intake (0.92 cups/day) were slightly lower than U.S. adults' average reported vegetable and fruit intake levels (1.57 cups/day and 0.96 cups/day, respectively).[51]

Of the 823 participants who self-reported their health status at baseline, 9.7% reported "poor" health status, 41.0% reported "fair" health status, and 48.6% reported a health status of "good," "very good," or "excellent" (**Table B11**).

How Did We Analyze the Impact of PPR Participation?

Participant-level impact of PPR projects was evaluated by comparing individual participants' baseline surveys to their follow-up surveys. Baseline surveys were administered around the time of enrollment and intended to measure participants' well-being and experiences prior to PPR participation. Follow-up surveys were administered after the participant was in the project for some time and intended to measure participants' well-being and experiences after receiving services through the PPR project.

In prior years, impact analyses included matched surveys collected by all projects active during that year. This approach unintentionally overrepresented data from newer projects that had not yet reached peak effectiveness. For this reason, impact analysis now focuses on data collected at any time from projects that completed their awards in the current year. This revised approach included data from participants who met the following criteria: (1) participated in a PPR project that completed its award in Y4; (2) had a matched baseline and follow-up survey from any year of the PPR project; (3) had follow-up surveys dated at least 90 days after baseline. These criteria ensured analyses included participants from across completed projects' entire lifecycle. These criteria also limited the analyses to participants who had the opportunity to access project services for a meaningful amount of time between baseline and follow-up, rather than those with only a few weeks between baseline and follow-up.

In this way, these criteria ensure enough time had passed between the surveys for participants to potentially engage with the program and experience impact. Additionally, these criteria ensured that the baseline and follow-up data were collected from the same participants, rather than different groups of people.

In order to establish a consistent sample for future impact reports, the NTAE completed a process based on Y1-Y3 datasets to define inclusion and exclusion criteria. The inclusion and exclusion criteria were identified before Y4 data were available. Therefore, the resulting sample for this Y4 report is small and includes participants from only a limited number of grantees. This important process established new, consistent criteria for inclusion that will be carried into future reports.

In Y4, five PPR projects completed their awards. Four of these projects provided baseline and follow-up surveys from participants. These four PPR projects operated between 2019-2023 and include survey data collected at any point during those years. From these four projects, baseline surveys were matched to follow-up surveys from 176 participants who met the criteria described above.

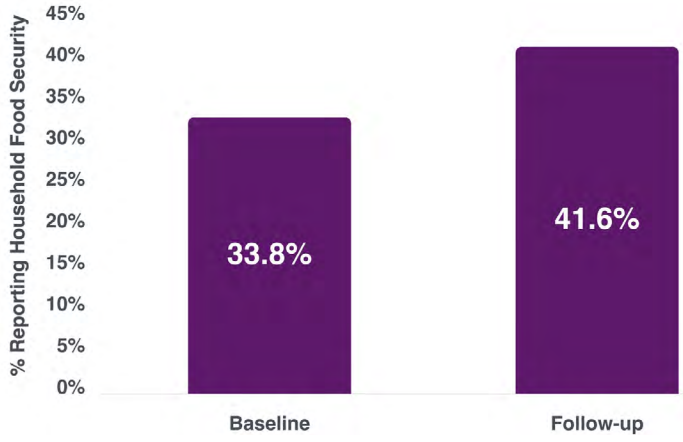
[51] Young S, Guthrie J, Lin B-H. *Food Consumption and Nutrient Intakes*. USDA ERS. 2021. https://www.ers.usda.gov/data-products/food-consumption- and-nutrient-intakes.

Appendix 9 presents a comprehensive set of tables describing the 176 participants whose data were used to describe project impact on PPR participants. The average age of participants was 43.0 years. Most participants were female (83.8%) and Non-Hispanic or Latino/a/x (94.6%; **Table B8**). Many participants described themselves as American Indian or Alaskan Native (49.0%) and/or Black or African American (37.9%; **Table B8**). Several groups have limited representation among the 176 participants in this analysis. Many more participants will be included in these analyses in future years as more projects complete their awards.

How Did PPR Projects Impact Household Food Security?

Within the four projects included in this analysis, 77 participants completed the U.S. Household Food Security Survey Module: Six-Item Short Form at baseline and follow-up.[52] At baseline, 33.8% reported household food security and 66.2% reported experiencing household food insecurity within the previous 30 days. At the follow-up survey, 41.6% reported household food security and 58.4% reported experiencing household food insecurity within the previous 30 days (**Figure 24**). **These results demonstrate a meaningful increase in household food security associated with participation in a PPR project.**

Figure 24. Percentage of PPR Participants who Reported Household Food Security Increased from Baseline to Follow-up (n = 77)*



*Participants included in this figure are from four projects that completed their award in Y4 and collected both baseline and follow-up surveys from participants.

This increase in household food security among PPR participants from baseline to follow-up aligns with results observed in other studies of the impact of PPR projects on household participants' food security.[53, 54, 55]

How Did PPR Projects Impact Fruit and Vegetable Intake?

Within the four projects included in this analysis, 149 participants completed the DSQ for daily FV intake at baseline and follow-up. The average baseline FV intake was 2.60 FV cups/day (**Figure 25**). **At follow-up, PPR participants reported an average FV intake of 2.79 cups/day, a 0.19 FV cups/day increase from baseline.** This increase included a 0.10 cups/day increase in fruit intake (from 1.13 to 1.23 cups/day) and a 0.09 cups/day increase in vegetable intake (from 1.52 to 1.61 cups/day; **Figure 25**). This increase represents a small but meaningful[56] step toward consuming the recommended number of daily cups of FVs.

[52] Of the 176 participants whose data were used to describe PPR projects' impact on participants, 99 did not complete the household food security module at baseline or follow-up. About 90% of the participants who did not complete the household food security module came from a single project.

[53] Jones LJ, Van Wassenhove-Paetzold J, Thomas K, et al. Impact of a Fruit and Vegetable Prescription Program on Health Outcomes and Behaviors in Young Navajo Children. *Curr Dev Nutr.* 2020;4(8):nzaa109. doi:10.1093/cdn/nzaa109.

[54] Ridberg RA, Bell J F, Merritt KE, et al. A pediatric Fruit and Vegetable Prescription Program Increases Food Security in Low-income Households. *J Nutr Educ Behav.* 2019;51(2):224-230.e1.

[55] Aiyer JN, Raber M, Bello RS, et al. A Pilot Food Prescription Program Promotes Produce Intake and Decreases Food Insecurity. *Transl Behav Med.* 2019;9(5):922-930. doi:10.1093/tbm/ibz112.

[56] Bellavia A, Larsson SC, Bottai M, Wolk A, Orsini N. Fruit and vegetable consumption and all-cause mortality: a dose-response analysis. *Am J Clin Nutr.* 2013;98(2):454-459. doi:10.3945/ajcn.112.056119.

Figure 25. Average Daily FV Cup Equivalents among PPR Participants at Baseline and Follow-up (n = 149)*

The observed 0.19 cups/day increase in FV intake among participants in four projects that completed their awards in Y4 is higher than the 0.11 cups/day increase reported in the Year 3 Impact Findings. This difference should be interpreted with caution. It may in part be due to implementing a revised analytic approach between Y3 and Y4 so that impact analyses now focus on a smaller number of participants in projects that completed their awards in the current year.

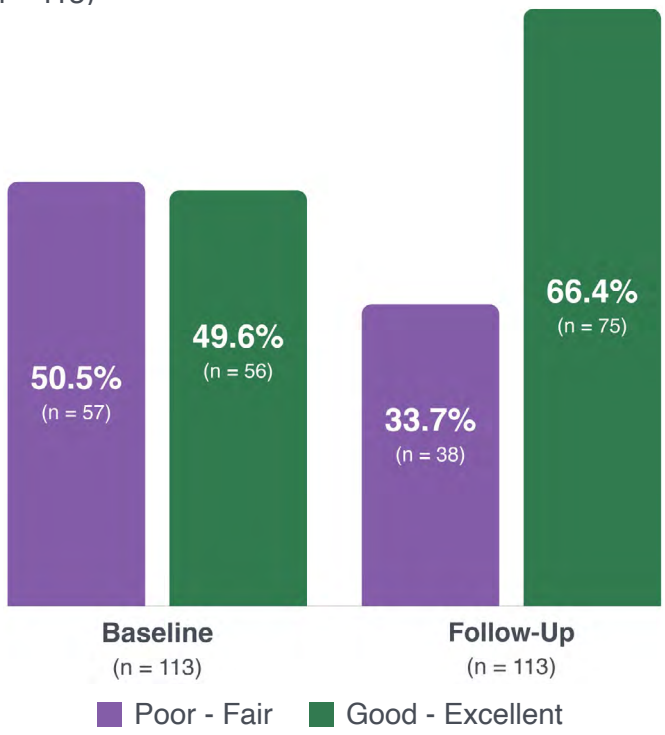
Only four projects that completed their awards in Y4 collected follow-up survey data, so there were not enough survey respondents within some racial and ethnic subgroups to draw confident conclusions about subgroups. However, there was wide variation in FV intake change among the four projects. Participants from one project increased FV intake by an average of 0.46 cups/day. Conversely, participants in another project increased FV intake by an average of only 0.05 cups/day. It is currently unknown which aspects of PPR are most strongly associated with increased FV intake. PPR models vary in intensity and duration and often respond to their communities' specific needs by adding services that influence program effectiveness (e.g., nutrition education, providing transportation). As such, the NTAE is investigating the role of project and participant variation on project impact (see the **"New Developments and Opportunities in PPR Evaluation"** section below for more information).

> "I guess [the PPR project] opened my eyes to fresh food and different types of foods. On my budget I never would have tried as many vegetables as I have. **I really like talking to the farmers. They tell you how to cook the vegetables. I do feel a part of the community."**
>
> *— Southern region PPR participant*

How Did PPR Projects Impact Perceived Health?

Within the four projects included in this analysis, 113 participants reported perceived health status at baseline and follow-up (**Table B11**). There was a decrease in the number and proportion of PPR participants who reported "poor" health from baseline (8.9%) to follow-up (2.7%). There was also a decrease in those who reported "fair" health (baseline = 41.6%; follow-up = 31.0%; **Table B11**). **From baseline to follow-up, there was an increase in participants reporting "good," "very good," or "excellent" health** (baseline = 49.6%; follow-up = 66.4%; **Figure 26**; **Table B11**).

Figure 26. Perceived Health of PPR Participant at Baseline and Follow-up Assessment (2022-2023; n = 113)*



NOTE: This figure does not include the following categories: don't know/prefer not to answer and missing.

*Participants included in this figure are from four projects that completed their award in Y4 and collected both baseline and follow-up surveys from participants.

> **"Participants [in our PPR project] reported...positive health impacts...** including eating healthier, weight loss, lower A1C levels, lower blood pressure, lower cholesterol, having more energy, better digestion, improved skin health/ complexion, and feeling better overall."
>
> — North Central region grantee

These analyses are based upon a relatively small number of participants, but the positive impact of PPR on perceived health status is promising. Perceived health measures capture a global picture of health status that is not tied to any single health condition or diagnosis.[57] Single-item assessments of perceived health are used as a proxy for actual health[36] and have been consistently associated with both morbidity[58] and mortality risk.[59] People living below the federal poverty level tend to report "fair" or "poor" health status more often than people with higher income levels.[60] In addition, most PPR participants already have or are at risk for a chronic condition prior to enrollment. From this perspective, the positive impact of PPR on perceived health status is promising. The NTAE is further investigating changes in PPR participants' health indicators (e.g., hemoglobin A1c, body mass index). Results of these ongoing investigations will provide a better understanding of how improvements in self-reported perceived health relate to changes in other health indicators (see the **"New Developments and Opportunities in PPR Evaluation"** section below for more information).

[57] Centers for Disease Control and Prevention. Measuring Healthy Days. Atlanta, Georgia: CDC, November 2000.

[58] Latham K, Peek CW. Self-rated Health and Morbidity Onset Among Late Midlife U.S. Adults. *J Gerontol B Psychol Sci Soc Sci.* 2013;68(1):107-116. doi:10.1093/geronb/gbs104.

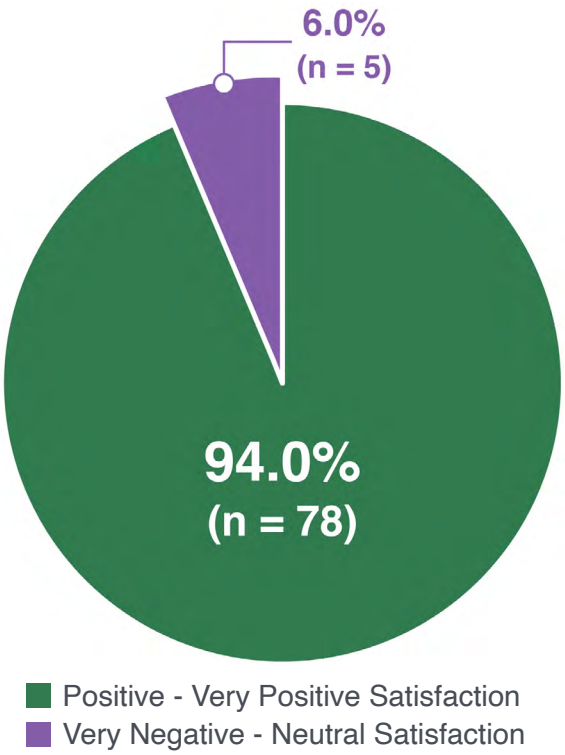
[59] DeSalvo KB, Bloser N, Reynolds K, et al. Mortality Prediction With a Single General Self-rated Health Question. *J Gen Intern Med.* 2006;21:267-75.

[60] Health Status - Health, United States. Published August 8, 2022. Available at: https://www.cdc.gov/nchs/hus/topics/health-status.htm.

How Satisfied With PPR Projects Were PPR Participants?

The PPR follow-up survey asked participants to rate their satisfaction with PPR projects. Among the 83 participants who responded to this item, most participants (94.0%) felt "positive" or "very positive" about their PPR participation (**Figure 27**; **Table B12**). Only one participant (1.2%) felt "negative" or "very negative." The overwhelmingly favorable response is a strong indication that PPR projects are meeting participants' needs.

Figure 27. Program Satisfaction among PPR Project Participants (2022-2023; n = 83)*



*Participants included in this figure are from four projects that completed their award in Y4 and collected both baseline and follow-up surveys from participants.

New Developments and Opportunities in PPR Evaluation

The Congressional mandate that established GusNIP (via 2018 Farm Bill) requires the NTAE to evaluate healthcare costs, healthcare utilization, and healthcare outcomes associated with PPR projects. All PPR grantees agreed to report participant healthcare cost, utilization, and outcomes data, but many grantees reported challenges in accessing and sharing relevant data.

In Y4, grantees made progress towards reporting these outcomes. Twenty-two PPR grantees reported having access to participants' electronic health record (EHR) data. Nearly all of those grantees (n = 21) successfully established data use agreements with the NTAE for sharing clinical data. Four grantees shared de-identified clinical and cost data with the NTAE through a new secure data transfer system. Initial analysis of EHR data is underway and a manuscript based on this work has been submitted to a scientific journal.

Additionally, five grantees implemented pilot survey items to measure participants' self-reported healthcare utilization, including clinic visits, overnight hospitalization, and emergency department visits. These grantees have already collected baseline utilization data from 211 participants across the country. Preliminary results show that during the three months prior to PPR enrollment, 46.4% of participants had attended chronic disease management check-ups, 12.3% had visited an emergency department, and 7.6% had been hospitalized (**Table B13**). These early findings suggest that there are opportunities for PPR projects to partner with participants to increase utilization of preventive care services, decrease visits to an emergency department, and decrease hospitalizations.

Recent studies[61,62] with non-GusNIP participants with type 2 diabetes in produce prescription and healthy grocery projects have shown mixed results for hemoglobin A1c (HbA1c) management compared to people not participating in these projects. These studies serve as reminders for the importance of including comparison groups in evaluation when there is the ability to do so. In a sub-study funded by the American Diabetes Association (ADA), NTAE researchers are studying the of the impact of GusNIP PPR on participants with type 2 diabetes and with low income in five projects funded by GusNIP/GusCRR/ARPA. The five PPR grantees participating in this study are evaluating changes in PPR participants' HbA1c, healthcare utilization, and other outcomes as compared to control group participants who do not participate in PPR projects. This study will also measure the cost to implement PPR projects and identify best practices to improve program capacity and participant satisfaction.

To maximize positive impacts, PPR projects work to have as many participants as possible receive available food and services. Nevertheless, GusNIP and non-GusNIP PPR projects alike find it challenging to help participants engage with the project over time.

In a study funded by the American Heart Association (AHA), NTAE researchers are using data about GusNIP PPR projects to identify combinations of project characteristics (e.g., providing produce boxes vs. reloadable benefits cards), strategies (e.g., providing transportation services vs. partnering with neighborhood markets), and contexts (e.g., rural vs. urban locations) associated with sustained high levels of participant engagement. This new study moves beyond the assumption that simply offering produce prescriptions will automatically result in high levels of program uptake. Researchers will draw upon the diversity of PPR projects funded by GusNIP/GusCRR/ARPA to understand how different combinations of project characteristics impact participant engagement. Findings are expected in early 2025.

The NTAE also collaborated with Stanford University's Food For Health Equity Lab to explore the facilitators and barriers to implementing and scaling PPR projects. This research focused on 13 PPR projects across the country that are funded by GusNIP/GusCRR/ARPA. The research team interviewed various individuals from each project, including representatives from the grantee organizations, healthcare partners, food retail sites, and nutrition education providers. Findings from this study are forthcoming and will help illustrate what PPR project designs work best, under what conditions, and in which settings.

Studies such as the Stanford, AHA, and ADA studies address important knowledge gaps related to the impact and implementation of both GusNIP and non-GusNIP PPR projects. These studies look across PPR projects funded by GusNIP/GusCRR/ARPA to highlight the impact of grantees' work. Collectively, findings from these studies will leverage knowledge gained to maximize impact for participants, healthcare providers, and food system partners.

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[61] Doyle J, Alsan M, Skelley N, Lu Y, Cawley J. Effect of an Intensive Food-as-Medicine Program on Health and Health Care Use: A Randomized Clinical Trial. *JAMA Intern Med*. Published online December 26, 2023. doi:10.1001/jamainternmed.2023.6670.

[62] Hager K, Shi P, Li Z, et al. Evaluation of a Produce Prescription Program for Patients With Diabetes: A Longitudinal Analysis of Glycemic Control. *Diabetes Care*. 2023;46(6):1169-1176. doi: 10.2337/dc22-1645.

NTAE Supporting the Field: Highlights from Year 4

The NTAE's unique structure brings together implementation and evaluation support to improve the outcomes and impacts of GusNIP. During the last four years, the NTAE has provided real-time assistance, tools, templates, and resources to applicants and grantees to maximize their project's efforts. In doing so, the NTAE has been able to demonstrate GusNIP's national impact on key indicators of participants' health, as well as local economies. In Y4 alone, the NTAE supported 185 active GusNIP awards (see **Table 1**), resolved more than 1,500 requests for technical assistance, and provided more than 1,200 hours of 1:1 support to over 400 NI and PPR practitioners (**Figure 28**). As a leader in the NI and PPR fields, the NTAE and its partners can identify and address common systemic issues that serve as barriers to GusNIP projects' success, including point-of-sale technology in grocery retail, data sharing in healthcare settings, and pathways for food sourcing.

The following sections highlight examples of support provided by the NTAE to grantees, applicants, and practitioners during Y4. These examples also indicate how the NTAE helped grantees demonstrate GusNIP impact.

Supporting Current and Potential GusNIP Grantees

The NTAE supports GusNIP grantees and applicants by connecting them with resources, technical experts, and a community of practitioners who provide guidance to NI and PPR projects. In Y4, the NTAE continued to support the GusNIP community by offering training and peer-learning opportunities and offered a new capacity building grant opportunity for first-time GusNIP applicants.

The NTAE continuously seeks feedback from grantees to better meet their needs and maximize programmatic impact in their communities. In response to an expressed need, NTAE partners facilitated a six-week training related to local sourcing and supply chain development. As a part of this training, grantees identified potential partners and mapped a process to facilitate local sourcing from farmers and local suppliers. The training is expected to help grantees develop new business opportunities for rural farmers and communities.

Figure 28. Technical Assistance Provided by the NTAE in Year 4

Another example of responsiveness to needs expressed within the field, NTAE partners facilitated a workgroup of PPR grantees and practitioners to standardize certain elements of technology at the point-of-sale for program operators, participants, and grocers. The workgroup catalogued existing technology-based solutions for operating PPRs in grocery stores and developed recommendations for future improvement. These standards will help current and future PPR implementers by providing clear guidance about technological requirements needed for grocer partners.

The NTAE continued to prioritize and foster peer learning opportunities in Y4. Communities of practice addressing a wide range of topics[63] were offered to grantees and practitioners on a bi-monthly basis and allowed grantees with shared interests to connect, solve problems, and exchange information. Additionally, two in-person mini convenings – one focused on PPR and another focused on NI[64] – provided important learning and networking opportunities for attendees to engage in peer learning and see active NI and PPR projects via site visits.

Finally, the NTAE hosted its fourth annual National Convening in Arlington, VA. Conducted across three days with sessions across five tracks,[65] the National Convening reached more than 600 participants both on-site and virtually. It provided a unique opportunity for NI and PPR practitioners, funders, policymakers, technology providers, and researchers to engage with each other. The National Convening also provided opportunities to visit one of five DC-area organizations implementing NI and/or PPR programs. Peer learning opportunities like these allow grantees to share best practices with the aim of improving program implementation and evaluation.

Building on the NTAE's previous efforts, mini grants were again offered through the Capacity Building and Innovation Fund (CBIF) in Y4. More information about the CBIF is provided in the call-out box below. **Figure 29** maps the locations of fifth-round CBIF awardees.

[63] Topics were chosen based on expressed interest from grantees and included nutrition education in NI programs, PPR, DEI in incentive programs, corner stores, local and regional sourcing in grocery, and evaluation.

[64] The PPR mini-convening took place in San Diego and Los Angeles, CA. The NI mini-convening took place in Philadelphia, PA.

[65] Convening tracks included Beginning and Early-Stage NI and PPR Programs, Program Sustainability and Expansion Strategies, Reporting and Evaluation, Community Innovations, and Technology Solutions.

Fifth Round of the Capacity Building and Innovation Fund: Supporting First-time GusNIP Applicants

The NTAE awarded $900,000 to 41 organizations across 23 states, Washington D.C., and Puerto Rico (**Figure 29**). The fifth round of funding focused on providing capacity building support to organizations preparing to apply for a FY23 or FY24 GusNIP award for the first time or funding to organizations that have not previously received GusNIP funding. For more information about the CBIF and the full list of awardees, see this **press release**.

This mini-grant opportunity aims to increase the reach of GusNIP by providing additional support to communities not currently served by GusNIP. Awardees funded various capacity-building initiatives, including grant-writing support, financial systems updates, coalition building, and strategic planning. Each of these activities is not only vital for a competitive GusNIP application but helps to create a successful application that centers community voices. By investing in applicants and helping them to build strong foundations for GusNIP proposals, the NTAE is facilitating more equitable access to funding across underrepresented geographies and communities.

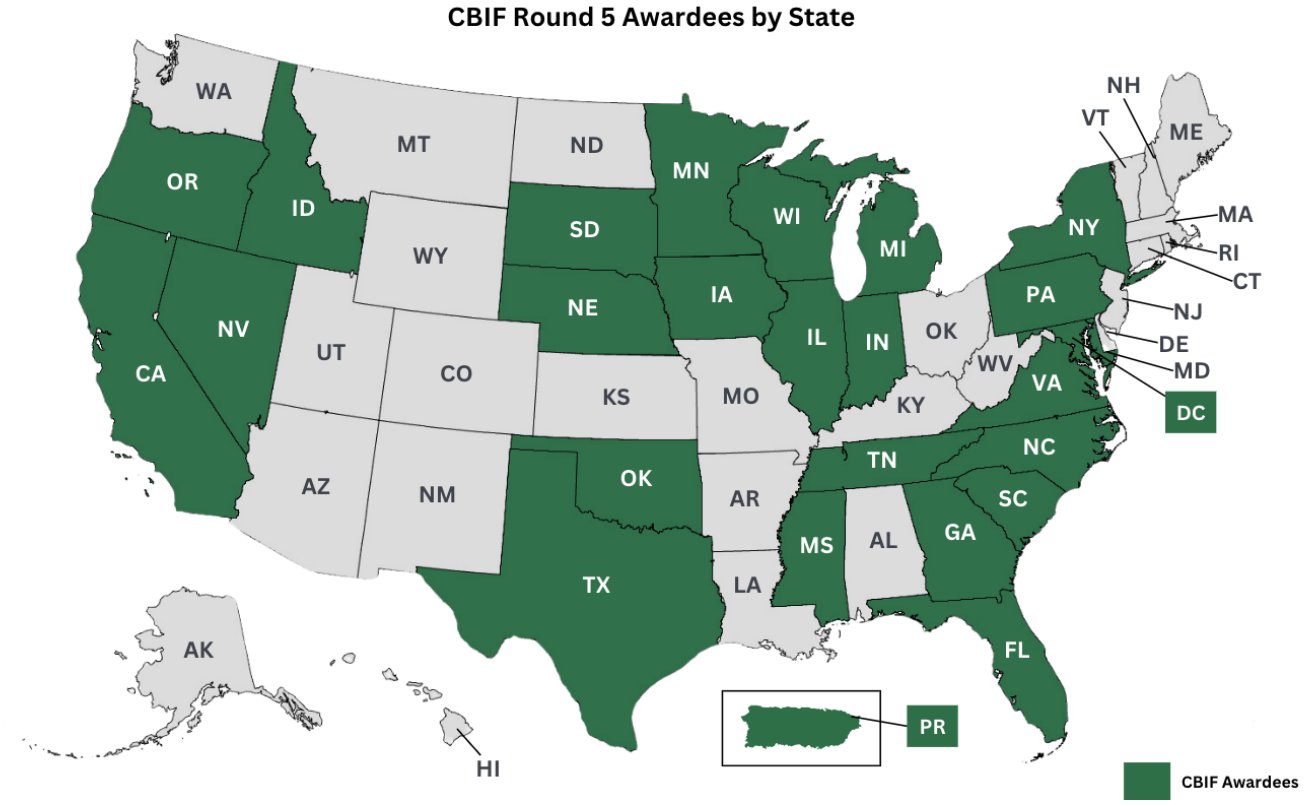
Example Fifth Round Capacity Building and Innovation Fund Awardees

Banco de Alimentos (Carolina, Puerto Rico) was awarded $8,000 to undertake strategic planning activities including reviewing best practices in program design and building partnerships to develop an NI project proposal in FY23. Subsequently, Banco de Alimentos successfully secured a $100,000 GusNIP Nutrition Incentive Pilot Grant in FY23.

Common Threads (Austin, TX) split their $25,000 award equally with their partner Royally Fit, a proudly minority-, woman-, veteran-, and disability-owned and family-operated organization. Funds will support strategic planning meetings with healthcare and local food partners to develop a GusNIP proposal for a PPR project that promotes nutrition education and holistic health.

Nourish Knoxville (Knoxville, TN) invested their award of $25,000 into hiring for three strategic positions to increase capacity for a statewide (TN) NI application. These positions included an experienced grant writer, an accountant to improve grant tracking systems, and a consultant to convene stakeholders across the state of Tennessee currently operating incentive programs as well as those interested in offering incentive programs.

Figure 29. CBIF Round Five Awardees by State and Territory



Demonstrating GusNIP Effectiveness and Building Evaluation Capacity

Improving eating behaviors among families with low income or living in historically underserved communities helps advance national nutrition security in the U.S. – consistent access, availability, and affordability of foods that promote well-being and prevent or treat disease.[66] Support from and collaboration with the NTAE makes it possible to show GusNIP's total nationwide impact on promoting nutrition security. During the first four years of GusNIP, the NTAE built an evidence base that indicates GusNIP participants increase their consumption of FVs and experience improved household food security. Moreover, the NTAE used site-level data collected from GusNIP grantees to demonstrate the profound impact GusNIP has on local economies. When GusNIP participants redeem FV incentives, they also spend money at grocery stores and farmers markets in their communities, creating additional positive economic impacts.

In Y4, the NTAE commissioned the development of the **GusNIP NTAE Nutrition Incentive Economic Impact Calculator** to help showcase these impacts for individual NI projects. Along with the NTAE's other previously developed resources, this tool is freely available to grantees and practitioners via the Nutrition Incentive Hub website. Users of the GusNIP NTAE Nutrition Incentive Economic Impact Calculator can easily produce an infographic that can be saved as a PDF or emailed for use in reporting and dissemination. See **Appendix 11** for an example of the infographic this resource creates.

[66] United States Department of Agriculture. *Food and Nutrition Security*. Accessed November 9, 2023. https://www.usda.gov/nutrition-security.

GusNIP NTAE Nutrition Incentive Economic Impact Calculator: *Grantee Testimonial*

"Understanding the full economic impact of our program has been pretty important for our advocacy efforts. In particular, we're midway through our first statewide appropriation of funds, and we are actively advocating for the next round as we speak… Our current governor's administration is much more focused on farmers and economic development…and the impact calculator has been helpful in speaking that language specifically."

— Southern Region NI Grantee

The NTAE continuously improves the level and quality of service provided to grantees. To that end, the NTAE launched a centralized site-level help desk to streamline requests and responses related to collecting and reporting site-level data. Comprehensive and tailored advising resulted in high compliance with reporting requirements as well as facilitated a large sample of both participant surveys (n = 18,586) and firm-level reports (n = 44,450). To more effectively engage the growing number of grantees, the NTAE further revised its advising model. Specifically, new grantees are now advised in peer groups to provide more opportunities for peer learning.

The NTAE further bolstered grantee infrastructure and capacity to collect and report PPR health-related data. By establishing data use agreements with the NTAE and sharing clinical data via a new secure data transfer system, PPR grantees can leverage electronic health record (EHR) data for improved program evaluation moving forward. To help alleviate barriers associated with collecting EHR data, the NTAE piloted survey items to measure participants' self-reported healthcare utilization, including clinic visits, overnight hospitalization, and emergency department visits.[67] Together, EHR data and self-reported healthcare utilization data will be used to better understand the impact of PPR programs nationwide.

Conclusions and Next Steps for Future Years

The collaborative work of the GusNIP NTAE, Nutrition Incentive Hub, grantees, and NI/PPR practitioners made possible through USDA NIFA funding, furthers the mission of recent USDA and White House initiatives in public health nutrition. In 2022, USDA announced an expanded focus on nutrition security that addresses the co-existence of food insecurity, diet-related diseases, and disparities.[68] In the same year, the Biden-Harris Administration released the National Strategy on Hunger, Nutrition, and Health, which calls for improved food access and affordability, integrated nutrition and health, as well as enhanced food and nutrition security research.[69] Additionally, the President and First Lady relaunched The Cancer Moonshot initiative – a national effort across public and private sectors to radically improve cancer treatment and prevention in the U.S.[70] To support the goals of these initiatives, USDA and the larger public health community in the U.S. are committed to improving food and nutrition security, reducing diet-related chronic diseases, and accelerating health equity, through programs like GusNIP.

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[67] Centers for Disease Control and Prevention. *NHANES 2017-2018 Questionnaire Instruments. Hospital Utilization and Access to Care*. Accessed November 9, 2023. https://wwwn.cdc.gov/nchs/nhanes/continuousnhanes/questionnaires.aspx?BeginYear=2017.

[68] USDA Announces Actions on Nutrition Security. Press release. U.S. Department of Agriculture. March 17, 2022. https://www.usda.gov/media/press-releases/2022/03/17/usda-announces-actions-nutrition-security.

[69] White House. *Biden-Harris Administration National Strategy on Hunger, Nutrition, and Health*. September, 2022. https://www.whitehouse.gov/wp-content/uploads/2022/09/White-House-National-Strategy-on-Hunger-Nutrition-and-Health-FINAL.pdf.

[70] Cancer Moonshot. The White House. 2022. Accessed March 29, 2024. https://www.whitehouse.gov/cancermoonshot/.

The NTAE's findings have shown that NI and PPR projects positively impact people and communities, underscoring the integral role these programs play in larger public health nutrition initiatives. These projects improve food and nutrition security, increase fruit and vegetable intake, and have tremendous economic ripple effects. Currently, there is great diversity in how NI and PPR projects are implemented. There remain important evaluation questions to better inform the future of these projects. Specifically, the NTAE is focused on learning more about NI and PPR program characteristics and implementation parameters that maximize health impacts, economic impacts, and dollars to participants.

During previous years of GusNIP, the NTAE documented the health-related and economic impacts of GusNIP investments in NI and PPR projects across the nation. Also during that time, the NTAE helped to maximize GusNIP investments by aiding grantees in efforts to efficiently and effectively implement and evaluate their projects. The NTAE's approach to combined reporting, evaluation, technical assistance, and information support has been essential for building capacity, continuously improving projects, and expanding projects into new communities.

Accomplishments during the previous four years are groundbreaking. Nevertheless, there remain opportunities to better understand how to further optimize the success of existing grantees and better support GusNIP applicants to apply for and successfully receive GusNIP funding. Throughout the next four years, the NTAE expects to identify more impactful program models and implementation characteristics that are resource efficient, promote local economies, and streamline implementation. Some of the vital questions that the NTAE strives to answer include:

- What are the most cost-effective routes to widescale implementation?
- What are the options for efficient widescale implementation in each geography, including what opportunities does **SNAP EBT integration** present?
- How does the amount, frequency, and type of incentive impact GusNIP outcomes?

- How do other resources, such as nutrition education or referrals, impact outcomes?
- In what ways does GusNIP help to address complex social (e.g., mental health) and environmental (e.g., food loss and waste) issues?

Answering these questions is critical to elucidate the multifaceted factors for GusNIP evaluation and providing the highest quality implementation. This knowledge can help equip current and future GusNIP grantees with research-backed best practices in order to expand the reach of NI and PPR projects and to maximize project impact among underrepresented communities and geographies. As the field of GusNIP practitioners grows, we envision further optimizing support to effectively reach the greatest number of participants, food retail outlets, clinics, and communities. Examples of this support include providing lower capacity grantees with tailored technical assistance, potentially decreasing the amount of data collection required, and developing case studies that elevate strategies for grantees to move from low to high capacity. The NTAE aims for these approaches to enhance GusNIP project sustainability and further build the evidence base while enriching the health and economic vitality of communities across the country through NI and PPR projects. In the pursuit of unlocking the full potential of NI and PPR projects, the NTAE's commitment to answering vital questions and optimizing support sets the stage for a future where communities nationwide are more readily able to flourish.

Appendices

Appendix 1. Glossary of Acronyms/Abbreviations

Abbreviation/Acronym	Full Name/Description
A	
ARPA	American Rescue Plan Act
B	
B&M	brick-and-mortar
BMI	body mass index
C	
CBIF	Capacity Building and Innovation Fund
CDC	Centers for Disease Control and Prevention
COVID or COVID-19	coronavirus disease of 2019
CSA	community supported agriculture
D	
DGA	Dietary Guidelines for Americans
DSQ	Dietary Screener Questionnaire
E	
EBT	electronic benefits transfer
EFNEP	Expanded Food and Nutrition Education Program
EHR or EMR	electronic health record or electronic medical record
E-Token	electronic token
F	
FD	farm direct
FFN	Fair Food Network
FI	food insecurity
FINI	Food Insecurity Nutrition Incentive Program
FQHC	Federally Qualified Health Center
FVs	fruits and vegetables
FVI	fruit and vegetable intake
FY	fiscal year
G	
CNHI	Center for Nutrition and Health Impact (formerly the Gretchen Swanson Center for Nutrition)
GusCRR	GusNIP COVID Relief and Response
GusNIP	Gus Schumacher Nutrition Incentive Program (formerly the FINI Program). Also refers to the family of awards from the USDA National Institute of Food and Agriculture (GusNIP, GusCRR, and ARPA funded awards).
H	
HbA1c or A1c	hemoglobin A1c (measurement for blood sugar)
HIP	Healthy Incentives Pilot
I	
IRB	Institutional Review Board

Abbreviation/Acronym	Full Name/Description
N	
NI	nutrition incentive (general; includes SNAP incentives); Nutrition Incentive Program funded by GusNIP
NIFA	National Institute of Food and Agriculture, USDA
NTAE or NTAE Center	Nutrition Incentive Program Training, Technical Assistance, Evaluation, and Information Center. Also known as the NTAE Center. The Center for Nutrition and Health Impact is the current NTAE awardee for GusNIP.
P	
PA	program advisor
PPR	produce prescription (general); Produce Prescription Program funded by GusNIP
R	
RFA	request for applications
S	
SNAP	Supplemental Nutrition Assistance Program
SNAP-Ed	Supplemental Nutrition Assistance Program Education
T	
TA	technical assistance
U	
USDA	United States Department of Agriculture
W	
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children
Y	
Y	year

Appendix 2. Core Partner Structure

USDA NIFA

GusNIP NTAE Center

CENTER FOR Nutrition & Health Impact

Project Director
Amy Lazarus Yaroch, PhD

Nutrition Incentive Hub
CREATED BY GUSNIP NTAE CENTER

Reporting & Evaluation (R&E)

R&E Lead
Center for Nutrition and Health Impact (formerly the Gretchen Swanson Center for Nutrition)

Research Partners
Data Management and Analysis Center, Cincinnati Children's Hospital Medical Center
Project Director: Nanhua Zhang, PhD

University of California San Francisco
Project Director: Hillary Seligman, MD, MAS

12 Research & Program Advisor Consultants

Technical Assistance & Innovation (TA&I)

TA&I Lead
Fair Food Network

Farm Direct
Michigan Farmers Market Association

Grocery Retail
National Grocers Association Foundation

Produce Prescription
Michigan Farmers Market Association

Corner Stores & Nutrition Education
The Food Trust

Appendix 3. Participant-Level Data Collection Methodology

Overview of Participant-Level Core Measures for GusNIP

What are participant-level outcomes? Participant-level outcomes are measured using a set of survey items (described below) validated among populations with low income that were selected for feasibility and ease of use. These measures are meant to assess the experiences of individuals receiving services from GusNIP projects.

What are GusNIP's participant-level core measures? The participant-level core measures evaluate key participant-level outcomes related to the GusNIP intervention. In 2019, the NTAE worked with USDA NIFA, grantees, sites,[1] and expert partners to identify and establish methods and measures to evaluate core participant-level outcomes.

When are participant-level outcomes collected? NI grantees collect cross-sectional surveys annually throughout the award duration with sample size dependent on project size (i.e., pilot, standard, or large scale). PPR grantees collect surveys at baseline and follow-up among a cohort of participants enrolled in the project over the duration of the award. NI and PPR participant-level data collected by August 31 are submitted annually to the NTAE.

Participant-Level Survey Modules

Rationale for the selection of each survey module, which contain the participant-level core measures, is described in further detail on the Nutrition Incentive Hub website for **NI projects** and for **PPR projects**.

Food Security. Participants were asked to respond to the **USDA Six-Item Household Food Security Survey Module**. The module includes six questions about food eaten in the household within the last 30 days and whether the participant is able to afford the food needed by their household. Applying USDA's scoring mechanism, each affirmative response receives one point, for a total possible score range of 0-6. For most grantees, reporting "often true" or "sometimes true" was an affirmative response. However, for one grantee, reporting "yes" was an affirmative response. Scores of 0-1 are considered "high/marginal food security," scores of 2-4 are considered "low food security," and scores of 5-6 are considered "very low food security."

Fruit and Vegetable Intake (FVI). To assess FVI, participants were asked about their intake frequency of 10 food and beverage items: 100% fruit juice, fruit, salad, fried potatoes, other kinds of potatoes, cooked dried beans, other vegetables, salsa, pizza, and tomato sauce. Items were sourced from the **Dietary Screener Questionnaire (DSQ)** used in the **National Health and Nutrition Examination Survey (NHANES) 2009-2010 series.**[2] Some grantees further tailored the food examples within each question to be more culturally relevant among the communities they serve. Response options for each item include: "Never," "1 time last month," "2-3 times last month," "1 time per week," "2 times per week," "3-4 times per week," "5-6 times per week," "1 time per day," "2 or more times per day," with the addition of "2-3 times per day," "4-5 times per day," and "6 or more times per day" for the 100% fruit juice item only.[3] Frequency responses were converted to daily frequencies according to the table on the next page.

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[1] Sites are locations where GusNIP projects are administered. They are referred to as "firms" in the GusNIP Request for Applications. All NI sites are SNAP-authorized food retail outlets.

[2] Epidemiology and Genomics Research Program. (n.d). Dietary screener questionnaire in the NHANES 2009-10: Background. National Institutes of Health, National Cancer Institute, Division of Cancer Control and Population Sciences. https://epi.grants.cancer.gov/nhanes/dietscreen/

[3] The fruit juice item includes three response options that are not included in the other items ("2-3 times per day," "4-5 times per day," and "6 or more times per day"). Food items have a response option "2 or more times per day."

Daily Frequency Values for 10-item DSQ

Frequency Response	Daily Frequency Value
Never	0
1 time last month	0.033
2-3 times last month	0.083
1 time per week	0.143
2 times per week	0.286
3-4 times per week	0.5
5-6 times per week	0.786
1 time per day	1
2 or more times per day	2
2-3 times per day	2.5
4-5 times per day	4.5
6 or more times per day	6

After responses were converted to daily frequency values, data were input into a **scoring algorithm** specifically developed for the DSQ in order to determine *daily cup equivalents* of FVI based upon participant demographics.

Sociodemographic Characteristics. Sociodemographic data are limited to age, sex, race, and ethnicity. Basic demographic information allows researchers to understand which populations NI and PPR projects are reaching and whether project impacts differ among populations. Demographic data are also used in calculating the DSQ.

Other Program Impacts. All participants were asked to respond to a single item about program satisfaction: "Overall, how would you rate your experience with [NI or PPR program name]?" Response options were on a 5-point Likert scale ranging from very negative to very positive. Participants were also asked a single question about their health status: "Would you say in general that your health is poor, fair, good, very good, or excellent?"

Supplementary Participant-Level Data Collection Resources

The GusNIP NTAE developed and maintains a list of optional topics and constructs for participant-level surveys to help grantees identify additional items that may be of interest and relevant to their specific project (e.g., related to the main outcomes of FVI and food security, such as hunger-coping and trade-off behaviors, transportation, food literacy and preferences, and health conditions). With a growing number of GusNIP grantees focused on families, the GusNIP NTAE has developed a suite of youth and parent survey items and modules. These tools are designed to be used when a project has a child-focused component and is interested in exploring youth health outcomes. The full versions of these tools, including a baseline and follow-up survey for both children and parents, can be found on the **Supplementary and Recommended Metrics** page of the Nutrition Incentive Hub website. Additionally, some GusNIP PPR grantees piloted a survey module for self-reported healthcare utilization adapted from **NHANES 2017-2018 Hospital Utilization and Access to Care (HUQ)**. This resource is available upon request. The supplementary and recommended participant-level metrics are not reported by the GusNIP NTAE in the Impact Findings.

Sample Size Requirements

The tables below show survey sample size requirements by year and project type. PAs work one-on-one with grantees to determine the best sampling and survey administration procedures to achieve the appropriate sample size requirement. NI grantees collect surveys once annually. PPR grantees collect surveys across their award period, surveying the same participants at two time points (baseline and follow-up).

GusNIP Sample Size Requirements

Award Year	GusNIP Pilot Projects (NI)	GusNIP Projects (NI)	GusNIP Large Scale Projects (NI)	GusNIP Produce Prescription Projects
2019	Not required	150	230	100-130
2020	Not required	100	150	100-130
2021	Not required	100	150	100-130
2022	Not required	100	150	100-130

GusCRR Sample Size Requirements

Award Year	GusCRR Projects (NI)	GusCRR Large Scale Projects (NI)	GusCRR Produce Prescription Projects
2021	75	100	75

ARPA Sample Size Requirements

Award Year	ARPA PPR Meritorious	ARPA PPR Enhancement	ARPA PPR Standard
2022	100-130	100-130	100-130

Inclusion and Exclusion Criteria for Participant-Level Surveys

NI survey respondents were required to be 18 years of age or older and participants of an NI program. PPR survey respondents were recruited through health clinics or health programs and were PPR project participants which meant they were 18 years of age or older and met any specific PPR project eligibility criteria outlined by the grantee (e.g., diabetes diagnosis, Medicaid recipient). Each grantee's final sample size was comprised of surveys that (1) had responses to at least 75% of survey questions, (2) had complete responses for the DSQ and food security modules, and (3) had responses for age and gender.

Appendix 4. Site-Level Reporting Methodology

Overview of Site-Level Core Measures for GusNIP

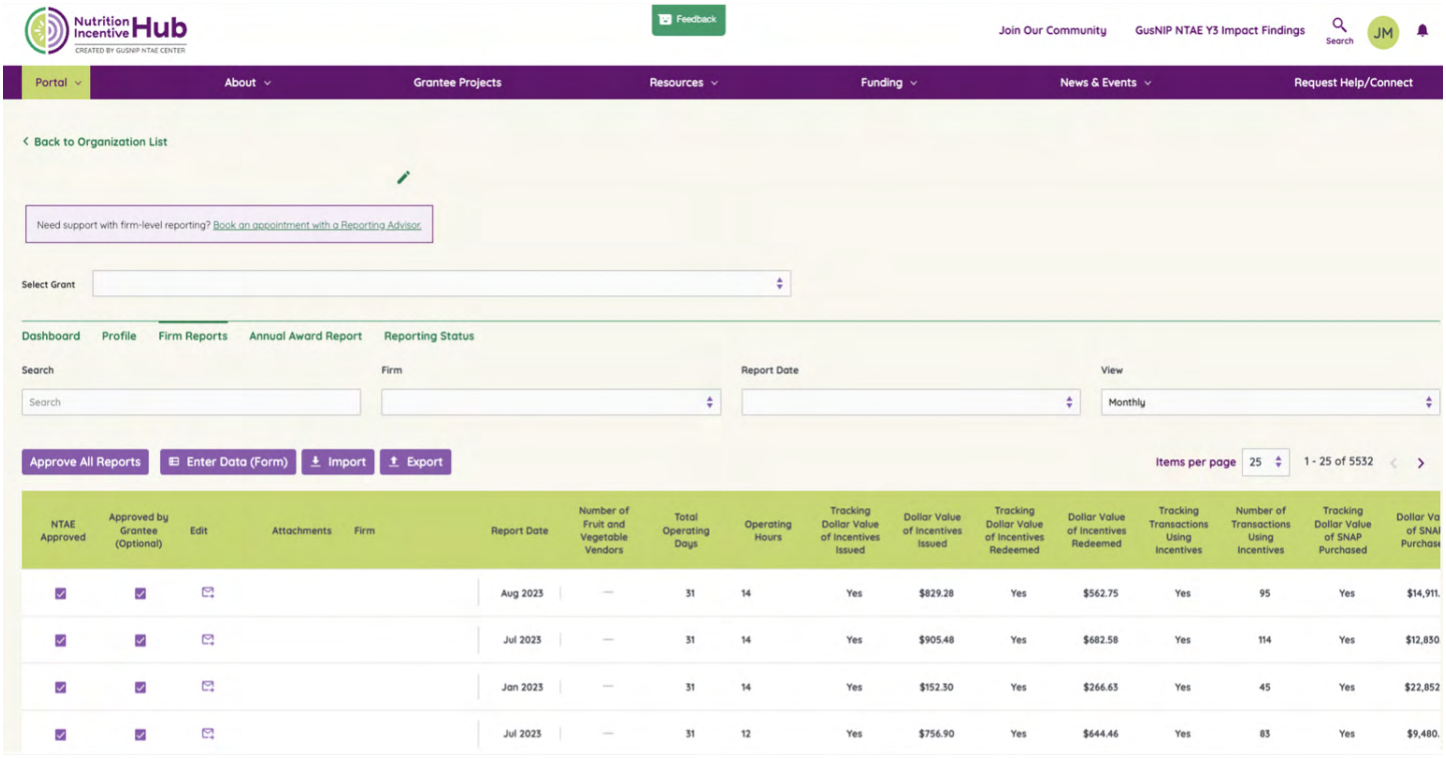
What are site-level outcomes? Site-level outcomes monitor project implementation and identify which properties of NI and PPR projects are most effective at increasing incentive redemption. These core measures are collected from food retail outlets as well as clinics and are reported in FD, B&M, and clinic categories. Site-level data, such as the dollar amount of incentives distributed and redeemed each month, are also used to calculate local economic impact.

What are GusNIP's site-level core measures? The site-level core measures evaluate key site-level outcomes related to the GusNIP intervention. In 2019, the NTAE worked with USDA NIFA, grantees, sites, and expert partners to identify methods and measures to evaluate core site-level outcomes.

When are site-level outcomes collected? NI and PPR grantees work with collaborating sites to submit the site-level data to the GusNIP NTAE monthly and annually.

Site-Level Data Collection

Grantees submitted site-level reports to the GusNIP NTAE via the Nutrition Incentive Hub portal. The following screenshot shows the portal reporting page with grantee and site information redacted.



Site-level reporting data come from three sources:

- Monthly Site Reports (1 per site per month)
- Annual Site Reports (1 per site per year on September 30)
- Grantee Annual Report (1 per grant award per year on September 30)

Site-level reporting data are based on a series of core measures summarized in the tables below.

NI Site-Level Core Measures

Core measures for **grantee organizations** are outlined below. Grantees report these measures for each award. Therefore, multiple reports are required if the grantee has multiple awards.

Core Measure	# of Fields	Example Item	Rationale
Grantee-level information ***Reported annually***	5	Expenses associated with establishment and operations of the project	Allows for determination of actual costs and provides input to cost-related analyses

Core measures for **brick-and-mortar sites**, including supermarkets, grocery stores, and small format stores, are outlined below. Grantees are required to report these measures for all their brick-and-mortar sites.

Core Measure	# of Fields	Example Items	Rationale
Site-level descriptive information ***Reported annually***	17-20*	Financial instrument used for SNAP purchases and incentives Products eligible for incentives	Provides site-level descriptive information to understand contextual elements of project delivery and implementation
Site-level numeric measures ***Reported monthly***	12	Amount ($) of incentives redeemed Number of unique incentive customers	Describes NI utilization and redemption patterns and tracks "dose" of intervention

* Exact number of fields varies and depends upon additional programming offered at the site.

Core measures for **farm direct sites**, including farmers markets, farm stands, and CSAs, are outlined below. Grantees are required to report these measures for all their farm direct sites.

Core Measure	# of Fields	Example Items	Rationale
Site-level descriptive information ***Reported annually***	17-20*	Financial instrument used for SNAP purchases and incentives Products eligible for incentives	Provides site-level descriptive information to understand contextual elements of project delivery and implementation
Site-level numeric measures ***Reported monthly***	13	Amount ($) of incentives redeemed Number of unique incentive customers Number of fruit and vegetable vendors	Describes NI utilization and redemption patterns and tracks "dose" of intervention

* Exact number of fields varies and depends upon additional programming offered at the site.

PPR Site-Level Core Measures

Core measures for **grantee organizations** are outlined below. Grantees report these measures for each award. Therefore, multiple reports are required if the grantee has multiple awards.

Core Measure	# of Fields	Example Item	Rationale
Grantee-level information ***Reported annually***	5	Expenses associated with establishment and operations of the project	Allows for determination of actual costs and provides input to cost-related analyses

Core measures for **brick-and-mortar sites**, including supermarkets, grocery stores, and small format stores, that allow redemption of PPR incentives, are outlined below. Grantees are required to report these measures for all their brick-and-mortar sites.

Core Measure	# of Fields	Example Items	Rationale
Site-level descriptive information ***Reported annually***	15-18*	Financial instrument used for PPR incentives FV products eligible for incentives	Provides site-level descriptive information to understand contextual elements of project delivery and implementation
Site-level numeric measures ***Reported monthly***	10	Amount ($) of PPR incentives redeemed	Describes PPR utilization and redemption patterns and tracks "dose" of intervention

* Exact number of fields varies and depends upon additional programming offered at the site.

Core measures for **farm direct sites**, including farmers markets, farm stands, and CSAs, that allow redemption of PPR incentives are outlined below. Grantees are required to report these measures for all their farm direct sites.

Core Measure	# of Fields	Example Items	Rationale
Site-level descriptive information ***Reported annually***	15-18*	Financial instrument used for PPR incentives FV products eligible for incentives	Provides site-level descriptive information to understand contextual elements of project delivery and implementation
Site-level numeric measures ***Reported monthly***	10	Amount ($) of PPR incentives redeemed	Describes PPR utilization and redemption patterns and tracks "dose" of intervention

* Exact number of fields varies and depends upon additional programming offered at the site.

Core measures for **clinics** that enroll participants, distribute PPR incentives, and/or allow the redemption of PPR incentives are outlined below. Grantees are required to report these measures for all their clinics that enroll, distribute, and/or allow the redemption of PPR incentives.

Core Measure	# of Fields	Example Items	Rationale
Site-level descriptive information ***Reported annually***	13-27*	Financial instrument used for PPR incentives FV products eligible for incentives	Provides site-level descriptive information to understand contextual elements of project delivery and implementation
Site-level numeric measures ***Reported monthly***	10	Amount ($) of PPR incentives distributed Number of PPR project participants enrolled and completed	Describes PPR utilization and redemption patterns and tracks "dose" of intervention Tracks project participation

* Exact number of fields varies and depends upon clinic site type (i.e., enrollment site, distribution site, redemption site) and if the clinic offers additional programming.

Appendix 5. Description of 2022 GusNIP Grantees

2022 ARPA Grantees; Produce Prescription Projects (PPR)

The 2022 GusNIP PPR RFA states that all GusNIP PPR projects must:

1. The 2022 GusNIP PPR RFA states that all GusNIP PPR projects must:
2. Include a letter of support from one or more healthcare partners
3. Prescribe fresh fruits and vegetables to eligible individuals

Individuals are eligible to participate in a GusNIP PPR project if they are eligible for the following:

1. Benefits under the Food and Nutrition Act of 2008 (7 U.S.C. 2011 et seq.); or
2. medical assistance under a State plan or a waiver of such a plan under title XIX of the Social Security Act (42 U.S.C. 1396 et seq.) and enrolled under such plan or waiver; and
3. A member of a low-income household that suffers from, or is at risk of developing, a diet-related health condition.

All funded GusNIP PPR projects adhere to the above eligibility criteria. Some GusNIP PPR projects have additional priority populations within that eligibility criteria, which are outlined in 'Additional Priority Population(s)' in the table below.

Grantee	Grantee Type[1]	Total Grant Amount and Duration	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
ARPA Standard							
Avera McKennan	HCO	$500,000 3 years	Adults, families, and children	6 months	B&M; clinic; FD	$25 vouchers or produce box per week	SD
California State University Fresno Foundation	UNI	$500,000 3 years	College students	6 months	B&M; clinic; FD	1 produce box per week	CA

Grantee	Grantee Type[1]	Total Grant Amount and Duration	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
Chicago Horticultural Society	CBO	$500,000 2 years		40 weeks	Clinic; FD	1 produce box per week	IL
Children's National Medical Center	HCO	$500,000 3 years	Families with children	6 months	Clinic; FD	1 delivery of fresh produce every other week	DC
Clemson University	UNI	$499,933 3 years	Adults at risk of or diagnosed with type 2 diabetes and related conditions	14 weeks	Clinic	2 produce boxes per month	SC
Collaborative for Educational Services	CBO	$500,000 3 years		1 year and 9 months	B&M; clinic	$40 debit card per month	MA
Community Action Partnership of Orange County	CBO	$331,605 3 years	Adults with diabetes	6 months	B&M; clinic; FD	$10 vouchers per week and 1 produce box per month	CA
Community Food and Agriculture Coalition	CBO	$500,000 3 years	Adults at risk of or diagnosed with diabetes or hypertension	52 weeks	B&M; clinic; FD	$7-$50 per person or family per week	MT
Community Health Center of Southeast Kansas, Inc	CBO	$500,000 3 years Returned funds		1 year	Returned funds	$25 produce box every other week	KS
Cornell Cooperative Extension Association of Jefferson County	CBO	$384,610 3 years		6 weeks	B&M; clinic; FD	$25 produce vouchers per week	NY
Cornell Cooperative Extension Association of Suffolk County	CBO	$420,866 2 years	Adults at risk of or diagnosed with prediabetes or diabetes	3 months with the option to continue for an additional 3 months	B&M; clinic; FD	$20 vouchers per week	NY
County of Hudson	GOV	$500,000 3 years	Adults diagnosed with prediabetes, diabetes, or hypertension	12 months	Clinic; FD	$80 produce vouchers per month	NJ

Grantee	Grantee Type[1]	Total Grant Amount and Duration	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
County of Los Angeles	GOV	$500,000 3 years	Adults diagnosed with type 2 diabetes or prediabetes	6 months	B&M; clinic	$40 electronic debit card per month	CA
County of Oakland	GOV	$453,000 3 years		6 months	B&M; clinic; FD	$40 vouchers per month	CA
Department of Health Minnesota	GOV	$500,000 3 years		3 months	B&M; clinic; FD	$50 voucher, produce box, or CSA share per month	MN
Everyone's Harvest	CBO	$500,000 3 years		19 weeks	Clinic; FD	$35 voucher per week	CA
Families Anchored in Total Harmony, Inc	CBO	$500,000 2 years	African American adults with a diagnosis related to diabetes, digestive, heart, and vascular diseases	52 weeks	FD	$20 produce box per week	IN
The Griffin Hospital	HCO	$500,000 3 years	Adults diagnosed with prediabetes or type 2 diabetes	6 months	B&M	$40 incentive per household plus an additional $5 per household member per month	CT
Iowa Healthiest State Initiative	CBO	$500,000 2 years	Adults diagnosed with prediabetes or type 2 diabetes	6 months	B&M; clinic; FD	$30 incentive per participant or family member per month	IA
Kahuku Medical Center	HCO	$500,000 2 years		24 months	Clinic; FD	$30 produce boxes every other week	HI
The Keya Foundation	CBO	$500,000 3 years		15 months	B&M; clinic; FD	$30 produce box every other week	LA
Market Umbrella Org	CBO	$500,000 3 years		12 weeks	B&M; clinic; FD	$30 produce box every other week	LA
Mid America Regional Council Community Services Corporation	Other: Metro-politan Planning Organi-zation	$500,000 3 years	Adults who are prediabetic or prehypertensive	6 months	B&M; clinic	$10 financial incentive per participant per week with additional $5 incentive per household member per week	MO

Grantee	Grantee Type[1]	Total Grant Amount and Duration	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
Montefiore Medical Center	HCO	$500,000 3 years	Adults diagnosed with prediabetes or diabetes	6 months	Clinic	2 food boxes per month	NY
Nuestras Raices Inc	CBO	$500,000 3 years	Latino adults diagnosed with type 2 diabetes	5 months	B&M; clinic; FD	2 produce boxes per person or household per month; RCT design with mixed delivery model	MA
Oklahoma Association of Conservation Districts, Inc	CBO	$500,000 3 years	Adults diagnosed with type 2 diabetes and an A1c of 8.0 or higher	12 months	FD	Produce pickup or delivery every other week	OK
Oklahoma Foundation for Medical Quality	Other: Consulting firm, non-profit	$500,000 2 years		1 year	Clinic; FD	$20 in matching dollars per month	OK
Partnership for a Healthier America	CBO	$476,941 2 years	Adults living in Bolivar and Sunflower County, Mississippi with a BMI > 25 or HbA1c > 5.7-8.5%	6 months	Pending	$25 worth of produce per week	DC
Produce Perks Midwest	CBO	$500,000 3 years	Adults diagnosed with prediabetes or type 2 diabetes, with priority enrollment for individuals of color	6 months	B&M; clinic; FD	1 produce box delivery or voucher per month	OH
Project Open Hand	CBO	$500,000 2 years	Adults diagnosed with HIV/AIDS, type 2 diabetes, Hepatitis C, end stage renal disease, or other cardiovascular disease	Varies with diagnosis	B&M; clinic	$13-$14 produce bag delivery or pick up per week	CA
Promedica Health System, Inc	HCO	$500,000 3 years	People who are between 12 and 20 weeks pregnant at enrollment	12 months	B&M; clinic	$100 stipend per month	OH

Grantee	Grantee Type[1]	Total Grant Amount and Duration	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
Regents of the University of Minnesota	UNI	$500,000 3 years		1 year	Clinic	$35 worth of produce per week	MN
South Dakota School of Mines and Technology	UNI	$500,000 2 years	Great Plains Area American Indian/Alaska Native adults newly diagnosed with type 2 diabetes	12 months	Pending	Free produce for 52 weeks	SD
Southeast Missouri Foodbank	CBO	$500,000 3 years	Veterans	12 months	B&M	1 produce box pickup every other week	MO
Springfield Community Gardens	CBO	$190,000 1 year		22 weeks	Clinic	1 free CSA box per week	MO
Tampa Metropolitan Area YMCA	CBO	$500,000 3 years	Adults diagnosed with diabetes or heart disease	16 weeks	Clinic	Produce pick up twice per month	FL
Texas A&M Agrilife Research	UNI	$500,000 3 years	Adults diagnosed with hypertension	24 weeks	B&M; clinic	1 produce box per week	TX
Thai Community Development Center, Inc	CBO	$500,000 3 years	Adults diagnosed with prediabetes or type 2 diabetes	12 months	Pending	$20-$60 produce box twice a month	CA
Top Box Foods	CBO	$500,000 2 years	Adults diagnosed with hypertension	52 weeks	B&M; clinic	1 produce box per week	IL
University of Mississippi	UNI	$450,000 3 years	African American households with a low food security status and a qualifying health condition	36 months	B&M; clinic	$70 punch card with a match from household per month	MS
Wellspring Cooperative Corporation	CBO	$500,000 3 years		18 months	Clinic; FD	$40-$80 Healthy Incentive Program Benefits per month	MA
YMCA of Metropolitan Washington	CBO	$500,000 3 years	Adults diagnosed with prediabetes	12 months	Pending	1 produce bag per week	DC

Grantee	Grantee Type[1]	Total Grant Amount and Duration	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
YMCA of Northwest North Carolina	CBO	$500,000 3 years		12 months	B&M; clinic; FD	1 produce box twice per month	NC

[1] Grantee types include: CBO = Community based organization or other non-profit; GOV = state or local government agency; HCO = Healthcare organization; UNI = University or other higher education organization; Other

[2] Additional priority population(s) sourced from project summaries within USDA's Current Research Information System

[3] Site types include: brick-and-mortar (B&M), clinic, and farm direct (FD)

Grantee	Grantee Type[1]	Total Grant Amount, Time Period	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
ARPA Meritorious							
Appalachian RC and D Council	CBO	$499,565 3 years		12 months	B&M; FD	$240 incentives per year	TN
Arkansas Hunger Relief Alliance	CBO	$499,953 3 years		12 months	B&M; clinic	$50 worth of produce per month	AR
Catskill Regional Medical Center	HCO	$499,580 3 years	Adults diagnosed with diabetes	12 weeks	B&M; FD	$20 voucher per week	NY
Ceres Community Project	CSA	$495,333 3 years	Pregnant women and their families who are at risk of gestational diabetes, poor birth outcomes and post-natal depression	29 weeks	B&M	4 weeks of medically tailored meals upon enrollment then weekly produce delivery for 22 weeks as well as 5 weeks of meals postpartum	CA
Communicare Health Centers	HCO	$499,986 3 years	Adults with an HbA1C > 5.7%	7 months	Clinic; FD	1 produce box or equivalent dollar amount per week	CA
Farmshare Austin	CBO	$80,839 1 year	Adults diagnosed with diabetes	6 months	FD	$390 credit per 6 months	TX
Feeding Florida, Inc	Other: Food Bank Association	$499,999 3 years		16 weeks	Pending	$36 on card per week	FL

Grantee	Grantee Type[1]	Total Grant Amount, Time Period	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
FISH	CBO	$500,000 3 years	Adults diagnosed with, or at risk for, diabetes, hypertension, and/or overweight/ obesity	12 months	B&M	1 CSA share per week	WA
High Desert Food and Farm Alliance	CBO	$378,210 3 years		12 weeks	B&M; FD	1 produce pick up per week	OR
LiveWell Greenville	CBO	$500,000 3 years		12 months	FD	1 $30 produce box every 2 weeks	SC
Local Food Hub, Inc	CBO	$498,863 3 years	Families who are patients at a children's hospital	18 months	Pending	1 produce bag per week for first 15 months; then at least 1 produce bag monthly plus $40 farmers market vouchers per month	VA
New York Common Pantry	CBO	$500,000 2 years		6 months	Clinic; FD	1 produce package twice a month	NY
Rural Health Network of SCNY, Inc	CBO	$500,000 3 years	Adults diagnosed with cardiovascular disease, diabetes, prediabetes, or BMI greater than 30	6 months	B&M; FD	$360 over 6 months	NY
SCHA Foundation, Inc	CBO	$500,000 2 years	Adults diagnosed with a diagnosis of prediabetes or diabetes	6 months	B&M	$20 vouchers or produce boxes every other week	SC
The Health and Hospital Corporation of Marion County	Other: Municipal Corpora-tion	$500,000 3 years	Adults diagnosed with diabetes, hypertension, or overweight/ obesity	12 months	B&M; FD	$90 per month	IN

Grantee	Grantee Type[1]	Total Grant Amount, Time Period	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
University Health Associates (formerly University Healthcare Physicians)	CBO	$500,000 3 years	Adults at risk of and/or diagnosed with diabetes, prediabetes, gestational diabetes, heart disease, obesity, hyperlipidemia, hypertension, and pregnancy	6 months	Clinic	$20 twice a month	WV
Wholesome Wave Georgia Incorporated	CBO	$478,783 3 years	Adults diagnosed with or at risk of developing diabetes, hypertension, obesity, or other diet-related chronic disease	6 months	FD	$1 per household member per day	GA

[1] Grantee types include: CBO = Community based organization or other non-profit; GOV = state or local government agency; HCO = Healthcare organization; UNI = University or other higher education organization; Other

[2] Additional priority population(s) sourced from project summaries within USDA's Current Research Information System

[3] Site types include: brick-and-mortar (B&M), clinic, and farm direct (FD)

Grantee	Grantee Type[1]	Total Grant Amount, Time Period	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
ARPA Enhancement							
Appalachian Sustainable Agriculture Project	CBO	$499,987 3 years		8 months	Clinic; FD	$20 - $60 per week	NC
Catholic Health Initiatives	HCO	$499,289 3 years		6 months	B&M; FD	$100 worth of vouchers in first month followed by 5 $50 refills	CO
County of Alameda	GOV	$500,000 3 years		4 months	Clinic; FD	$40 worth of produce delivered per week	CA
Delta Health Alliance	CBO; HCO	$499,825 3 years	Adults diagnosed with diabetes, hypertension, obesity, or hyperlipidemia	12 months	B&M; clinic	$40 grocery store credit program per month	MS

Grantee	Grantee Type[1]	Total Grant Amount, Time Period	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
Forsyth Farmers' Market	Other: Farmer's Market	$472,287 3 years		8 months	FD	$50 per month with $25 for each additional household member per week	GA
New Mexico Farmers Marketing Association	CBO	$499,984 3 years	Adults diagnosed with type 2 diabetes	16 weeks	Clinic; FD	1 CSA share or paper voucher per week	NM
Parkview Hospital	HCO	$499,978 3 years	Children or adults diagnosed with obesity; Adults diagnosed with prediabetes, diabetes, or cardiac diseases; Underserved women with an at-risk pregnancy	6 months	B&M; clinic; FD	$50 debit card or paper voucher per month	IN
Share Our Strength	CBO	$490,052 2 years	Households with Medicaid-insured youth in areas where nutrition insecurity and childhood overweight or obesity is above national averages	6 months	B&M; clinic; FD	$40 voucher per month	DC
The Corbin Hill Food Project	CBO	$500,000 3 years	Seniors over the age of 55, including formerly incarcerated seniors living in supportive housing	12 months	B&M	$35 of produce every other week	NY
Wholesome Wave Foundation	CBO	$458,707 3 years	Pregnant patients in their first trimester at enrollment	10 months	B&M; FD	$100 via Fresh Connect debit card or produce box per month	CT

Grantee	Grantee Type[1]	Total Grant Amount, Time Period	Additional Priority Population(s)[2]	Intervention Duration	Site Type(s)[3]	Prescription Amount and Mechanism	State(s) Reached
Williamson Health and Wellness Center, Inc	HCO	$311,672 3 years	Adults at risk of or diagnosed with heart disease or diabetes	6 months	FD	$20 loyalty card per week	WV
Yukon-Kuskokwim Health Corporation	CBO	$500,000 3 years	Adults diagnosed with diabetes, prediabetes, gestational diabetes, or at risk for developing diabetes	24 months	B&M; clinic; FD	$45 voucher or produce box per month	AK

[1] Grantee types include: CBO = Community based organization or other non-profit; GOV = state or local government agency; HCO = Healthcare organization; UNI = University or other higher education organization; Other

[2] Additional priority population(s) sourced from project summaries within USDA's Current Research Information System

[3] Site types include: brick-and-mortar (B&M), clinic, and farm direct (FD)

2022 GusNIP Grantees: Nutrition Incentive Projects (NI)

Grantee	Grantee Type[1]	Total Grant Amount and Duration	Site Type(s)[2]	Match Amount and Mechanism	State(s) Reached
GusNIP Large Scale Projects					
California Department of Food and Agriculture	GOV	$12,898,290 3 years	B&M; FD	1:1 match per day up to $10/15/20; 50% off F/V; voucher	CA
Farm Fresh Rhode Island	CBO	$4,867,7730 3 years	B&M; FD	1:1 match with various caps at farmers markets; 50% discount with a cap in retail; tokens; vouchers	RI
Farmers Market Fund	CBO	$3,932,486 2 years	B&M; FD	1:1 match per visit up to $20; 50% off CSA shares; discount, EBT card, loyalty card, paper, or voucher	OR
Sustainable Food Center	CBO	$1,867,960 2 years	B&M; FD	1:1 match up to $30 per visit; discount, loyalty card, paper, or voucher	TX

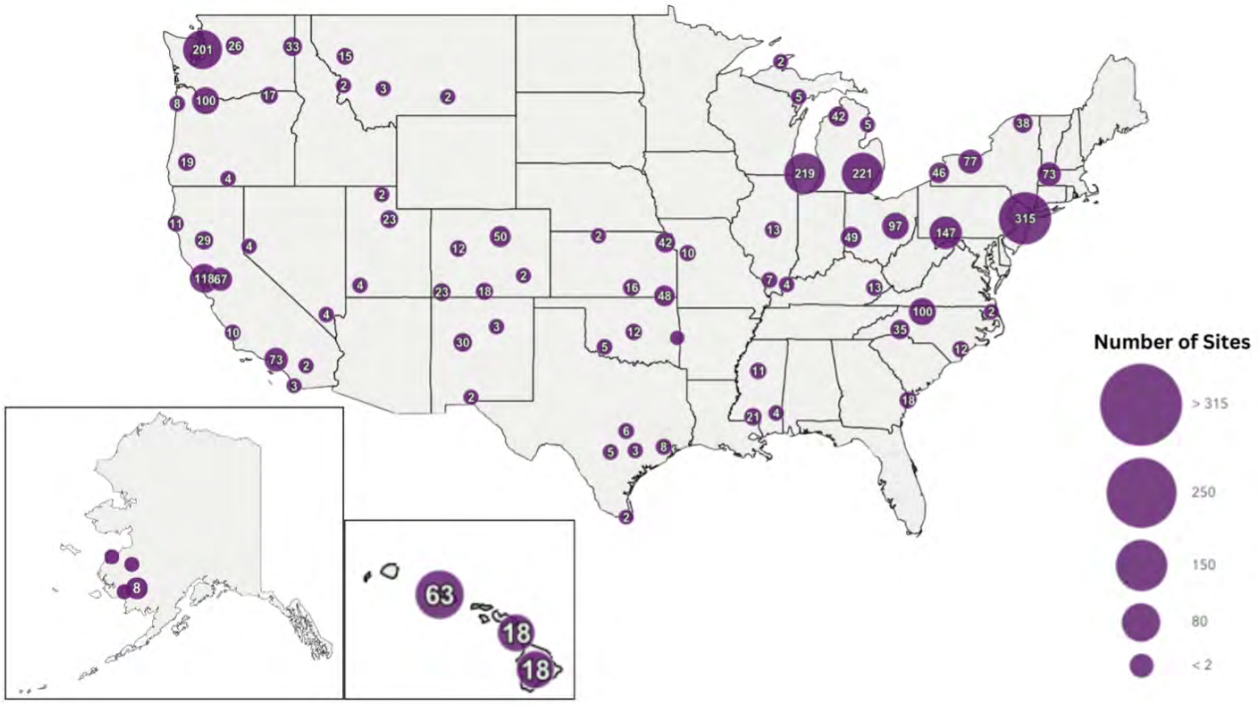
Grantee	Grantee Type[1]	Total Grant Amount and Duration	Site Type(s)[2]	Match Amount and Mechanism	State(s) Reached
Tulsa Community Foundation	CBO	$14,215,190 4 years	B&M; FD	1:1 match up to $20 per day; coupon	OK
GusNIP Standard Projects					
Crossroads Community Food Network	CBO	$400,033 4 years	B&M; FD	1:1 match at FM & 50% discount at POS at co-op; $50 per week cap	MD
The Urban Food Initiative	CBO	$500,000 4 years	B&M	1:1 match per store transaction up to $10	MA
GusNIP Pilot Projects					
North Carolina Agriculture and Technical State University	UNIV	$98,948 1 year	FD	Matching 1:1 cost of CSA box	NC

[1] Grantee types include: CBO = Community based organization or other non-profit; GOV = state or local government agency; HCO = Healthcare organization; UNI = University or other higher education organization; Other

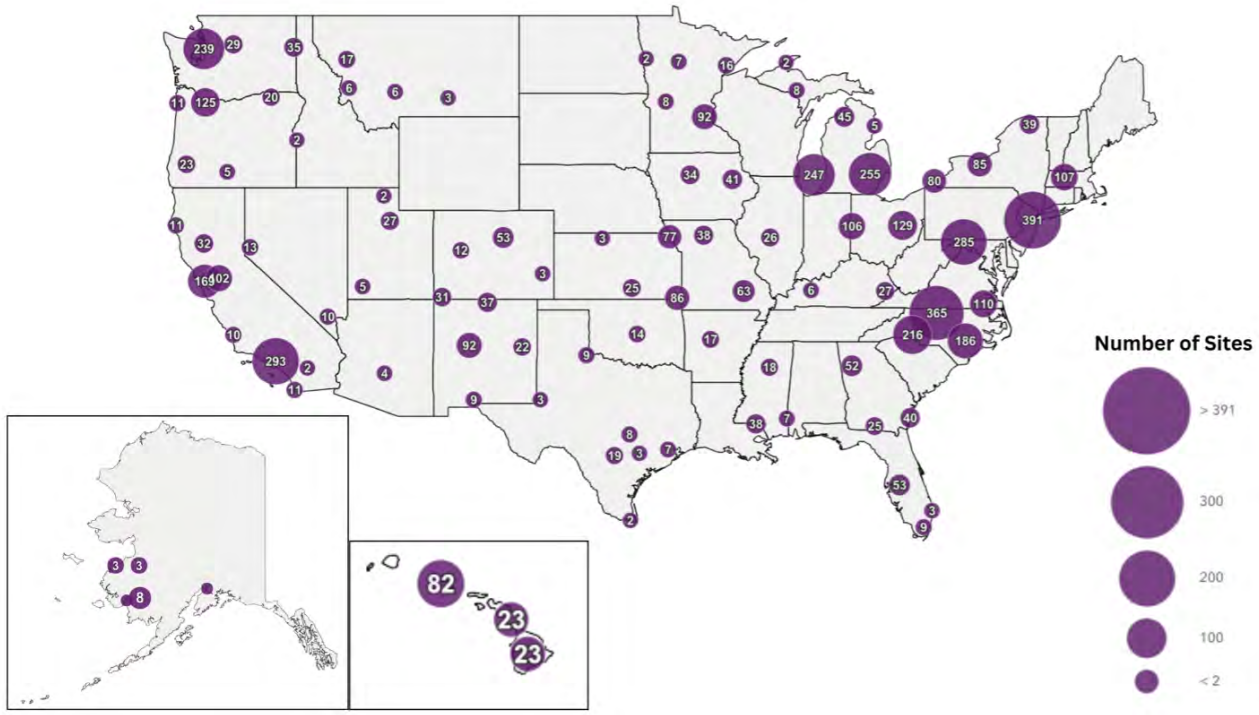
[2] Site types include: brick-and-mortar (B&M) and farm direct (FD)

Appendix 6. GusNIP Sites and Locations Maps: Years 2 and 3

Number of GusNIP Sites and Locations in Year 2[4]



Number of GusNIP Sites and Locations in Year 3[4]



[4] This map provides a national view of the number of GusNIP sites within a given geographic area. ArcGIS online aggregation tool was used to create medium size clusters of sites which are represented by circles on the map. Circles display the number of sites contained within a given geographic area.

Appendix 7. Nutrition Incentive Results Tables

Nutrition Incentive Site-Level Results Tables

Table A1. Total Estimated Number of NI Participants in Y4 by Month and Award Mechanism

Month and Year	GusNIP Customers Served	GusCRR Customers Served	Total
September 2022	160,084	70,984	231,068
October 2022	186,411	45,016	231,428
November 2022	125,335	46,201	171,535
December 2022	141,254	66,842	208,095
January 2023	130,470	73,624	204,094
February 2023	122,163	85,020	207,183
March 2023	104,182	99,769	203,951
April 2023	115,133	110,708	225,841
May 2023	131,851	126,900	258,751
June 2023	166,077	133,618	299,696
July 2023	181,429	112,860	294,289
August 2023	196,546	82,372	278,918
Monthly Average	146,745	87,826	234,571

Table A2. SNAP Purchases/Products Eligible to Trigger Incentive Distribution by Site Type for NI Projects (2022-2023)[1]

Eligible SNAP Purchases/ Products	B&M (n = 1,213)	FD (n = 2,028)	Total NI (N = 3,241)
All FVs (fresh, canned, frozen, dried, plants, and/or seeds) n (%)	310 (25.56%)	34 (1.68%)	344 (10.61%)
All SNAP Eligible Items n (%)	394 (32.48%)	1,656 (81.66%)	2,050 (63.25%)
Fresh FVs Only n (%)	393 (32.40%)	196 (9.66%)	589 (18.17%)
Only State or Regionally Grown FVs n (%)	116 (9.56%)	140 (6.90%)	256 (7.90%)
Other n (%)	2 (0.16%)	1 (0.05%)	3 (0.09%)

B&M = brick-and-mortar sites; FD = farm direct sites; FVs = fruits and vegetables; N = total number in sample; n = number in subsample; NI = nutrition incentive; SNAP = Supplemental Nutrition Assistance Program

[1] Sites that did not report on SNAP purchases/products eligible to trigger incentives for incentive redemption (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages.

Table A3. Fruits and Vegetables (FVs) Eligible for Incentive Redemption by Site Type for NI Projects (2022-2023)[1]

Eligible FVs	B&M (n = 1,213)	FD (n = 2,028)	Total NI (N = 3,241)
Fresh FVs Only n (%)	482 (39.74%)	599 (29.54%)	1,081 (33.35%)
All FVs (fresh, canned, frozen, dried, plants, and/or seeds) n (%)	608 (50.12%)	623 (30.72%)	1,231 (37.98%)
Only State or Regionally Grown FVs n (%)	122 (10.06%)	840 (41.42%)	962 (29.68%)
Other n (%)	0 (0%)	4 (0.20%)	4 (0.12%)

B&M = brick-and-mortar sites; FD = farm direct sites; FVs = fruits and vegetables; N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Sites that did not report on FVs eligible for incentives (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages.

Table A4. Financial Instruments[1] for Incentive Distribution/Redemption by Site Type for NI Projects (2022-2023)[2]

Financial Instrument	B&M (n = 1,213)	FD (n = 2,028)	Total NI (N = 3,241)
CSA Share or Produce Box n (%)	1 (0.08%)	54 (2.66%)	55 (1.70%)
Discount at Register n (%)	237 (19.54%)	254 (12.52%)	491 (15.15%)
EBT Card n (%)	7 (0.58%)	20 (0.99%)	27 (0.83%)
Loyalty Account[3] n (%)	480 (39.57%)	68 (3.35%)	548 (16.91%)
Paper Voucher or Coupon n (%)	498 (41.06%)	925 (45.61%)	1,423 (43.91%)
Token n (%)	3 (0.25%)	791 (39.00%)	794 (24.50%)
Other n (%)	1 (0.08%)	0 (0%)	1 (0.03%)

B&M = brick-and-mortar sites; EBT = electronic benefit transfer; FD = farm direct sites; N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Financial instruments are the methods that sites use to distribute incentives.

[2] Sites that did not report on financial instruments for incentive redemption (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for financial instruments for incentive redemption so the rows in each column may not add up to the number of sites (n) and the percentages may add to more than 100%.

[3] Loyalty account includes sites with online loyalty accounts, loyalty cards, and/or ID-based loyalty accounts.

Table A5. Annual Incentive Distribution and Redemption by Site Type for NI Projects (2022-2023)[1]

Incentive Distribution and Redemption	GusNIP NI (n = 2,746)	GusCRR NI (n = 1,457)	B&M (n = 1,517)	FD (n = 2,143)	All Sites (N = 3,660)
Annual Incentives Distributed					
Total	$57,980,161.67	$11,333,384.92	$48,360,900.26	$20,952,646.33	$69,313,546.59
Mean[2]	$21,658.63	$11,855.01	$ 50,271.21	$9,832.31	$ 19,078.87
Annual Incentives Redeemed					
Total	$35,502,640.65	$12,150,221.24	$28,449,237.81	$19,203,624.08	$47,652,861.89
Mean[2]	$ 13,675.90	$ 8,514.52	$18,778.37	$9,630.70	$11,845.11
Annual Redemption Rate					
Total[3]	61.23%	107.21%	58.83%	91.65%	68.75%

B&M = brick-and-mortar sites; FD = farm direct sites; GusNIP NI = NI awards through GusNIP; GusCRR NI = NI awards through COVID Relief and Response; N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Number of sites (n) in each column header represents the number of active sites in each category and includes sites with missing data for each metric. Many sites operate using both GusNIP and GusCRR funding. In addition, some sites operate multiple projects and multiple project types (e.g., NI and PPR projects). Thus, there is overlap in the counts of sites attributed to distinct funding sources.

[2] Means were calculated by dividing the total dollar value of incentives distributed or redeemed by the number of sites with data for that metric. Sites with missing data were excluded from the calculation.

[3] Total annual redemption rate is calculated as the total annual incentives redeemed divided by the total annual incentives distributed in each column and is represented as a percentage.

Table A6. Nutrition Education Activities Offered by Site Type Among NI Projects that Offered Any Nutrition Education (2022-2023)[1]

Nutrition Education Activities	B&M (n = 308)	FD (n = 1,159)	Total NI (N =1,467)
1:1 or Small Group Nutrition Education n (%)	35 (11.36%)	62 (5.35%)	97 (6.61%)
Partnering Nutrition Education[2] n (%)	43 (13.96%)	337 (29.08%)	380 (25.90%)
Cooking Demonstrations n (%)	289 (93.83%)	1,028 (88.70%)	1,317 (89.78%)
Food Navigation or Tours n (%)	25 (8.12%)	196 (16.91%)	221 (15.06%)

Nutrition Education Activities	B&M (n = 308)	FD (n = 1,159)	Total NI (N =1,467)
E-interventions n (%)	37 (12.01%)	67 (5.78%)	104 (7.09%)
Other[3] n (%)	13 (4.22%)	79 (6.82%)	92 (6.27%)

B&M = brick-and-mortar sites; FD = farm direct sites; N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Sites that did not report on nutrition education offered (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for nutrition education activities so the rows in each column will not add up to the number of sites (n).

[2] Other external agencies (e.g., SNAP-Ed, EFNEP, WIC) offer educational programming.

[3] Other responses included: gardening education, children specific programming, nutrition education including physical activity, canning and preserving, etc.

Table A7. Support Services Offered by Site Type Among NI Projects that Offered Any Support Service (2022-2023)[1]

Support Services	B&M (n = 498)	FD (n = 604)	Total NI (N = 1,102)
Resource Referrals n (%)	49 (9.84%)	356 (58.94%)	405 (36.75%)
Produce Delivery and Transportation n (%)	482 (96.79%)	221 (36.59%)	703 (63.79%)
Health Fairs and Other Community Building Activities n (%)	1 (0.20%)	49 (8.11%)	50 (4.54%)
Voter Registration and Other Civic Engagement n (%)	4 (0.80%)	102 (16.89%)	106 (9.62%)
COVID Testing or Vaccination n (%)	25 (5.02%)	57 (9.44%)	82 (7.44%)
Other[2] n (%)	3 (0.60%)	41 (6.79%)	44 (3.99%)

B&M = brick-and-mortar sites; COVID = coronavirus disease 2019; FD = farm direct sites; N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Sites that did not report on support services offered (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for support services so the rows in each column will not add up to the number of sites (n).

[2] Other responses included: promotion of other programs, skill building (e.g., computer classes), behavioral health screenings, etc.

Table A8. Marketing Activities Offered by Site Type Among NI Projects that Conducted Any Marketing Activities (2022-2023)[1]

Marketing Activities	B&M (n = 887)	FD (n = 1,975)	Total NI (N = 2,862)
On-site Signage or Announcements n (%)	637 (71.82%)	1,525 (77.22%)	2,162 (75.54%)
Direct Promotions Distributed by Direct Mail, Email, Phone n (%)	607 (68.43%)	1,292 (65.42%)	1,899 (66.35%)
Public Promotions n (%)	191 (21.53%)	477 (24.15%)	668 (23.34%)
Multi-lingual Promotions n (%)	113 (12.74%)	545 (27.59%)	658 (22.99%)
Directories n (%)	40 (4.51%)	219 (11.09%)	259 (9.05%)
Online Advertisements n (%)	406 (45.77%)	1,334 (67.54%)	1,740 (60.80%)
Other[2] n (%)	12 (1.35%)	31 (1.57%)	43 (1.50%)

B&M = brick-and-mortar sites; FD = farm direct sites; N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Sites that did not report on project marketing activities (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for marketing services so the rows in each column will not add up to the number of sites (n).

[2] Other responses included: special events, promotion with partnering agencies (e.g., senior's center, food banks, neighborhood associations), etc.

Table A9. Sociodemographic Characteristics of NI Project Participants (N = 9,157) by Site Type (2022-2023)[1]

Sociodemographic Characteristics	Brick-and-Mortar (n = 3,447)	Farm Direct (n = 3,897)	Uncategorized[2] (n = 1,813)	Overall (N = 9,157)
Age (Years)				
Participants Reporting Age (n)	3,210	3,619	1,520	8,349
Mean (SD)	43.59 (14.97)	46.49 (16.56)	48.63 (16.44)	45.76 (16.05)
Age Group (Years) n (%)				
18 to 24	253 (7.88%)	192 (5.30%)	63 (4.14%)	508 (6.08%)
25 to 34	754 (23.48%)	885 (24.43%)	310 (20.39%)	1,949 (23.33%)
35 to 44	870 (27.09%)	855 (23.61%)	331 (21.78%)	2,056 (24.61%)
45 to 64	977 (30.43%)	995 (27.47%)	486 (31.97%)	2,458 (29.43%)
65 and over	357 (11.12%)	695 (19.19%)	330 (21.71%)	1,382 (16.54%)
Missing[3]	236	275	293	804
Gender n (%)				
Male	634 (18.85%)	706 (18.45%)	397 (23.26%)	1,737 (19.53%)
Female	2,570 (76.42%)	2,848 (74.44%)	1,213 (71.06%)	6,631 (74.54%)
Non-Binary/Third Gender	70 (2.08%)	142 (3.71%)	32 (1.87%)	244 (2.74%)
Prefer to Self-Describe	5 (0.15%)	6 (0.16%)	2 (0.12%)	13 (0.15%)
Prefer Not to Answer	84 (2.50%)	124 (3.24%)	63 (3.69%)	271 (3.05%)
Missing	84	71	106	261
Race n (%)				
American Indian or Alaskan Native	77 (2.30%)	69 (1.87%)	23 (1.58%)	169 (1.99%)
Asian	201 (6.01%)	241 (6.53%)	43 (2.95%)	485 (5.71%)
Black or African American	758 (22.65%)	478 (12.95%)	187 (12.84%)	1,423 (16.75%)
More Than One Race	159 (4.75%)	191 (5.17%)	37 (2.54%)	387 (4.56%)
Native Hawaiian	57 (1.70%)	10 (0.27%)	7 (0.48%)	74 (0.87%)
Other	547 (16.34%)	147 (3.98%)	32 (2.20%)	726 (8.55%)
Other Pacific Islander	21 (0.63%)	5 (0.14%)	16 (1.10%)	42 (0.49%)
White	1,203 (35.94%)	2,139 (57.95%)	735 (50.48%)	4,077 (48.00%)
Don't Know/Not Sure	89 (2.66%)	79 (2.14%)	38 (2.61%)	206 (2.43%)
Prefer Not to Answer	235 (7.02%)	332 (8.99%)	338 (23.21%)	905 (10.65%)
Missing	100	206	357	663

Sociodemographic Characteristics	Brick-and-Mortar (n = 3,447)	Farm Direct (n = 3,897)	Uncategorized[2] (n = 1,813)	Overall (N = 9,157)
Ethnicity n (%)				
Non-Hispanic or Latino/a/x	2,253 (67.03%)	3,082 (80.60%)	758 (51.99%)	6,093 (70.50%)
Hispanic or Latino/a/x	988 (29.40%)	536 (14.02%)	581 (39.85%)	2,105 (24.35%)
Prefer Not to Answer	120 (3.57%)	206 (5.39%)	119 (8.16%)	445 (5.15%)
Missing	86	73	355	514
Region[4] n (%)				
Northeast	497 (14.42%)	980 (25.15%)	614 (33.87%)	2,091 (22.83%)
North Central	593 (17.20%)	803 (20.61%)	852 (46.99%)	2,248 (24.55%)
Southern	571 (16.57%)	621 (15.94%)	40 (2.21%)	1,232 (13.45%)
Western	1,786 (51.81%)	1,493 (38.31%)	307 (16.93%)	3,586 (39.16%)
Total[5] n (%)	3,447 (37.64%)	3,897 (42.56%)	1,813 (19.80%)	9,157

N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Variables are in alphabetical order following recent guidance from: Flanagin, A., Frey, T., Christiansen, S.L., AMA Manual of Style Committee. Updated Guidance on the Reporting of Race and Ethnicity in Medical and Science Journals. *JAMA*. 2021;326(7):621–627.

[2] Participants were considered "uncategorized" if they did not specify a type of site attached to the location where they took the survey. Many participants completed the survey online, so identifying a site location where the survey occurred was not feasible.

[3] Missing values for age group, gender, ethnicity, and race are not included in percentage calculations.

[4] Regions defined by: USDA NIFA.

[5] Total displayed as row percentage. Example: Of the total sample, 37.6% of participants can be attributed to brick-and-mortar sites, 42.6% to farm direct sites, and 19.8% were uncategorized.

Table A10. Frequency and Percentage of Food Security Status Among NI Project Participants (N = 5,838) by Sociodemographic Characteristics (2022-2023)[1,2,3]

Sociodemographic Characteristics	Food Secure (n = 2,425)	Food Insecure (n = 3,413)
Age (Years)		
Mean (SD)	47.15 (16.96)	44.84 (15.31)
Age Group (Years) n (%)		
18 to 24	114 (34.78%)	214 (65.22%)
25 to 34	533 (41.70%)	746 (58.30%)
35 to 44	534 (39.26%)	827 (60.74%)
45 to 64	607 (37.49%)	1,013 (62.51%)
65 and over	468 (52.82%)	418 (47.18%)
Missing	167	195
Gender n (%)		
Male	483 (44.55%)	601 (55.45%)
Female	1,774 (40.63%)	2,592 (59.37%)
Non-Binary/Third Gender	57 (36.62%)	99 (63.38%)
Prefer to Self-Describe	4 (46.06%)	4 (53.94%)
Prefer Not to Answer	86 (48.15%)	93 (51.85%)
Missing	21	23
Race n (%)		
American Indian or Alaskan Native	25 (20.80%)	97 (79.20%)
Asian	175 (47.73%)	192 (52.27%)
Black or African American	413 (38.53%)	659 (61.47%)
More Than One Race	113 (39.81%)	171 (60.19%)
Native Hawaiian	24 (37.39%)	39 (62.61%)
Other	147 (35.81%)	264 (64.19%)
Other Pacific Islander	8 (35.32%)	15 (64.68%)
White	1,136 (43.63%)	1,467 (56.37%)
Don't Know/Not Sure	48 (38.36%)	78 (61.64%)
Prefer Not to Answer	215 (43.13%)	283 (56.87%)
Missing	121	149
Ethnicity n (%)		
Hispanic or Latino/a/x	399 (35.09%)	739 (64.91%)
Non-Hispanic or Latino/a/x	1,836 (42.88%)	2,446 (57.12%)
Prefer Not to Answer	132 (47.06%)	148 (52.94%)
Missing	57	79

Sociodemographic Characteristics	Food Secure (n = 2,425)	Food Insecure (n = 3,413)
Region[4] n (%)		
North Central	514 (39.00%)	805 (61.00%)
Northeast	664 (44.56%)	826 (55.44%)
Southern	365 (38.40%)	585 (61.60%)
Western	882 (42.43%)	1,197 (57.57%)
Total[5] n (%)	**2,425 (41.54%)**	**3,413 (58.46%)**

N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Variables are in alphabetical order following recent guidance from: Flanagin, A., Frey, T., Christiansen, S.L., AMA Manual of Style Committee. Updated Guidance on the Reporting of Race and Ethnicity in Medical and Science Journals. *JAMA*. 2021;326(7):621–627.

[2] Table displays row percentages (age group, gender, ethnicity, race, region, and total sample). Example: Of participants aged 18 to 24, 34.8% were food secure and 65.2% were food insecure. Missing values for age group, gender, ethnicity, and race are not included in percentage calculations.

[3] Distributions in this table are weighted which will cause the counts to not be whole numbers, so these have been rounded to whole numbers for appearance. See "How Did We Analyze the Impact of NI Participation?" in the main report for an explanation of how weighting was applied to this table.

[4] Regions defined by: USDA NIFA.

[5] NI participants without enough data to compute food insecurity are not included in this table.

Table A11. Daily FVs Cup Equivalents Among NI Participants (N = 7,851) Across Sociodemographic Characteristics (2022-2023)[1]

Sociodemographic Characteristics	Fruits and Vegetables[1] (n = 7,689)	Fruits Only (n = 7,851)	Vegetables[2] Only (n = 7,754)
Age Group (Years) Mean (SD)			
18 to 24	2.57 (0.81)	1.13 (0.57)	1.5 (0.47)
25 to 34	2.72 (0.76)	1.19 (0.55)	1.58 (0.42)
35 to 44	2.73 (0.73)	1.1 (0.45)	1.66 (0.44)
45 to 64	2.78 (0.77)	1.08 (0.45)	1.7 (0.47)
65 and over	2.65 (0.67)	0.99 (0.36)	1.63 (0.42)
Gender Mean (SD)			
Female	2.63 (0.68)	1.08 (0.44)	1.57 (0.39)
Male	3.08 (0.89)	1.17 (0.56)	1.93 (0.55)
Race Mean (SD)			
American Indian or Alaskan Native	2.65 (0.72)	1.14 (0.60)	1.57 (0.35)
Asian	2.8 (0.87)	1.04 (0.51)	1.75 (0.56)
Black or African American	2.62 (0.84)	1.1 (0.58)	1.56 (0.48)
More Than One Race	2.77 (0.78)	1.13 (0.50)	1.66 (0.46)
Native Hawaiian	2.87 (1.12)	1.27 (0.77)	1.69 (0.63)
Other	2.8 (0.70)	1.15 (0.42)	1.68 (0.41)
Other Pacific Islander	2.88 (0.79)	1.24 (0.61)	1.78 (0.37)
White	2.75 (0.71)	1.09 (0.43)	1.66 (0.43)
Don't Know/Not Sure	2.6 (0.72)	1.06 (0.48)	1.56 (0.40)
Prefer Not to Answer	2.72 (0.68)	1.11 (0.44)	1.64 (0.40)
Ethnicity Mean (SD)			
Hispanic or Latino/a/x	2.71 (0.70)	1.12 (0.46)	1.63 (0.39)
Non-Hispanic or Latino/a/x	2.72 (0.77)	1.1 (0.48)	1.64 (0.46)
Prefer Not to Answer	2.78 (0.75)	1.08 (0.47)	1.73 (0.46)
Region[3] Mean (SD)			
North Central	2.59 (0.72)	1.04 (0.46)	1.57 (0.43)
Northeast	2.77 (0.73)	1.13 (0.46)	1.65 (0.42)
Southern	2.71 (0.90)	1.12 (0.59)	1.64 (0.53)
Western	2.8 (0.71)	1.12 (0.44)	1.69 (0.43)
Total Mean (SD)	2.72 (0.75)	1.10 (0.47)	1.64 (0.44)

N = total number in sample; n = number in subsample; NI = nutrition incentive; FVs = fruits and vegetables

[1] Variables are in alphabetical order following recent guidance from: Flanagin, A., Frey, T., Christiansen, S.L., AMA Manual of Style Committee. Updated Guidance on the Reporting of Race and Ethnicity in Medical and Science Journals. *JAMA*. 2021;326(7):621–627.

[2] Vegetables calculated with legumes and without french fries.

[3] Regions defined by: USDA NIFA.

Table A12. Daily FV Frequency Among Non-Cisgendered and Preferred to Self-Describe NI Participants (N = 257; 2022-2023)

Response n (%)	Fruit Juice[1]	Fruit	Salad	Fried Potatoes	Other Potatoes	Beans	Vegetables[2]	Salsa	Pizza	Tomato Sauce
Never	54 (21.01%)	1 (0.39%	8 (3.11%)	24 (9.34%)	24 (9.34%)	25 (9.73%)	2 (0.78%)	57 (22.18%)	43 (16.73%)	40 (15.56%)
1 time last month	65 (25.29%)	8 (3.11%)	15 (5.84%)	38 (14.79%)	37 (14.40%)	21 (8.17%)	7 (2.72%)	43 (16.73%)	69 (26.85%)	40 (15.56%)
2-3 times last month	53 (20.62%)	24 (9.34%)	38 (14.79%)	56 (21.79%)	54 (21.01%)	46 (17.90%)	7 (2.72%)	56 (21.79%)	76 (29.57%)	71 (27.63%)
1 time per week	12 (4.67%)	15 (5.84%)	29 (11.28%)	57 (22.18%)	46 (17.90%)	47 (18.29%)	11 (4.28%)	29 (11.28%)	32 (12.45%)	44 (17.12%)
2 times per week	15 (5.84%)	34 (13.23%)	40 (15.56%)	46 (17.90%)	44 (17.12%)	59 (22.96%)	26 (10.12%)	27 (10.51%)	18 (7.00%)	39 (15.18%)
3-4 times per week	26 (10.12%)	67 (26.07%)	48 (18.68%)	18 (7.00%)	35 (13.62%)	35 (13.62%)	63 (24.51%)	23 (8.95%)	12 (4.67%)	18 (7.00%)
5-6 times per week	13 (5.06%)	32 (12.45%)	31 (12.06%)	10 (3.89%)	9 (3.50%)	12 (4.67%)	41 (15.95%)	12 (4.67%)	5 (1.95%)	5 (1.95%)
1 time per day	11 (4.28%)	28 (10.89%)	27 (10.51%)	5 (1.95%)	6 (2.33%)	7 (2.72%)	31 (12.06%)	4 (1.56%)	0 (0%)	0 (0%)
2 or more times per day	3 (1.17%)	47 (18.29%)	19 (7.39%)	2 (0.78%)	1 (0.39%)	2 (0.78%)	68 (26.46%)	3 (1.17%)	1 (0.39%)	0 (0%)
2-3 times per day	1 (0.39%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
6 or more times per day	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Prefer not to respond	4 (1.56%)	1 (0.39%)	2 (0.78%)	1 (0.39%)	1 (0.39%)	3 (1.17%)	1 (0.39%)	3 (1.17%)	1 (0.39%)	0 (0%)

N = total number in sample; n = number in subsample; NI = nutrition incentive; FV = fruit and vegetable

[1] The fruit juice item includes three response options that are not included in the other items ("2-3 times per day"; "4-5 times per day"; "6 or more times per day").

[2] Vegetables calculated with legumes and without french fries.

Table A13. Perceived Health Status Among NI Project Participants (N = 5,596) by Program Participation Length (2022-2023)

Perceived Health Status n (%)	First-time Participants (n = 1,100)	< 6 Months Participation (n = 1,650)	≥ 6 Months Participation (n = 2,846)	Overall NI (N = 5,596)
Poor	90 (8.46%)	101 (6.29%)	214 (7.67%)	404 (7.42%)
Fair	354 (33.42%)	471 (29.46%)	793 (28.44%)	1,618 (29.71%)
Good	392 (37.06%)	636 (39.73%)	1,014 (36.38%)	2,042 (37.50%)
Very Good	145 (13.73%)	283 (17.67%)	539 (19.34%)	967 (17.76%)
Excellent	61 (5.73%)	97 (6.04%)	201 (7.21%)	358 (6.58%)
Don't Know/Prefer Not to Answer	17 (1.59%)	13 (0.82%)	27 (0.96%)	57 (1.04%)
Missing[1]	42	50	59	151
Total[2] n (%)	1,100 (28.07%)	1,650 (27.09%)	2,846 (46.72%)	5,596

N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Missing values for perceived health status are not included in percentage calculations.

[2] Total displayed as row percentage for duration. Example: Of the total sample, 28.1% were first-time participants, 27.1% participated for less than 6 months, and 46.7% participated for 6 months or more.

[3] Distributions in this table are weighted which will cause the counts to not be whole numbers, so these have been rounded to whole numbers for appearance. See "How Did We Analyze the Impact of NI Participation?" in the main report for an explanation of how weighting was applied to this table.

Table A14. Program Satisfaction Among NI Project Participants (N = 6,090) by Site Type (2022-2023)

Program Satisfaction n (%)	Brick-and-Mortar (n = 2,359)	Farm Direct (n = 2,970)	Uncategorized (n = 761)	Overall (N = 6,090)
Very Negative	21 (1.00%)	12 (0.39%)	7 (0.96%)	39 (0.69%)
Negative	20 (0.95%)	16 (0.53%)	9 (1.22%)	44 (0.77%)
Neutral	151 (7.23%)	105 (3.59%)	50 (6.83%)	306 (5.33%)
Positive	570 (27.30%)	621 (21.26%)	174 (23.82%)	1,365 (23.78%)
Very Positive	1,229 (58.91%)	2,088 (71.49%)	394 (53.95%)	3,712 (64.68%)
Don't Know/Prefer Not to Answer	96 (4.61%)	80 (2.73%)	97 (13.23%)	273 (4.75%)
Missing[1]	273	48	30	351
Total[2] n (%)	2,359 (38.74%)	2,970 (48.76%)	761 (12.50%)	6,090

N = total number in sample; n = number in subsample; NI = nutrition incentive

[1] Missing values for program satisfaction are not included in percentage calculations.

[2] Total displayed as row percentage for site type. Example: Of the total sample, 38.7% were brick-and-mortar participants, 48.8% were farm direct participants, and 12.5% were uncategorized.

[3] Distributions in this table are weighted which will cause the counts to not be whole numbers, so these have been rounded to whole numbers for appearance. See "How Did We Analyze the Impact of NI Participation?" in the main report for an explanation of how weighting was applied to this table.

Appendix 8. Core Measures Terms, Definitions, and Examples

Definitions and Examples of Financial Instruments

Financial Instruments	Definitions and Examples
Token	The incentive is a physical item typically provided in farmers market settings when an NI participant swipes their EBT card or a PPR participant presents their prescription at a central location.
Paper vouchers or coupons	The incentive or prescription is printed on a receipt or other paper mechanism and is available for the participant to use on subsequent shopping trips; essentially a rebate.
Loyalty account	The incentive or prescription is integrated into a site's loyalty program through a physical card or unique account number. Some loyalty accounts are associated with a grocery store or chain of grocery stores while some operate independently.
Discount at the register	The incentive or prescription is an automatic discount provided at the point of sale.
EBT cards	The incentive or prescription is integrated into a participant's EBT card.
CSA share or produce box	The incentive or prescription is given to NI/PPR participants as a weekly or monthly CSA share or produce box.

Definitions and Examples of Eligible Products for Earning and Redeeming Incentives

Eligible Products	Definitions and Examples
All SNAP-eligible items	An incentive model where participants can earn incentives on any SNAP-eligible item (typically in FD settings), not just FVs. Redemption on non-FV items is not allowable under GusNIP.
Fresh FVs only	An incentive model where participants can earn/redeem incentives or prescriptions on the purchase of *fresh* FVs only.
All FVs (fresh, canned, frozen, dried, plants, and/or seeds)	An incentive model where participants can earn/redeem incentives on the purchase of any FV, which may include canned, dried, or frozen FVs without added sugars, fats, oils, or salt/sodium.
Only State or Regionally Grown FVs	An incentive model where participants can earn/redeem incentives or prescriptions on FVs that are grown locally or regionally.

Definitions and Examples of Nutrition Education, Support Services, and Marketing Activities

Nutrition Education Activities	Definitions and Examples
1:1 or small group nutrition education	Formalized programs like the Diabetes Prevention Program (DPP) or registered dietitian (RD) consultation that occur individually or in small group settings.
Partnering nutrition education	Other external agencies (e.g., SNAP-Ed, EFNEP, WIC) that offer educational programming.
Cooking demonstrations	Food demonstrations, taste testing, and recipe sharing.
Food navigation/tours	Tours for participants in and around the food outlet to demonstrate how to use the program onsite.
E-interventions	Virtual classes and electronic delivery of nutrition education materials.
Other	Education programming that does not fit into the categories above.
Support Services	**Definitions and Examples**
Resource referrals	Activities that help participants access other needed resources such as emergency food or housing.
Health fairs and other community building	Activities that support health (e.g., physical activity, flu shots) and social support among participants and the community (e.g., health fairs, volunteer training).
Produce delivery and transportation services	Activities that either deliver the produce to participants or provide transportation to program locations.
Voter registration and other civic engagement	Activities that support civic engagement in the community such as voter registration.
COVID testing/vaccination	Onsite COVID testing and/or vaccinations.
Marketing Promotions	**Definitions and Examples**
On-site signage or announcements	All forms of signage (e.g., flyer, banner) or announcements (e.g., intercom) at the site locations.
Direct advertising distributed by direct mail, email, phone	Materials that are distributed by direct mail, email, or phone.
Public promotions	Radio or TV advertisements, outdoor advertisements (e.g., billboard, transit), and public events.
Multi-lingual promotions	Promotions of any type that were translated into languages other than English.
Online advertisements	Advertisements posted online and/or mobile apps as well as search engine optimization efforts.
Directories	List of resources available in the community.

Appendix 9. Produce Prescription Results Tables

Produce Prescription Site-Level Results Tables

Table B1. Fruits and Vegetables (FVs) Eligible for Incentive Redemption by Site Type for PPR Projects (2022-2023)[1]

Eligible FVs	B&M (n = 819)	FD (n = 156)	Clinics (n = 18)	Total PPR (N = 993)
Fresh FVs Only n (%)	483 (58.97%)	83 (53.21%)	10 (55.56%)	576 (58.01%)
All FVs (fresh, canned, frozen, dried, plants, and/or seeds)[2] n (%)	321 (39.19%)	5 (3.21%)	5 (27.78%)	331 (33.33%)
Only State or Regionally Grown FVs n (%)	2 (0.24%)	66 (42.31%)	3 (16.67%)	71 (7.15%)
Other n (%)	13 (1.59%)	1 (0.64%)	0 (0%)	14 (1.41%)

B&M = brick-and-mortar sites; FD = farm direct sites; FVs = fruits and vegetables; N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Sites that did not report on FVs eligible for incentives (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages.

[2] NIFA accepts justifications for broadening the range of fresh FV prescribed to emphasize culturally sensitive foods and food practices, as well as in cases where food supply and food system disruptions may hinder access to fresh fruits and vegetables.

Table B2. Financial Instruments[1] for Incentive Distribution by Site Type for PPR Projects (2022-2023)[2]

Financial Instruments	B&M (n = 43)	FD (n = 44)	Clinics (n = 209)	Total PPR (N = 296)
CSA Share or Produce Box n (%)	8 (18.60%)	6 (13.64%)	47 (22.49%)	61 (20.61%)
Discount at Register n (%)	0 (0%)	1 (2.27%)	0 (0%)	1 (0.34%)
EBT Card n (%)	0 (0%)	0 (0%)	10 (4.78%)	10 (3.38%)
Loyalty Account[3] n (%)	6 (13.95%)	2 (4.55%)	20 (9.57%)	28 (9.46%)
Paper Voucher or Coupon n (%)	4 (9.30%)	5 (11.36%)	128 (61.24%)	137 (46.28%)
Token n (%)	0 (0%)	25 (56.82%)	21 (10.05%)	46 (15.54%)
Debit Card n (%)	24 (55.81%)	7 (15.91%)	45 (21.53%)	76 (25.68%)
Other n (%)	2 (4.65%)	0 (0%)	2 (0.96%)	4 (1.35%)

B&M = brick-and-mortar sites; CSA = community supported agriculture; FD = farm direct sites; N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Financial instruments are the methods that sites use to distribute incentives.

[2] Sites that did not report on financial instruments for incentive redemption (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for financial instruments for incentive redemption so the rows in each column may not add up to the number of sites (n) and the percentages may add to more than 100%.

[3] Loyalty account includes sites with online loyalty accounts, loyalty cards, and/or ID-based loyalty accounts.

Table B3. Annual Incentive Distribution and Redemption by Site Type for PPR Projects (2022-2023)[1]

Incentive Distribution and Redemption	GusNIP PPR (n = 774)	GusCRR PPR (n = 682)	ARPA PPR (n = 347)	B&M (n = 915)	FD (n = 196)	Clinics (n = 314)	All Sites (N = 1,425)
Annual Incentives Distributed							
Total	$3,673,109.22	$1,359,097.32	$987,494.62	$297,516.74	$1,038,205.68	$4,683,978.74	$6,019,701.16
Mean[2]	$22,673.51	$18,617.77	$8,028.41	$14,875.84	$21,629.29	$17,220.51	$16,814.81
Annual Incentives Redeemed							
Total	$2,445,465.96	$1,217,312.41	$826,548.43	$2,032,079.08	$1,883,071.31	$574,176.41	$4,489,326.80
Mean[2]	$3,851.13	$1,966.58	$4,327.48	$2,419.14	$9,706.55	$10,073.27	$3,106.80
Annual Redemption Rate							
Total[3]	66.58%	89.57%	83.70%	683.01%	181.38%	12.26%	74.58%

B&M = brick-and-mortar sites; FD = farm direct sites; GusNIP PPR = PPR awards through GusNIP; GusNIP CRR = PPR awards through COVID Relief and Response; N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Number of sites (n) in each column header represents the number of active sites in each category and includes sites with missing data for each metric. Many sites operate using both GusNIP and GusCRR funding. In addition, some sites operate multiple projects and multiple project types (e.g., NI and PPR projects). Thus, there is overlap in the counts of sites attributed to distinct funding sources.

[2] Means were calculated by dividing the total dollar value of incentives distributed or redeemed by the number of sites with data for that metric. Sites with missing data were excluded from the calculation.

[3] Total annual redemption rate is the total annual incentives redeemed divided by the total annual incentives distributed in each column and is represented as a percentage.

Table B4. Nutrition Education Activities Offered by Site Type Among PPR Projects that Offered Any Nutrition Education (2022-2023)[1]

Nutrition Education Activities	B&M (n = 80)	FD (n = 107)	Clinics (n = 161)	Total PPR (N = 348)
1:1 or Small Group Nutrition Education n (%)	9 (11.25%)	10 (9.35%)	110 (68.32%)	129 (37.07%)
Partnering Nutrition Education[2] n (%)	28 (35.00%)	27 (25.23%)	29 (18.01%)	84 (24.14%)
Cooking Demonstrations n (%)	75 (93.75%)	88 (82.24%)	145 (90.06%)	308 (88.51%)
Food Navigation or Tours n (%)	21 (26.25%)	27 (25.23%)	5 (3.11%)	53 (15.23%)
E-interventions n (%)	6 (7.50%)	14 (13.08%)	63 (39.13%)	83 (23.85%)
Other[3] n (%)	1 (1.25%)	0 (0%)	14 (8.70%)	15 (4.31%)

B&M = brick-and-mortar sites; FD = farm direct sites; N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Sites that did not report on nutrition education (i.e., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for nutrition education activities so the rows in each column will not add up to the number of sites (n).

[2] Other external agencies (e.g., SNAP-Ed, EFNEP, WIC) offer educational programming.

[3] Other responses included: gardening education, children-specific programming, nutrition education including physical activity, canning, and preserving, etc.

Table B5. Support Services Offered by Site Type Among PPR Projects that Offered Any Support Services (2022-2023)[1]

Support Services	B&M (n = 82)	FD (n = 77)	Clinics (n = 176)	Total PPR (N = 335)
Resource Referrals n (%)	43 (52.44%)	49 (63.64%)	153 (86.93%)	245 (73.13%)
Produce Delivery and Transportation n (%)	75 (91.46%)	41 (53.25%)	67 (38.07%)	183 (54.63%)
Health Fairs and Other Community Building Activities n (%)	2 (2.44%)	3 (3.90%)	35 (19.89%)	40 (11.94%)
Voter Registration and Other Civic Engagement n (%)	1 (1.22%)	7 (9.09%)	6 (3.41%)	14 (4.18%)
COVID Testing or Vaccination n (%)	25 (30.49%)	6 (7.79%)	115 (65.34%)	146 (43.58%)
Other[2] n (%)	0 (0%)	5 (6.49%)	3 (1.70%)	8 (2.39%)

B&M = brick-and-mortar sites; COVID = coronavirus disease of 2019; FD = farm direct sites; N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Sites that did not report on support services (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for auxiliary services so the rows in each column will not add up to the number of sites (n).

[2] Other responses included: promotion of other programs, skill building (e.g., computer classes), behavioral health screenings, etc.

Table B6. Marketing Activities Offered by Site Type Among PPR Projects that Conducted Any Marketing Activities (2022-2023)[1]

Marketing Activities	B&M (n = 70)	FD (n = 125)	Clinics (n = 151)	Total PPR (N = 346)
On-site Signage or Announcements n (%)	53 (75.71%)	76 (60.80%)	97 (64.24%)	226 (65.32%)
Direct Promotions Distributed by Direct Mail, Email, Phone n (%)	22 (31.43%)	80 (64.00%)	107 (70.86%)	209 (60.40%)
Public Promotions n (%)	7 (10.00%)	13 (10.40%)	19 (12.58%)	39 (11.27%)
Multi-lingual Promotions n (%)	5 (7.14%)	17 (13.60%)	47 (31.13%)	69 (19.94%)
Directories n (%)	6 (8.57%)	23 (18.40%)	16 (10.60%)	45 (13.01%)
Online Advertisements n (%)	17 (24.29%)	56 (44.80%)	19 (12.58%)	92 (26.59%)
Other[2] n (%)	2 (2.86%)	4 (3.20%)	23 (15.23%)	29 (8.38%)

B&M = brick-and-mortar sites; COVID = coronavirus disease of 2019; FD = farm direct sites; N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Sites that did not report on support services (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of sites (n) in each column header is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for auxiliary services so the rows in each column will not add up to the number of sites (n).

[2] Other responses included: promotion of other programs, skill building (e.g., computer classes), behavioral health screenings, etc.

Table B7. Chronic Conditions Used as Eligibility Criteria Among PPR Enrollment Sites (2022-2023)

Chronic Conditions Used to Determine Eligibility	Enrollment Site (N = 211)[1]
Cardiovascular Disease n (%)	157 (74.41%)
Diabetes n (%)	159 (75.36%)
Hypertension n (%)	144 (68.25%)
Obesity n (%)	114 (54.03%)
Prediabetes n (%)	159 (75.36%)

N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Sites that did not report on chronic disease eligibility criteria for PPR program participation (e.g., scenarios where this question was not applicable) were removed from the sample. Thus, the number of enrollment sites is based on the number of sites that have data for this metric, not the total number of sites. Percentages are column percentages. Sites may select multiple options for chronic disease eligibility so the percentages may add to more than 100%.

Produce Prescription Participant-Level Results Tables

Table B8. Sociodemographic Characteristics at Baseline Among PPR Participants Who Completed Baseline Surveys in Y4 (N = 1,062) and PPR Participants in the Y4 Impact Analysis (N = 176; 2022-2023)

Sociodemographic Characteristics	Participants who Completed Baseline Surveys in Y4 (N = 1,062)[2]	Participants in the Y4 Impact Analysis (N = 176)[3]
Age (Years)		
Participants Reporting Age (n)	1,011	167
Mean (SD)	46.84 (15.28)	43.01 (14.19)
Age Group (Years) n (%)		
18 to 24	45 (4.45%)	10 (5.99%)
25 to 34	230 (22.75%)	56 (33.53%)
35 to 44	217 (21.46%)	31 (18.56%)
45 to 64	402 (39.76%)	61 (36.53%)
65 and over	117 (11.57%)	9 (5.39%)
Missing	51	9
Gender n (%)		
Male	101 (11.14%)	25 (14.97%)
Female	788 (86.88%)	140 (83.83%)
Non-Binary/Third Gender	2 (0.22%)	0 (0%)
Prefer to Self-Describe	1 (0.11%)	1 (0.60%)
Prefer Not to Answer	15 (1.65%)	1 (0.60%)
Missing	155	9
Race n (%)		
American Indian or Alaskan Native	161 (18.83%)	75 (49.02%)
Asian	6 (0.70%)	0 (0%)
Black or African American	395 (46.20%)	58 (37.91%)
More Than One Race	27 (3.16%)	2 (1.31%)
Native Hawaiian	5 (0.58%)	4 (2.61%)
Other	19 (2.22%)	3 (1.96%)
Other Pacific Islander	3 (0.35%)	2 (1.31%)
White	173 (20.23%)	6 (3.92%)
Don't Know/Not Sure	16 (1.87%)	0 (0%)
Prefer Not to Answer	50 (5.85%)	3 (1.96%)
Missing	207	23
Ethnicity n (%)		
Hispanic or Latino/a/x	81 (9.32%)	7 (4.24%)
Non-Hispanic or Latino/a/x	751 (86.42%)	156 (94.55%)
Prefer Not to Answer	37 (4.26%)	2 (1.21%)
Missing	193	11

Sociodemographic Characteristics	Participants who Completed Baseline Surveys in Y4 (N = 1,062)[2]	Participants in the Y4 Impact Analysis (N = 176)[3]
Region[4] n (%)		
Northeast	141 (13.28%)	43 (24.43%)
North Central	62 (5.84%)	0 (0%)
Southern	605 (56.97%)	37 (21.02%)
Western	254 (23.92%)	96 (54.55%)
Missing	0	0

N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Variables are in alphabetical order following recent guidance from: Flanagin, A., Frey, T., Christiansen, S.L., AMA Manual of Style Committee. Updated Guidance on the Reporting of Race and Ethnicity in Medical and Science Journals. *JAMA*. 2021;326(7):621–627.

[2] Participants with only a baseline survey in Y4 (September 1, 2022-August 31, 2023) and full survey planned for subsequent reporting periods.

[3] Participants who (1) participated in a PPR project that completed its award in Y4 (September 1, 2022-August 31, 2023); (2) had a matched baseline and follow-up survey from any year of the PPR award; (3) had follow-up surveys dated at least 90 days after baseline.

[4] Regions defined by: USDA NIFA.

Table B9. Frequency and Percentage of Food Security Status Among PPR Participants Who Completed Baseline Surveys in Y4 (N = 819)[1] by Sociodemographic Characteristics (2022-2023)[2]

Sociodemographic Characteristics	Food Secure (n = 236)	Food Insecure (n = 583)
Age (Years)		
Participants Reporting Age (n)	226	564
Mean (SD)	51.67 (15.35)	49.61 (14.27)
Age Group (Years) n (%)		
18 to 24	6 (25.00%)	18 (75.00%)
25 to 34	27 (24.32%)	84 (75.68%)
35 to 44	51 (31.48%)	111 (68.52%)
45 to 64	95 (25.00%)	285 (75.00%)
65 and over	47 (41.59%)	66 (58.41%)
Missing	10	19
Gender n (%)		
Male	27 (27.00%)	73 (73.00%)
Female	180 (29.61%)	428 (70.39%)
Non-Binary/Third Gender	1 (50.00%)	1 (50.00%)
Prefer to Self-Describe	0 (0%)	1 (100.00%)
Prefer Not to Answer	5 (35.71%)	9 (64.29%)
Missing	23	71
Race n (%)		
American Indian or Alaskan Native	1 (2.56%)	38 (97.44%)
Asian	3 (50.00%)	3 (50.00%)
Black or African American	123 (31.54%)	267 (68.46%)
More Than One Race	4 (16.67%)	20 (83.33%)
Native Hawaiian	0 (0%)	2 (100.00%)
Other	7 (36.84%)	12 (63.16%)
Other Pacific Islander	1 (33.33%)	2 (66.67%)
White	52 (31.14%)	115 (68.86%)
Don't Know/Not Sure	3 (18.75%)	13 (81.25%)
Prefer Not to Answer	17 (36.17%)	30 (63.83%)
Missing	25	81
Ethnicity n (%)		
Hispanic or Latino/a/x	18 (24.00%)	57 (76.00%)
Non-Hispanic or Latino/a/x	184 (29.92%)	431 (70.08%)
Prefer Not to Answer	10 (28.57%)	25 (71.43%)
Missing	24	70

Sociodemographic Characteristics	Food Secure (n = 236)	Food Insecure (n = 583)
Region[3] n (%)		
Northeast	19 (34.55%)	36 (65.45%)
North Central	30 (23.62%)	97 (76.38%)
Southern	181 (30.22%)	418 (69.78%)
Western	6 (15.79%)	32 (84.21%)
Missing	0	0
Total n (%)	**236 (28.82%)**	**583 (71.18%)**

N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Participants with a baseline survey in Y4 (September 1, 2022-August 31, 2023) from all active PPR projects. Due to missing data for key variables in this table, the sample size (N) in this table differs from what was reported for the full Baseline Only Sample (N=1,062).

[2] Variables are in alphabetical order following recent guidance from: Flanagin, A., Frey, T., Christiansen, S.L., AMA Manual of Style Committee. Updated Guidance on the Reporting of Race and Ethnicity in Medical and Science Journals. *JAMA*. 2021;326(7):621–627.

[3] Regions defined by: USDA NIFA.

Table B10. Daily FV Cup Equivalents Among PPR Participants Who Completed Baseline Surveys in Y4 (Fruits and Vegetables N = 787; Fruits Only N = 818; Vegetables Only N = 793)[1] Across Sociodemographic Characteristics (2022-2023)[2]

Sociodemographic Characteristics	Fruits and Vegetables (n = 787)	Fruits Only (n = 818)	Vegetables Only (n = 793)
Age Group (Years) Mean (SD)			
18 to 24	2.44 (1.03)	1.24 (0.88)	1.28 (0.33)
25 to 34	2.6 (0.8)	1.18 (0.61)	1.44 (0.40)
35 to 44	2.45 (0.78)	0.99 (0.49)	1.51 (0.46)
45 to 64	2.34 (0.87)	0.91 (0.54)	1.43 (0.51)
65 and over	2.33 (0.65)	0.82 (0.35)	1.47 (0.40)
Gender Mean (SD)			
Male	2.63 (0.88)	0.99 (0.67)	1.65 (0.55)
Female	2.4 (0.81)	0.99 (0.54)	1.42 (0.44)
Race Mean (SD)			
American Indian or Alaskan Native	2.65 (0.87)	1.22 (0.65)	1.47 (0.44)
Asian	2.39 (0.77)	0.84 (0.39)	1.48 (0.34)
Black or African American	2.38 (0.82)	0.94 (0.52)	1.43 (0.45)
More Than One Race	2.35 (0.75)	0.89 (0.39)	1.48 (0.46)
Native Hawaiian	2.28 (0.73)	0.99 (0.45)	1.26 (0.26)
Other	2.55 (0.70)	1.14 (0.70)	1.48 (0.39)
Other Pacific Islander	2.19 (0.40)	0.71 (0.10)	1.44 (0.28)
White	2.29 (0.73)	0.89 (0.52)	1.42 (0.41)
Don't Know/Not Sure	2.07 (0.52)	0.78 (0.35)	1.3 (0.30)
Prefer Not to Answer	2.67 (0.98)	1.07 (0.51)	1.59 (0.62)
Ethnicity Mean (SD)			
Hispanic or Latino/a/x	2.45 (0.75)	1 (0.55)	1.49 (0.42)
Non-Hispanic or Latino/a/x	2.42 (0.82)	0.99 (0.56)	1.44 (0.45)
Prefer Not to Answer	2.73 (1.05)	1.01 (0.54)	1.69 (0.70)
Region[3] Mean (SD)			
Northeast	2.98 (1.10)	1.34 (0.81)	1.74 (0.71)
North Central	2.13 (0.60)	0.79 (0.33)	1.34 (0.36)
Southern	2.35 (0.78)	0.92 (0.51)	1.43 (0.44)
Western	2.66 (0.84)	1.21 (0.61)	1.48 (0.45)

Sociodemographic Characteristics	Fruits and Vegetables (n = 787)	Fruits Only (n = 818)	Vegetables Only (n = 793)
Total Mean (SD)	**2.43 (0.82)**	**0.99 (0.56)**	**1.45 (0.46)**

N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Participants with a baseline survey in Y4 (September 1, 2022-August 31, 2023) from all active PPR projects. Due to missing data for key variables in this table, the sample size (N) in this table differs from what was reported for the full Baseline Only Sample (N=1,062).

[2] Variables are in alphabetical order following recent guidance from: Flanagin, A., Frey, T., Christiansen, S.L., AMA Manual of Style Committee. Updated Guidance on the Reporting of Race and Ethnicity in Medical and Science Journals. *JAMA*. 2021;326(7):621–627.

[3] Regions defined by: USDA NIFA.

Table B11. Perceived Health Status of PPR Participants Among PPR Participants Who Completed Baseline Surveys in Y4 (N = 1,062) and PPR Participants in the Y4 Impact Analysis (N = 113; 2022-2023)

Perceived Health n (%)	Participants Who Completed Baseline Surveys in Y4[1] (N = 1,062)	Participants in the Y4 Impact Analysis at Baseline[2] (N = 113)	Participants in the Y4 Impact Analysis at Follow-up[2] (N = 113)
Poor	80 (9.72%)	10 (8.85%)	3 (2.65%)
Fair	337 (40.95%)	47 (41.59%)	35 (30.97%)
Good	301 (36.57%)	46 (40.71%)	46 (40.71%)
Very Good	68 (8.26%)	9 (7.96%)	24 (21.24%)
Excellent	31 (3.77%)	1 (0.88%)	5 (4.42%)
Don't Know/ Prefer Not to Answer	6 (0.73%)	0 (0%)	0 (0%)
Missing[3]	239	0	0

N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Participants with a baseline survey in Y4 (September 1, 2022-August 31, 2023) from all active PPR projects.

[2] Participants who (1) participated in a PPR project that completed its award in Y4 (September 1, 2022-August 31, 2023); (2) had a matched baseline and follow-up survey from any year of the PPR award; (3) had follow-up surveys dated at least 90 days after baseline. Due to missing data for the key variable in this table, the sample size (N) in this table differs from what was reported for the full Analytic Sample (N=176).

[3] Missing values for perceived health status are not included in percentage calculations.

Table B12. Program Satisfaction Among PPR Participants at Follow-Up Among PPR Participants in the Y4 Impact Analysis (N = 176; 2022-2023)

Program Satisfaction n (%)	Participants in the Y4 Impact Analysis (N = 176)[1]
Very Negative	1 (1.20%)
Negative	0 (0%)
Neutral	4 (4.82%)
Positive	14 (16.87%)
Very Positive	64 (77.11%)
Don't Know/ Prefer Not to Answer	0 (0%)
Missing[2]	93

N = total number in sample; n = number in subsample; PPR = produce prescription

[1] Participants who (1) participated in a PPR project that completed its award in Y4 (September 1, 2022-August 31, 2023); (2) had a matched baseline and follow-up survey from any year of the PPR award; (3) had follow-up surveys dated at least 90 days after baseline. Due to missing data for the key variable in this table, the sample size (N) in this table differs from what was reported for the full Analytic Sample (N=176).

[2] Missing values for program satisfaction are not included in percentage calculations.

Table B13. Self-Reported Healthcare Utilization Among PPR Participants at Baseline[1] (N = 211; 2022-2023)

During the Past 3 Months…n (%)	Yes	No	Don't Know/ Prefer Not to Say	Missing
Were any of your visits with a doctor or other healthcare professional for a regularly scheduled check-up to manage diabetes, high blood pressure, or heart disease?	98 (46.45%)	102 (48.34%)	11 (5.21%)	0 (0%)
Were you a patient in an emergency room?	26 (12.32%)	178 (84.36%)	7 (3.32%)	0 (0%)
Were you a patient in a hospital overnight? Do not include an overnight stay in an emergency room.	16 (7.58%)	183 (86.73%)	11 (5.21%)	1(0.47%)

[1] Five grantees implemented pilot survey items to measure participants' self-reported healthcare utilization at baseline in Y4 (September 1, 2022-August 31, 2023) with follow-up survey planned for subsequent reporting periods.

Appendix 10. Peer-Reviewed Publications During Y4

Byker Shanks C, Parks CA, Izumi B, Andress L, Yaroch AL. The United States Department of Agriculture Gus Schumacher Nutrition Incentive Program's (GusNIP) National Training, Technical Assistance, Evaluation, and Information Center reply to 'The diversity, equity and inclusion lens is incomplete when disabilities are excluded'. *J Acad Nutr Diet*. 2023; S2212-2672. **https://doi:10.1016/j.jand.2023.03.008**

Houghtaling B, Misyak S, Serrano E, Dombrowski RD, Holston D, Singleton CR, Harden SM. Using the exploration, preparation, implementation, and sustainment (EPIS) framework to advance the science and practice of healthy food retail. *J Nutr Educ Behav*. 2023; 55(3):245-251. **https://doi:10.1016/j.jneb.2022.10.002**

Stotz SA, Mitchell E, Szczepaniak M, Akin J, Fricke H, Byker Shanks C. A qualitative exploration of approaches applied by nutrition educators within nutrition incentive programs. *J Nutr Educ Behav*. 2023; 55(3):224-234. **https://doi:10.1016/j.jneb.2022.11.007**

Stotz SA, Nugent N, Akers M, Leng K, Byker Shanks C, Yaroch AL, Krieger J, Szczepaniak M, Seligman H. How the Gus Schumacher produce prescription program works: an adaptation of a nutrition incentive theory of change. *Nutrients*. 2023; 15(15):3352. **https://doi.org/10.3390/nu15153352**

Appendix 11. Example Output from the GusNIP NTAE Nutrition Incentive Economic Impact Calculator

Economic Impact of Example Organization's Nutrition Incentive Project

September 2022 - August 2023

Described as a "triple win," nutrition incentive projects:

- Support consumers with limited income in purchasing and consuming more fruits and vegetables
- Improve the food security and health of SNAP participants
- Enhance the economic resilience of communities, farmers, and retailers across the United States

The total economic impact of Example Double Buck's nutrition incentive project includes the increased household purchases of fruits and vegetables (total amount of incentives redeemed) and the re-spending of those incentive dollars in the economy by individuals and businesses along the supply chain.

$502,467
Total Economic Impact

	At Brick and Mortar Sites	At Farm Direct Sites
Incentives Redeemed	$234,567	$123,456
Economic Impact	$304,937	$197,530

Brick and Mortar Sites include supermarkets, grocery stores, co-ops, dollar stores, corner stores/bodegas, and convenience stores.

Farm Direct Sites include farmers markets, farm stands, mobile markets, and community supported agriculture (CSAs).

An **economic multiplier** is used to calculate economic impact. It describes the total increase in output within an economy due to a $1 increase in spending. The estimates used for this calculator are based on 2021 agricultural and food sector data, and represent economic activity at that time.

The **economic impact** represents the amount of money generated in Nebraska from Example Double Buck's nutrition incentive project sales. This was calculated with a 1.3 economic multiplier for brick and mortar and 1.6 for farm direct and utilizes a self-reported amount of incentives redeemed at each site type.

To learn more about the methodologies of this calculator, please visit:
www.nutritionincentivehub.org/resources/economic-impact-calculator

Nutrition Incentive Hub
CREATED BY GUSNIP NTAE CENTER

CENTER FOR Nutrition & Health Impact

Colorado State University

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