

# Gus Schumacher Nutrition Incentive Program Training, Technical Assistance, Evaluation, and Information Center (GusNIP NTAE): Impact Findings

Year 2: September 1, 2020 to August 31, 2021



**Nutrition  
Incentive Hub**

CREATED BY GUSNIP NTAE CENTER



Developed by Gretchen Swanson Center for Nutrition,  
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## Executive Summary

The [Gus Schumacher Nutrition Incentive Program \(GusNIP\)](#) aims to support health and reduce food insecurity by increasing the purchase and consumption of fruits and vegetables (FVs) among low-income consumers. GusNIP is a competitive grant program funded through the United States Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA).

GusNIP funding supports:

- 1. Nutrition Incentive (NI)** Projects that provide incentives to individuals using Supplemental Nutrition Assistance Program (SNAP) benefits to purchase FVs;
- 2. Produce Prescription (PPR)** Projects that provide prescriptions in the form of incentives for the purchase of fresh FVs; and
- 3. Nutrition Incentive Program Training, Technical Assistance, Evaluation and Information Center (NTAE)** that provides training, technical assistance, reporting, and evaluation support to GusNIP grantees and applicants.

The [Gretchen Swanson Center for Nutrition \(GSCN\)](#), a nonprofit research center based in Omaha, Nebraska, is the primary awardee of a competitively-awarded cooperative agreement with USDA NIFA to lead the NTAE. GSCN partnered with [Fair Food Network](#) to assemble a coalition of national partners, referred to as the '[Nutrition Incentive Hub](#),' to provide comprehensive support in Reporting and Evaluation (R&E) and Technical Assistance and Innovation (TA&I) for all GusNIP grantees and applicants.

### Overview of GusNIP Year Two

This report documents the activities and accomplishments of the NTAE and the Nutrition Incentive Hub in its second year, as well as the national impact of GusNIP NI and PPR projects during the second year.

### GusNIP NTAE Year Two Key Findings

In year two (Y2), GusNIP grantees successfully **distributed an extraordinary amount of incentives**, equaling \$20,920,429 incentives redeemed. The incentives redeemed at local food retail outlets generated an **economic impact of approximately \$41,031,080**.

Further, grantees **increased both the proportion of their budgets allocated toward direct incentives (74.7%) and the number of locations offering incentives (N=1,959)**.

GusNIP grantees and the NTAE were successful in collecting a robust national dataset, showing that:

- **NI participants reported greater FV intake (FVI) the longer they participated in the project.**
- **PPR participants increased their FVI and experienced improvements in food security status from pre-project to post-project assessments.**

The ongoing COVID-19 pandemic overlapped with year two (Y2) of GusNIP, such that grantees and applicants were developing and implementing projects during a public health crisis. As American families were met with widespread job losses and persistent food insecurity, food retailers were equally struck by food product and staff shortages, supply chain disruptions, and extreme shifts in customer demand. Grantees managed longer-term adjustments to the unrelenting need for incentives driven by chronic food insecurity. These challenging health and economic realities mean that demand for affordable, healthy food has never been greater.

Consequently, GusNIP grantees strained to meet the continuing surges in project participation, while still expanding the reach and impact of their projects to support more families, farmers, and food retailers. Specifically, grantees and applicants were tireless in their charge to administer projects in existing locations, expand to new retail locations, and collect robust data.

In response to GusNIP grantee and applicant needs, the NTAE and Nutrition Incentive Hub stepped forward with comprehensive assistance, including “around the clock” R&E and TA&I services. This included GusNIP and COVID Relief and Response (GusCRR) proposal development assistance and grantee onboarding, intensive one-on-one coaching and guidance from the R&E and TA&I teams, trainings around survey development and data collection, broad-reach webinars and convenings, provision of resources to guide each grantee through the grant lifecycle, peer sharing through communities of practice, point of sale technology consulting, and more.

In Y2, the NTAE developed and launched a newly redesigned publicly accessible website and a secure, password-protected portal to support NI and PPR projects, simplify grantee reporting, and facilitate aggregate data visualization. The redesigned website and portal launched with a minimum viable product (MVP) in August 2021.

Y2 also represented the first time GusNIP grantees were able to collect participant surveys. Despite persisting challenges with in-person data collection, the NTAE was able to pivot and help grantees implement alternative solutions (e.g., electronic surveys), yielding almost 10,000 completed participant surveys across NI and PPR projects.

In Y2, the combined efforts of GusNIP grantees, the NTAE, and the Nutrition Incentive Hub resulted in low-income households purchasing over \$20M in FVs at their local farmers markets and grocery stores. This represents a 415% increase over the dollar amount of FVs purchased just one year prior, further reflecting the considerable response of the NTAE and Nutrition Incentive Hub to support grantees.

## Summary of GusNIP Year Two Key Findings

In 2020, USDA NIFA funded 30 total GusNIP projects (20 NI, 10 PPR). Awards ranged from \$40,000 over 1 year to \$5.5 million over 4 years and included projects in all four geographic regions of the United States.<sup>2</sup> In addition, many 2019 GusNIP grantees continued to implement their active projects. Another major accomplishment of GusNIP grantees and the NTAE was the successful collection of a robust national dataset, despite many

COVID-related challenges. This report presents both participant- and firm-level (e.g., grocery store, farmers market, health clinic) results from data collected in GusNIP Y2 (September 1, 2020 – August 31, 2021) including:

- **Participation in NI projects was associated with higher FVI over time.** Further, NI participants reported greater FVI than the average American adult. These results are considered clinically significant given prior research which demonstrates that every increase in FVI has a protective impact on health.
- **PPR participation resulted in reductions in food insecurity and increases in FVI.** Although only a small portion of the participant surveys collected represented PPR participants with both baseline and post-surveys completed (n=196), initial results provide an encouraging foreshadow of future results.
- 1,959 firms (e.g., grocery stores, farmers markets, health clinics) offered incentives in Y2, representing the **successful net addition of 1,371 locations** from Y1 (Y1 firms (588) + Y2 firms (1,371) = 1,959 active firms in Y2).
- GusNIP grantees spent a total of \$13,332,286 in Y2, with **74.7% of funds (\$9,961,150) serving as direct incentives spent by low-income Americans on FVs.**<sup>1</sup>
- Despite the challenges present in the midst of a global pandemic, **Y2 grantees increased the proportion of spending on direct incentives from 68.5% (Y1) to 74.7% (Y2).**
- **The total local economic impact** – the amount of money generated for communities surrounding the locations offering GusNIP incentives – **was over \$41M across GusNIP projects.** From Y1 to Y2, the economic impact of GusNIP projects grew by more than \$33M (Y1 economic impact = \$7,966,290 across 19 grantees vs. Y2 economic impact = \$41,030,080 across 30 grantees).

<sup>1</sup>\$13,177,296 is the total amount of GusNIP grant funds spent in Y2; this does not include match funds, which contribute toward incentives distributed and redeemed and other budget items.

<sup>2</sup>United States Department of Agriculture, Agricultural Research Service. (2021). *States by Census Region and Division*. <https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/docs/regions/>

## GusNIP NTAE Year Two Implications

During Y2, the NTAE and Nutrition Incentive Hub worked with grantees and applicants to demonstrate the collective success of NI and PPR projects. The challenges experienced and resolutions applied during the first two years of the NTAE set the foundation for responsive project implementation during the difficult circumstances accompanying the COVID-19 pandemic. As a result of the commitment from GusNIP grantees and their partners, the impact of incentives at the participant- and firm-levels demonstrated during Y2 of the NTAE are both positive and promising.

The findings in this report should be highlighted in comparison to previous federally funded evaluations of nutrition incentives. The FVI outcomes from the NTAE align with previous results during the Healthy Incentives Pilot Program (HIP) evaluation, which found a significant increase in FVI among participants.<sup>3</sup> The NTAE's preliminary participant-level findings contrast with the Food Insecurity Nutrition Incentive (FINI) evaluation, which found no statistically significant change in FVI among participants.<sup>4</sup> The current NTAE model has focused on developing a cohesive, robust, representative, and shared dataset and providing wraparound technical assistance, innovation, evaluation, and information services to support grantees, applicants, and the larger field to better understand and learn from the impact of NI and PPR projects.

In year three, the NTAE and Nutrition Incentive Hub will build upon existing momentum, continue using a “bottom up” approach, and incorporate grantee feedback and lessons learned to iteratively improve processes. Working in collaboration with USDA NIFA, grantees and applicants, participants, farmers markets, grocery stores, healthcare clinics, and other partners, the NTAE will continue to help low-income families increase their FV purchasing and FVI, thereby helping to reduce food insecurity and the burden of chronic disease while contributing to local economies to strengthen communities well into the future.



<sup>3</sup>Olsho L. E., Klerman, J. A., Wilde, P. E., & Bartlett, S. (2016). Financial incentives increase fruit and vegetable intake among Supplemental Nutrition Assistance Program participants: A randomized controlled trial of the USDA Healthy Incentives Pilot. *The American Journal of Clinical Nutrition*, 104(2), 423-35. <https://doi.org/10.3945/ajcn.115.129320>

<sup>4</sup>Vericker, T., Dixit-Joshi, S., Taylor, J., May, L., Baier, K., & Williams, E. S. (2021). Impact of food insecurity nutrition incentives on household fruit and vegetable expenditures. *Journal of Nutrition Education and Behavior*, 53(5), 418-27. <https://doi.org/10.1016/j.jneb.2020.10.022>



## Overview

### Gus Schumacher Nutrition Incentive Program (GusNIP)

The Gus Schumacher Nutrition Incentive Program (GusNIP) funded by the United States Department of Agriculture (USDA), National Institute of Food and Agriculture (NIFA), and formerly known as the Food Insecurity Nutrition Incentive Program (FINI), supports projects to increase the purchase of fruits and vegetables (FVs) among low-income consumers by providing incentives at the point of purchase. FINI was specifically directed toward providing incentives for Supplemental Nutrition Assistance Program (SNAP) participants. The funding for GusNIP was authorized by the 2018 Farm Bill. In addition to Nutrition Incentive (NI) Projects (including SNAP incentives), a new component of the program included Produce Prescription (PPR) Projects, allowing medical professionals to provide “prescriptions” in the form of financial incentives for the purchase of FVs to patients who experience diet-related chronic illnesses and/or screen positive for food insecurity. See [Appendix 1](#) for a glossary of acronyms/abbreviations used in this report.

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

The GusNIP Training, Technical Assistance, Evaluation, and Information Center (NTAE) was established through the [2019 Request for Applications](#) (RFA) as a competitively awarded cooperative agreement with the USDA NIFA. The NTAE prime awardee organization is the [Gretchen Swanson Center for Nutrition](#) (GSCN), a nonprofit research center based in Omaha, Nebraska. GSCN in partnership with [Fair Food Network](#), assembled a coalition of national partners, including the Ecology Center (farm direct), Farmers Market Coalition (farm

direct), The Food Trust (corner stores and nutrition education), Legend Consulting (PPR), Michigan Farmers Market Association (farm direct and PPR), Michigan State University Center for Regional Food Systems (diversity, equity, and inclusion; local sourcing; and partnership development), National Grocers Association Foundation (brick and mortar), and researching, reporting, and evaluation partners, including University of California San Francisco (PPR program implementation and evaluation), University of Michigan (biostatistics), Data Management and Analysis Center, Division of Biostatistics and Epidemiology, Cincinnati Children’s Hospital Medical Center (Pierce Kuhnell, Qin Sun, Nanhua Zhang) (biostatistics, analyses, and data management), Bailey Houghtaling (dissemination and implementation science and brick and mortar), Victoria Raschke (data management and reporting), Ronit Ridberg (health care and PPR evaluation), Laurel Sanville (nutrition education, community-based health promotion), Justin Shanks (research, technology, and infrastructure), Lydia Soo-Hyun Kim (clinician and PPR evaluation), and Sarah Stotz (PPR, nutrition education, and qualitative research). See [Appendix 2](#) for a depiction of the core partner structure.

The coalition, referred to as the ‘Nutrition Incentive Hub,’ works to comprehensively and effectively provide support in Reporting and Evaluation (R&E) and Technical Assistance and Innovation (TA&I) for GusNIP NI and PPR grantees, herein collectively referred to as ‘GusNIP grantees.’

During year two (Y2), the NTAE worked directly with a growing number of GusNIP grantees to understand their needs and appropriately build responsive capacity across project implementation and R&E. The overarching goals of the NTAE are as follows:



**GOAL 1 (R&E) – To develop systems, infrastructure, and collaborative relationships using a community-informed approach to support grantees’ R&E while building sustainability and capacity.**



**GOAL 2 (TA&I) – To maximize the effectiveness and efficiency of GusNIP projects in meeting GusNIP priorities, increasing fruit and vegetable (FV) purchases, and improving the nutrition of participating households.**

The second year of the NTAE was focused on refining and expanding services to the GusNIP community, while remaining flexible to meet the changing needs of grantees. During this period, the COVID-19 pandemic continued to influence both the operation and evaluation of GusNIP. Evolving face mask and social distancing guidelines varied across the country and, in some cases, negatively impacted project implementation and participant-level data collection. The NTAE continued to adapt support systems to help GusNIP grantees distribute FVs to households and meet new challenges to project monitoring and assessment.

## R&E Accomplishments

As a result of R&E efforts, grantees persisted in collecting evaluation data from participants and firms,<sup>5</sup> contributing to a robust national dataset. This report provides detailed firm-level and participant-level findings as well as descriptions of key accomplishments and activities carried out in Y2. R&E accomplishments in Y2 include:

- Provided all grantees with tailored services, training opportunities, and numerous resources to help evaluate their project(s). For example, R&E created and disseminated individualized reports for all active 2019 GusNIP grantees summarizing year one (Y1) firm-level data.
- Continued to implement a Program Advisor model, whereby each grantee is assigned an NTAE staff member to facilitate R&E, including obtaining Institutional Review Board (IRB) approval.

- Launched a redesigned [public website](#) and a new secure web portal to support NI and PPR projects, simplify grantee reporting, and facilitate aggregate data visualization.
- Promoted and refined the core minimum datasets for NI and PPR projects, added new languages, and recommended metrics to establish impact across all projects.
- Partnered with other national experts to develop new resources that support grantees' R&E efforts (e.g., NI Theory of Change, Health Insurance Portability and Accountability Act (HIPAA) guidance, recommendations on conducting PPR research and evaluation). These resources are forthcoming on the website in early 2022.
- Hosted 32 webinars and demonstrations covering GusNIP R&E topics to awarded and potential grantees, practitioners, and the broader scientific community.
- Presented at seven national conferences and contributed to peer-reviewed literature by publishing two manuscripts and submitting eight manuscripts into peer-review.
- Developed a Searchable Resource Library of all publicly available grey literature published or posted by USDA NIFA-funded grantees between 2015-2021 (NI and PPR projects). This resource will be available via the website in early 2022.
- Offered small grants for grantees to provide stipends to participants for completion of surveys.
- Developed and implemented the External Evaluators Community of Practice which provides a space for grantees' evaluators to learn and contribute to R&E methodology.
- Developed and implemented an Evaluation Subcommittee that includes broad TA&I partner representation to allow for greater collaboration with R&E.
- Developed protocols and processes for COVID Relief and Response (GusCRR) grantees to track and report GusCRR funding.
- Provided R&E specific technical assistance (TA) to organizations with TA instances/requests, including GusNIP/GusCRR RFA application development.
- Worked with TA&I core partners to establish tracking and evaluation feedback loops for TA requests and response (e.g., quarterly reports) and outcome assessment of TA delivered (e.g., post-webinar survey).

**“The technical assistance our R&E Program Advisor has offered during our monthly check-ins has been extremely helpful. As part of being a first-time grantee and Program Coordinator, there were so many different stepping stones we encountered while trying to get the program up and running. She has offered advice, provided encouragement during process, identified strategies and the individuals who could help us overcome the obstacles, connected us to those individuals who could help, offered to make (or did make phone calls herself), planned to do a site visit, reviewed and provided input on the pre/post surveys as well as other data needs. We are finally getting ready to launch our program and I do not think we would have done it without her.”**

– GusNIP PPR Grantee

<sup>5</sup>“Firms” referred to in this report are sites administering GusNIP projects including food retail outlets (e.g., grocery stores, farmers markets) and clinics.



## TA&I Accomplishments

GusNIP Y2 coincided with the global persistence of COVID-19, during which practitioners and GusNIP grantees continued to plan, propose, and implement NI and PPR projects. Y2 also found grantees making longer-term adaptations to the unrelenting demand for incentives. TA&I services and activities provided during this time sought to help grantees meet the continued surge in project participation and demand for incentives, while still expanding their projects to reach and impact more families, farmers, food retailers, clinics, and other relevant audiences.

Fair Food Network leads and coordinates TA across the team of TA&I partners (Farmers Market Coalition, National Grocers Association Foundation, The Food Trust, Michigan Farmers Market Association, Ecology Center, Michigan State University Center for Regional Food Systems). Together, the TA&I team deploys a combination of strategies that target and tailor individualized support to grantees and practitioners, broadly inform and connect stakeholders across the country, build the field of NI and PPR by supporting early-stage practitioners, and develop connections across these efforts to identify and share best practices. Such strategies include developing events and trainings for larger audiences around common questions and needs as well as highly individualized, intensive one-on-one or smaller group coaching and problem-solving. Further, resources and materials such as toolkits, templates, briefs, and best practices are developed and provided in response to field- and industry-specific needs.

A keystone effort in Y2 was the Nutrition Incentive Hub Convening. Once again, the event was hosted virtually to accommodate social distancing and to allow many more practitioners and stakeholders to attend. The Convening represented the collaborative efforts of many organizations working in NI and PPR fields and drew a remarkable number and breadth of attendees. With U.S. Senator Debbie Stabenow as the keynote speaker, and nearly 1,000 attendees across 40 sessions highlighting 125 speakers, the

Convening elevated the considerable and growing reach of GusNIP, including NI and PPR projects, the NTAE, and the Nutrition Incentive Hub.

In addition to this broad-reaching event, the TA&I team delivered extensive one-on-one assistance to grantees and practitioners to address individual challenges across all areas of implementation (i.e., administration, technology, marketing, fundraising, community partnerships). Through this expert coaching, the TA&I team addressed and resolved 1,000+ TA requests with over 500 hours of support to 200+ practitioners. The TA&I team also assisted grantees and practitioners in developing applications for two USDA funding opportunities, specifically the RFA for GusNIP 2021 and GusCRR. In Y2, TA included a concerted effort to help GusNIP and GusCRR applicants across 70+ organizations better understand and respond to these two concurrent RFAs.

Additional TA included a series of online training opportunities and communities of practice for grantees and practitioners at various stages of implementation. In Y2, five communities of practice facilitated regular peer-to-peer learning and problem-solving, including: nutrition education, NI and PPR projects operating in corner stores, local sourcing in brick and mortar (B&M) retail, as well as diversity, equity, and inclusion (DEI). Additionally, over 700 practitioners and stakeholders joined webinars and online training opportunities focused on an array of topics (see [Appendix 3](#)).

Capacity and technology limitations are two highly complex barriers that frequently hinder the ability to adapt and/or scale projects to achieve their full potential impact. Technology has long been a barrier to both early implementation and scaling for many NI and PPR projects. A core issue is the variation across project and site types, with different technology needs and capacities available at grocery stores, farmers markets, and health clinics. Currently, there are a wide and perplexing range of ways in which B&M firms utilize point of sale (POS) systems. As NI and PPR projects have evolved, POS providers have also created various ad hoc solutions to facilitate transactions, including paper vouchers, automatic discounts, and printed or digital coupons. During Y2, the TA&I team inventoried the specific needs of and identified a path forward for grantees and practitioners.





The Capacity Building and Innovation Fund (CBIF) has become a critical resource for GusNIP grantees and their implementing partners to address capacity challenges. Through the CBIF, the NTAE's Nutrition Incentive Hub moves beyond resolving "one-off" issues to providing more systemic investments to aid in the effectiveness and future sustainability of GusNIP projects. This grant program, which provides awards of \$5,000 to \$50,000, funds initiatives that strengthen an organization's ability to implement NI or PPR projects in their community. In Y2, the CBIF supported 13 GusNIP grantees to expand their reach, enhance community engagement, and strengthen their projects' long-term sustainability in high-need communities. This round of funding prioritized impact on programmatic capacity and sustainability, inclusive planning and co-creation of projects, and organizational leadership and partners that center and elevate the voices of the communities they serve.

**"The Nutrition Incentive Hub has made a huge impact on our quality of life as a nutrition incentive network and FINI/GusCRR awardee. We pieced together this work for years without support, and then the Hub came in and started offering stellar technical support. Time and time again, we face a problem, try to think of ways to solve it, remember we have the Nutrition Incentive Hub, and turn to them. The breadth and diversity of their knowledge base is amazing, and they've built a broad range of TA providers while presenting as a singular front. GSCN was instrumental in helping us solve our considerable data collection and reporting challenges. They helped us adapt so we can collect monthly reports from 90+ outlets across the state. Without their support, we would not have known what to do!"**

**– FINI and GusCRR grantee**

#### **Examples of CBIF-funded projects include:**

- **Appalachian Resource Conservation & Development Council** (Johnston City, Tennessee) used CBIF funds to hire a part-time project coordinator devoted to building sustainable relationships with the local hospital system, insurance companies, and others to secure long-term commitments to funding NI projects in the heart of Appalachia. They received a \$34,325.50 award and are a 2017 FINI grantee.
- **Forsyth Farmers' Market** (Savannah, Georgia) used funds to expand the capacity of their PPR project manager from a half-time to a full-time position, allowing increased focus on fundraising, preparing curriculum, and researching technology innovations. They received a \$20,500 award and are a 2019 GusNIP grantee.
- **North Dakota State University Extension** (Fargo, North Dakota) used funds to increase the number of farmers markets that are able to accept SNAP and implement an NI project in rural and tribal communities in North Dakota and South Dakota, as well as provide training and TA to facilitate the process. They received a \$50,000 award and are a partner of a 2018 FINI grantee.
- **Sustainable Food Center** (Austin, Texas) used funds to support staffing and marketing capacity with current partner organizations, expand the program to new regions of Texas, and provide startup toolkits and training on fundraising and community engagement. This work will reinforce community engagement and contribute to securing ongoing funding for program sustainability. They received a \$50,000 award and are a 2019 GusNIP grantee.

Beyond the work described above, additional Y2 activities and outcomes of the TA&I team of partners included:

- The National Grocers Association Foundation (NGAF) facilitated a POS Nutrition Incentive Workgroup of GusNIP grantees and NI practitioners from across the country. This group established a set of guidelines for POS providers to use when enhancing a store's POS system to implement GusNIP projects. By developing this shared understanding and field-wide assessment of the minimum standards required for incentive POS in B&M settings, the TA&I team can now educate POS developers on these requirements on behalf of a broader customer base.
- NGAF created four explainer videos that cover the basics of POS systems, how retailers acquire and maintain their systems, and how grocery stores can be "incentive ready" – meaning they understand how incentives work, the potential benefits to their stores, and can implement an appropriate POS technology solution.
- Farmers Market Coalition (FMC), Ecology Center, and Michigan Farmers Market Association developed and launched the [Farm Direct Nutrition Incentives Guide Site](#), which provides a comprehensive library of NI resources curated specifically for operators of farmers markets, community supported agriculture (CSAs), farm stands, and mobile markets. The website resources highlight innovative pilots, describe the historical context of incentives in farm direct (FD) settings, and advance knowledge on incentive and Electronic Benefits Transfer (EBT) technology (e.g., selecting appropriate SNAP redemption technology).
- FMC and their partners offered support related to payment processing technology by facilitating conversations with technology developers and USDA Food and Nutrition Services (FNS) on behalf of FD sites.
- The Food Trust developed comprehensive guides to implementing nutrition incentives in corner stores, and to combining NI and PPR efforts with nutrition education to maximize impacts. The Food Trust also continued to convene the Corner Store and Nutrition Education Communities of Practice, fostering a growing group of grantees and practitioners to share learnings and challenges.
- Michigan State University Center for Regional Food Systems (MSU CRFS), in collaboration with NGAF, conducted 37 interviews with grantees and practitioners to establish a baseline understanding of how organizations define "local," their motivations for sourcing locally, delineating their sourcing model, and identifying barriers and supports to local and regional sourcing. Interviews were analyzed to identify themes for a local and regional sourcing program model to inform the development of trainings, tools, and resources, including a three-part partnership development webinar series, a short publication on values-based supply chain development, and a food system partnership development planning tool for practitioners.
- MSU CRFS collaborated with the DEI Subcommittee to develop a food justice, equity, diversity, and inclusion summer webinar series that sought to highlight multicultural perspectives at the intersection of food systems and systemic racism in the U.S. The series featured national and international food justice advocates, as well as highlighted incentive projects led by and serving Black, Indigenous, and communities of color.
- Michigan Farmers Market Association (MIFMA) supported PPR grantees and practitioners with strategies to manage incentive spending amidst COVID-related challenges as well as navigate various technology providers and common technology questions. MIFMA hosted discussions on: nutrition education, future programming opportunities, sustainability options/needs, technology solutions, and barriers and strategies for redemption. MIFMA co-hosted three webinars throughout the year. The first described the 2021 PPR RFA, the second showcased a PPR technology solutions panel, and the third discussed building effective partnerships for PPR projects.
- Fair Food Network (FFN) provided communications and marketing support to every grantee that requested it, including up to 20 hours of individualized graphic design, social media consultation, designing or updating outreach materials, translation services, and web design. Some highlights from Y2 included working with multiple GusNIP grantees and practitioners on logo development, social media, print materials, and website updates.
- FFN provided TA for NI grantees and practitioners seeking to leverage state funds in their match fundraising. Fifty hours of support included sharing best practices and talking points, structuring budget requests, developing coalitions, and understanding legislative processes and language.

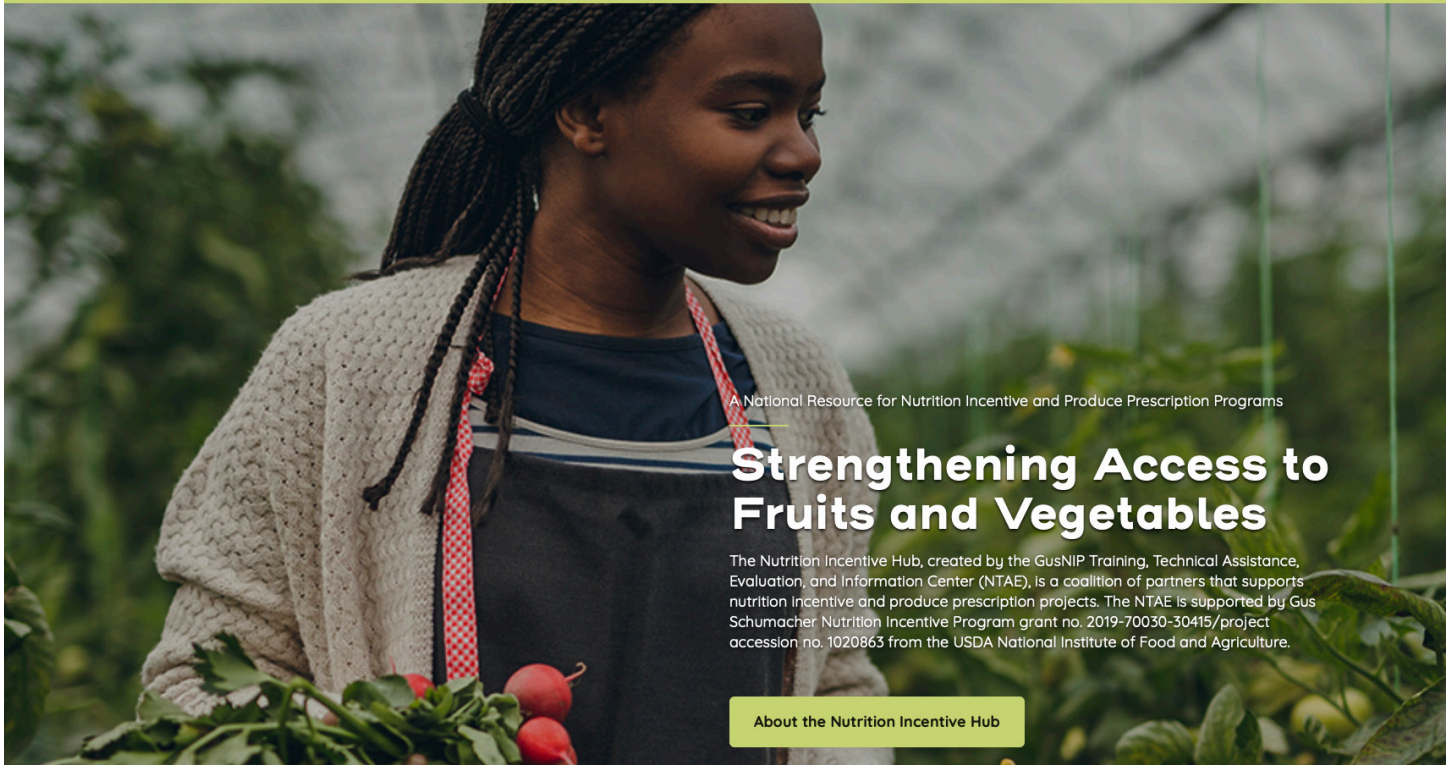


Image of the home page from the redesigned public website and secure web portal.

## Public Website and Secure Web Portal

In Y2, the NTAE developed and launched a newly redesigned publicly accessible website as well as a secure, password-protected web portal for grantees, NTAE staff, and other authorized users. The new website and portal have improved administrative functionality for content management and ongoing system maintenance. The redesigned website and portal launched with a minimum viable product (MVP) in August 2021.

From April 2021 through July 2021, the NTAE prepared for the MVP launch in August 2021. The team developed and implemented a strategic communications plan to guide awareness, training, and important transition steps related to the new website and secure portal. Content migration was completed from the old website to the new website. In collaboration with the NTAE marketing team and the DEI subcommittee, the NTAE developed a photo library and collaborative feedback loop with partners to inform the design and content of each

webpage prior to launch. Users of the public website have access to interactive tools, including a newly designed resource toolkit, Grantee Project Map, and Request Help form – all of which provides grantees, practitioners, and other users valuable information and guidance related to NI and PPR projects.

The NTAE migrated more than 20,000 grantee firm-level reports from an interim data collection system (i.e., Smartsheet) to the secure portal. The NTAE also developed custom and standard Excel reporting spreadsheet templates as well as online reporting forms for grantees and firms to transmit data.

Training and support resources were provided to grantees throughout the transition. These included instructional tip sheets, demos, office hours, and one-on-one calls with Reporting Advisors. The NTAE convened a grantee panel prior to launch to help inform the communication plan and resources shared during the transition.

Access to the portal is password secured. Users create their own account, which is then approved by NTAE portal administrators. Current users of the portal include grantees, associated firms, NTAE Program and Reporting Advisors, and USDA. Discussion groups, a new portal feature launching in early 2022, will be available to a broad audience of users including grantees, practitioners, and Nutrition Incentive Hub partners. Permissions are securely restricted, allowing users to view only information and data for their specific project.

Individual grantee dashboards show project reporting status and use data visualization to provide insights into past performance and trends. The portal supports the administration of GusNIP grantee- and firm-level data. All GusNIP and GusCRR grantees and firms received training and secure access to the portal to submit and view reports and, if authorized, modify project information.

NTAE staff and partners participated in user acceptance testing (UAT) throughout Y2 to ensure a successful launch and collaboration at all phases of the project. During UAT, NTAE staff were asked to test out various aspects and features of the portal. NTAE staff and Nutrition Incentive Hub partners were included in reviewing content and beta testing various aspects of the publicly accessible website. After launch, feedback was collected from users to help guide further enhancements of the website and portal.



## Description of 2020 GusNIP Grantees

In 2020, USDA NIFA funded 30 GusNIP projects: two GusNIP Pilot Projects (FPP), 10 GusNIP Projects (FIP), eight GusNIP Large Scale Projects (FLSP), and 10 GusNIP Produce Prescription Projects (PPR). Awards ranged from \$40,000 over one year to \$5.5 million over four years and covered all four regions of the United States.<sup>6</sup> During the Y2 award period (September 1, 2020 – August 31, 2021), GusNIP grantees (both 2019 and 2020 cohorts) spent \$13,332,286 with 74.7% of funds used directly for incentive distribution. Project details, including funding amount, geographic reach, firm counts/types, and an initiation description for all 30 GusNIP projects awarded in 2020 can be found in [Appendix 4](#). See [Appendix 5](#) for a map of all active grantees and associated firms during the Y2 award period.

<sup>6</sup>Ibid., 4

**“My colleagues and I have worked closely with the NTAE as they have launched the Nutrition Incentive Hub web portal. Throughout my time as a manager for multiple research projects, I have had the opportunity to work with several data-reporting databases. Since the launch of the portal, my experience has been seamlessly straightforward and positive. Our Program Advisor has always been responsive and helpful to our team. This has allowed our team to report the most accurate data that we can provide. The interface of the portal itself is user-friendly and required very little training to onboard our team. Finally, the creation of the portal has allowed us to have a centralized location that is accessible to our research team and collaborators. This ensures that not only we all have access to the same data but that we can report high data quality.”**

**– GusNIP PPR Grantee**

## Results

The 2020 GusNIP RFA required all grantees, with the exception of GusNIP Pilot Projects, to report on a core set of participant- and firm-level metrics to ensure common program tracking and enable meaningful comparisons across all projects. This report presents both participant- and firm-level results from data collected in Y2 of the NTAE (September 1, 2020 – August 31, 2021).

### **Key Differences Between NI and PPR Projects**

As a preface to the results below, it is important to note that the structure of and mechanisms by which NI and PPR projects operate are different. Due to varying project objectives, the volume of incentives that flow through these projects differs.

**NI projects often reach larger numbers of participants with lower intensity (e.g., amount of incentive, nutrition education, other ancillary services). The incentives (\$) redeemed tend to be lower dollar value per participant, but a higher number of incentives are redeemed overall due to larger numbers of participants.** NI projects are intended to yield a “trifecta” of benefits:

1. Increased purchase (and ultimately, consumption) of FVs among low-income customers who use SNAP;
2. Increased produce sales and expansion of customer base at FD and B&M firms<sup>7</sup>; and
3. Increased economic impact to communities through incentive dollars generating a multiplier effect. NI projects generally operate (i.e., incentives are distributed and redeemed) at the firm-level (e.g., FD and B&M sites).



**Conversely, PPR projects are often lower reach, but higher intensity (e.g., amount of incentive, nutrition education, other ancillary services). Given that PPR projects operate in health care settings and are designed to address chronic disease and/or food insecurity among low-income populations through prescriptions (i.e., vouchers) for FVs, the incentives (\$) issued tend to be higher dollar value per participant, but the volume of participants tends to be lower overall.**

PPR projects typically follow a specific cohort of patients that match certain eligibility requirements (e.g., participating in Medicaid, screening positive for food insecurity, presenting with a chronic health condition) over a specified length of time (e.g., 6 months). In addition to incentives issued with higher dollar values, participants receive more nutrition education opportunities and/or clinic consultations. Other benefits of PPR projects are the potential health care utilization and health care cost savings via improvements in patient health and chronic disease reduction. PPR projects generally operate through a clinic, Federally Qualified Health Center (FQHC), or within another health care setting.

<sup>7</sup>Brick and mortar (B&M) firms are traditional food retailers serving customers (e.g., grocery stores, supermarkets, corner stores, wholesale, etc.). Farm direct (FD) firms are venues that provide produce directly from farms (e.g., farmers market, farm stands, community supported agriculture, mobile market, etc.).



## Firm-Level Outcomes

### Firm Characteristics

“Firms” refer to sites administering GusNIP projects including food retail outlets (e.g., grocery stores, farmers markets) and clinics.



FD firms are venues that provide produce directly from farms (e.g., farmers market, farm stands, community supported agriculture, mobile market).



B&M firms are traditional food retailers serving customers (e.g., grocery stores, supermarkets, corner stores, wholesale).

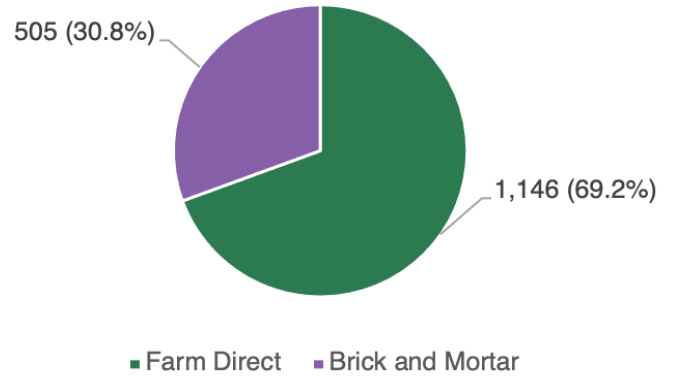
Both NI and PPR projects include FD and B&M firms where participants redeem incentives for FVs. Additionally, PPR also includes clinics as a firm type (some clinics also offer incentive redemption with pop-up farm stands, etc.).

All 2019 and 2020 GusNIP awarded projects (except for GusNIP Pilot Projects) that were active during this grant year were required to report firm-level core metrics. See [Appendix 6](#) for all firm-level tables. In Y2, active GusNIP grantees included 49 projects across the United States – two GusNIP Pilot Projects, 14 GusNIP Projects (i.e., midsize), 14 GusNIP Large Scale Projects, and 19 PPR projects. Since GusNIP Pilot Projects were not required to submit data, all results presented hereafter refer to 47 total projects (19 GusNIP PPR projects and 28 GusNIP NI projects). During Y2, \$13,332,286 in GusNIP funds were spent across 47 projects with \$9,961,150 (74.7%) of total GusNIP funds spent on direct incentives.<sup>8</sup> Y2 spending results are an increase from Y1 results, during which grantees reported spending 68.5% of total funds on direct incentives. The increase in the proportion of grant funds spent on direct incentives is indicative of initial successes of the NTAE and Nutrition Incentive Hub for improving project implementation and impact.

<sup>8</sup>This amount of funds spent does not include the matching funds (i.e., non-federal dollars) required by the GusNIP grant program.

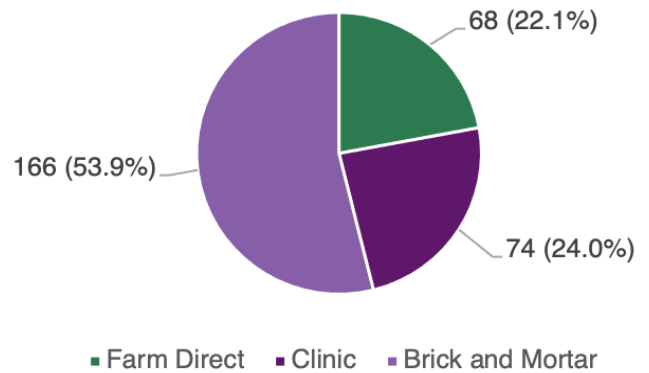


**Figure 1. NI Project Firm Types**  
(2020-2021; n=1,651)

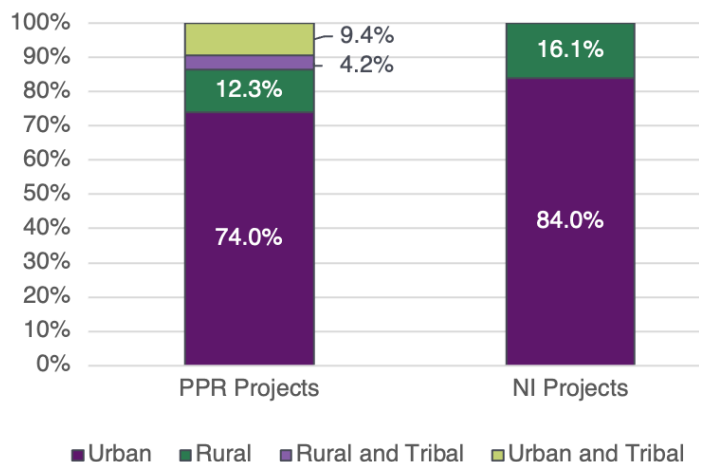


Across all active NI and PPR projects during this grant year, there were a total of 1,959 firms active at some point during the year. Of these 1,959 firms, 1,214 were FD, 671 were B&M, and 74 were clinics (**Figures 1 and 2**). Among NI projects, over two-thirds of the firms that were in operation during this grant year were FD (69.2%) and the remaining 30.8% were B&M (**Figure 1**). Of these NI firms, 84.0% primarily served urban populations, and 16.1% served rural populations (**Figure 3**). Among PPR projects, over half of the firms that were in operation during this grant year were B&M (53.9%) with the remainder comprised of FD (22.1%) and clinics (24.0%; **Figure 2**). Of these PPR firms, 74.0% primarily served urban populations, 12.3% served rural populations, 4.2% served rural and tribal populations, and 9.4% served urban and tribal populations (**Figure 3**). A greater proportion of FD firms among NI projects is not surprising given that many incentive projects were born out of the local food system movement to address food access challenges through expansion of farmers markets and associated programming such as financial incentives.<sup>9</sup> Some NI projects included the goal of expanding their projects to include more B&M sites in their narrative. Compared to the 25.0% of NI firms that were B&M from Y1 NTAE reporting, Y2 reporting shows a greater proportion of B&M firms (30.8%).

**Figure 2. PPR Project Firm Types**  
(2020-2021; n=308)



**Figure 3. Population Served by Firm Service Areas**  
(2020-2021; n=308 for PPR, n=1,651 for NI)



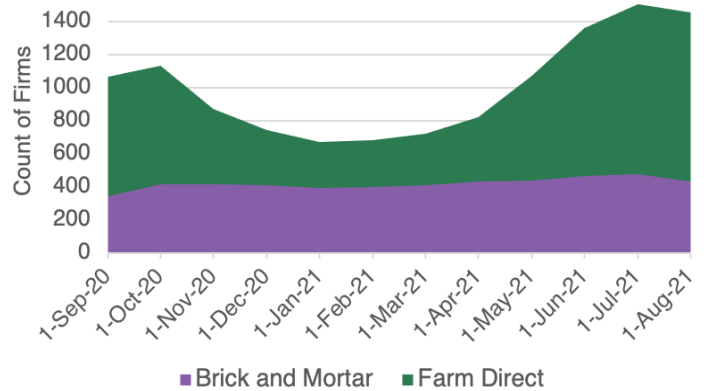
<sup>9</sup>Engel, K., & Ruder, E. H. (2020). Fruit and vegetable incentive programs for Supplemental Nutrition Assistance Program (SNAP) participants: A scoping review of program structure. *Nutrients*, 12(6), 1676. <https://doi.org/10.3390/nu12061676>

During Y2 of the NTAE, newly added grantee projects yielded an overall increase in the number of firms in operation. For both NI and PPR projects, graphs of participating firms by month of operation show a U-shaped curve for FD during Y2 (**Figures 4 and 5**). More firms participated as grantees launched their projects in September 2021, fewer firms participated during the winter months, and firm participation increased in the spring and then leveled off in the summer months (**Figures 4 and 5**). The pattern of firms being added and removed based on operation reflects the seasonal nature of some of the projects, especially those in FD settings that correspond with the growing season.

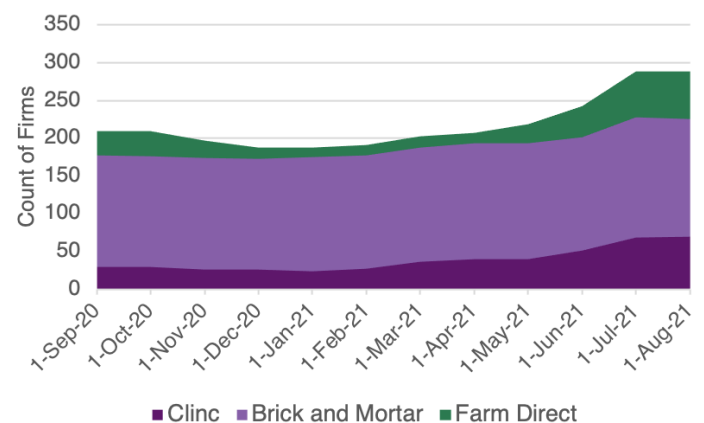
There were variations in the type of financial instrument used between FD and B&M firms as well as across NI and PPR projects. Among FD firms, the most common financial instrument was paper vouchers/coupons (n=580, 50.8%), followed by tokens (n=448, 39.2%; [Table A1](#)). See [Appendix 6](#) for all firm-level tables. Among B&M firms, the most common financial instrument was paper vouchers/coupons (n=293, 58.1%), followed by loyalty accounts (n=143, 28.4%; [Table A1](#)). The most common financial instrument for NI projects was paper vouchers/coupons (n=872, 53.3%), followed by tokens (n=452, 27.6%; [Table A1](#)). For PPR projects, the most common financial instrument was paper vouchers/coupons (n=36, 55.4%), followed by “other” (n=18, 27.7%; [Table A1](#)). Some firms use multiple financial instruments for incentives, so these categories are not mutually exclusive.

For the NI model, it is important to note that firms associated with NI projects had eligible items that *trigger* the incentive, meaning items that are eligible for receiving incentives when they are purchased using SNAP funds. Among B&M firms, the most common trigger for incentives was “All fresh FVs (plus canned, frozen, dried, plants, seeds)” (n=213, 42.3%), followed by “All fresh FVs only” (n=180, 35.7%; [Table A2](#)). Among FD firms, the most common trigger for incentives was “all SNAP eligible items” (n=1,072, 94.6%; [Table A2](#)). Farmers markets and other FD sites typically sell FVs and other locally produced items as their primary SNAP-eligible items.

**Figure 4.** Total Number of Firms Participating in NI Projects by Month of Project Operation (2020-2021)



**Figure 5.** Total Number of Firms Participating in PPR Projects by Month of Project Operation (2020-2021)



Within NI and PPR models, firms associated with NI and PPR projects had eligible items for redeeming incentives and PPR vouchers, meaning items that qualified for incentive and PPR voucher redemption. Among NI projects, there was an almost even distribution of the top three most common FVs eligible for incentive redemption: “All fresh FVs only” (n=578, 35.3%), “Only state or regionally grown FVs” (n=560, 34.2%), and “All fresh FVs (plus canned, frozen, dried, plants, seeds)” (n=466, 28.5%).<sup>10</sup> Among PPR projects, the most common FVs eligible for voucher redemption were “All fresh FVs (plus canned, frozen, dried, plants, and/or seeds)” (n=143, 60.9%) and “All fresh FVs only” (n=67, 28.5%; [Table A3](#)).

<sup>10</sup>Purchases to trigger incentives and products eligible for redemption were “select all that apply” and for most firms “all fresh FVs” applies and other items included such as frozen, canned, or plants expands the items eligible for projects.



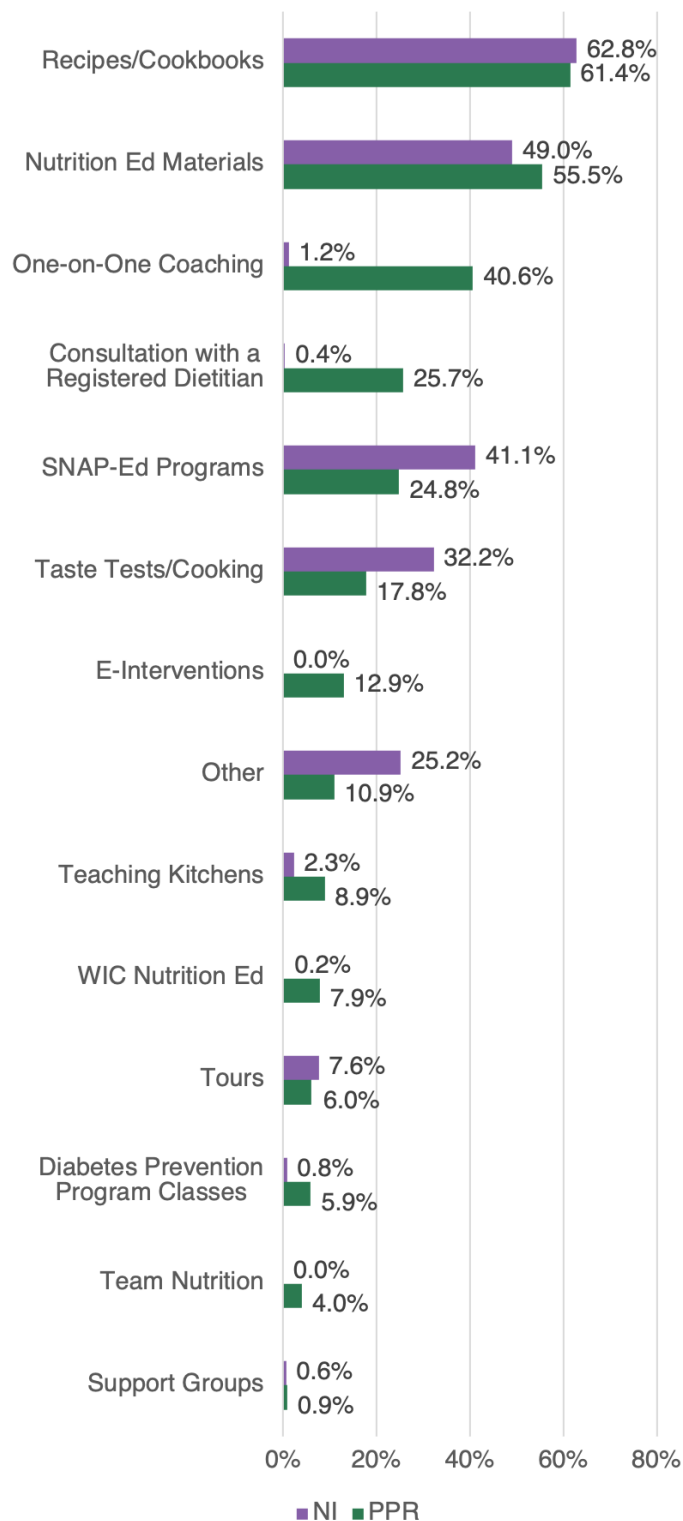
When eligible items for redeeming incentives are described by firm type, FD firms most often reported “Only state or regionally grown FVs” (n=533, 44.4%), followed by “All fresh FVs only” (n=386, 32.1%) and “All fresh FVs (plus canned, frozen, dried, plants, and/or seeds)” (n=251, 20.9%). B&M firms reported the most common eligibility criteria for redemption were “All fresh FVs (plus canned, frozen, dried, plants, and/or seeds)” (n=358, 53.4%) and “All fresh FVs only” (n=258, 38.5%; [Table A3](#)).

A total of 617 firms offered some type of nutrition education across NI and PPR projects ([Table A4](#)). Overall, the most common nutrition education activities offered at firms included: providing recipes or cookbooks (n=386, 62.6%), providing nutrition education materials (n=313, 50.7%), SNAP Education (SNAP-Ed) programs (n=237, 38.4%), and taste testing or cooking demonstrations (n=184, 29.8%; [Table A4](#)). The number of nutrition education activities offered was greater among NI projects (n=516) when compared to PPR projects (n=101) because a larger number of NI firms participated and reported. In addition to “lighter touch” nutrition education approaches (e.g., SNAP-Ed, recipes/cookbooks), the types of nutrition education activities that were offered frequently among PPR projects tended to be more intensive, such as one-on-one coaching sessions (n=41, 40.6%) and consultation with a registered dietitian nutritionist (n=26, 25.7%; [Figure 6](#); [Table A4](#)). Correspondingly, [Table A4](#) shows nutrition education activities broken down by B&M, FD, and clinic – highlighting that a greater proportion of more intensive nutrition education activities occurred within clinics as part of PPR projects.

Other common services provided beyond nutrition education (i.e., auxiliary services) included produce delivery services (n=144, 27.8%), resource referrals (n=122, 23.6%), shopping assistance (n=114, 22.0%), benefit application assistance (n=98, 18.9%), as well as COVID-19 testing (n=90, 17.4%) and vaccination (n=103, 19.9%; [Table A5](#)).

In terms of marketing activities that firms used to promote their NI or PPR projects, the most reported activity was on-site signage or announcements (n=1,252, 86.4%), followed by online advertisements (e.g., social media, website, apps; n=626, 43.2%), print advertisement (n=540, 37.3%), and multi-

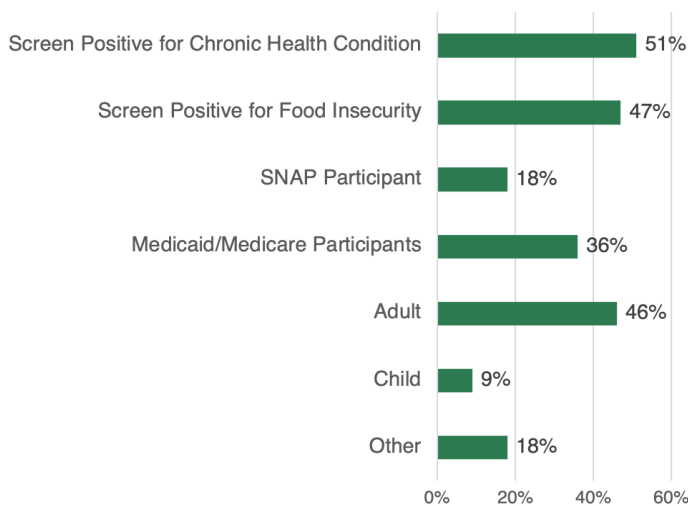
**Figure 6. Nutrition Education Across NI and PPR Projects (2020-2021)**





lingual promotions (n=460, 31.8%; [Table A6](#)). Eligibility requirements for participation in PPR projects varied. Most projects broadly included low-income adults at risk for food insecurity and chronic disease. At enrollment, firms for PPR projects were asked to select all eligibility criteria that were relevant for enrollment. The most common eligibility criteria were “having a diet related chronic disease” (n=51, 69.9%), “screening positive or at risk for food insecurity” (n=47, 64.4%), and “being an adult” (n=46, 63.0%; [Figure 7](#); [Table A7](#)). Most enrollment firms had multiple eligibility criteria for project enrollment. For firms using diagnosis of a chronic health condition as an eligibility criterion, the following types of conditions were included as part of eligibility criteria: diabetes (n=50, 100%), pre-diabetes (n=45, 90%), hypertension (n=45, 90%), obesity (n=39, 78%), and cardiovascular disease (n=36, 72%; data not shown).

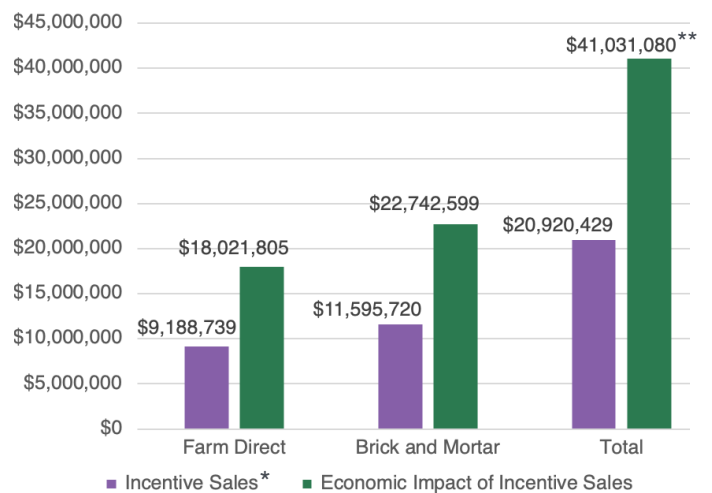
**Figure 7. PPR Project Eligibility Criteria for Enrollment (2020-2021)**



**Sales and Transactions and Economic Impact  
All NI and PPR Projects**

The total local economic impact of all GusNIP NI and PPR projects was \$41,031,080 (\$18,021,805 for FD, \$22,742,599 for B&M, and \$266,676 for clinics [not shown in figure]). This value represents the amount of money generated from total incentive program sales (\$20,920,429) for the communities surrounding the 1,876 participating firms that reported data ([Figure 8](#)). Local economic impact in [Figures 8, 10, and 12](#) was calculated using the [Local Economic Impact Calculator](#), developed by a team of economists and with support from USDA, to facilitate analysis of food systems initiatives.<sup>11</sup>

**Figure 8. Local Economic Impact of NI and PPR Projects by Firm Type (2020-2021)**



\*Incentive Sales = the dollar amount of incentives redeemed at participating firms  
 \*\*Total includes Farm Direct, Brick and Mortar, and clinic markets; the economic impact of clinic markets was \$266,676.

<sup>11</sup>The impact estimate is a rough estimate of the upper bound of economic impact an initiative may have. It includes both direct effects (e.g., sales at participating firms) and indirect effects (e.g., how firms spend the extra revenue, such as on hiring, marketing, etc.).

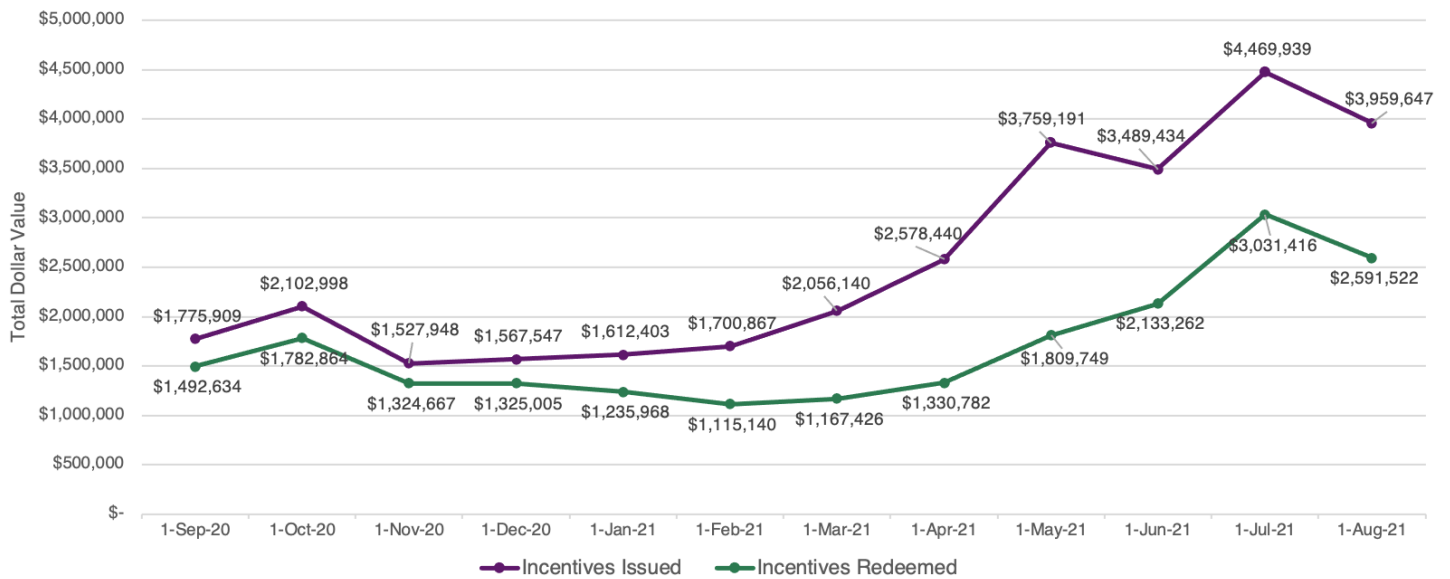
**NI Projects**

Among NI projects, a total of \$20,340,434 incentives were redeemed across 1,615 firms, with an average of \$12,595 incentives redeemed per firm (Table A8). A total of \$30,600,464 incentives were issued, resulting in a 66.5% total redemption rate and 78.8% mean redemption rate across all firms (Table A8). Among NI projects, incentive issuance was lowest in November 2020 (\$1,527,948) and redemption was lowest in February 2021 (\$1,115,140). Both issuance and redemption were highest in July 2021 (\$4,469,939 and

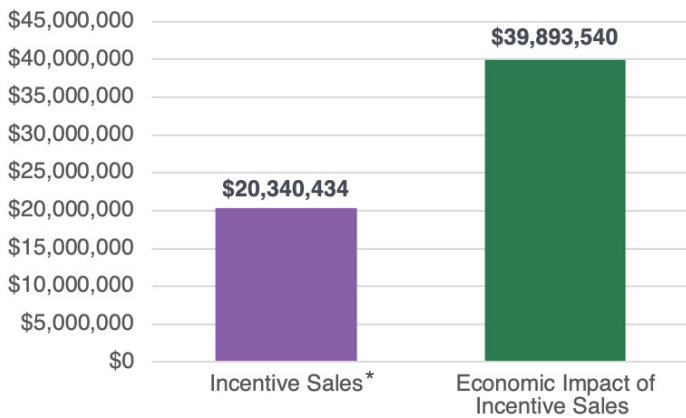
\$3,031,416, respectively; Figure 9). This is expected because many FD firms operate seasonally (and among NI projects, 69% were FD) based upon local agriculture and the growing season peaking during the summer months across many regions.

NI projects were designed to introduce new funding streams into local economies. The NI projects with active firms during Y2 brought an estimated total of \$39,893,540 into communities (Figure 10).

**Figure 9. Issuance and Redemption in Dollars for NI Projects (2020-2021)**



**Figure 10. Local Economic Impact of NI Projects (2020-2021)**



\*Incentive Sales = the dollar amount of incentives redeemed at participating NI firms



### PPR Projects

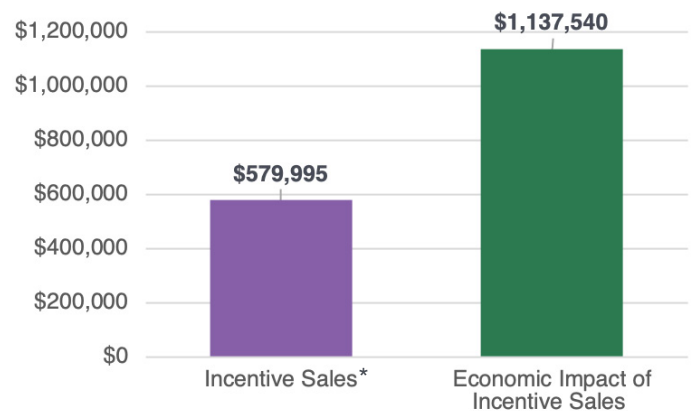
Among PPR projects, a total of \$579,995 incentives were redeemed across 261 firms, with an average of \$2,222 incentives redeemed per firm (Table A8). A total of \$886,975 incentives were issued, resulting in a 65.4% total redemption rate and 84.8% mean redemption rate across all firms (Table A8). Among PPR projects, both incentive issuance and redemption were lowest in January 2021 at \$34,498 and \$19,723, respectively (Figure 11). PPR issuance was highest in July 2021 at \$149,298 and redemption was highest in August at \$102,172 (Figure 11). It is expected that PPR project incentive issuance and redemption would be lowest over the winter months due to two factors:

(1) clinics may have been addressing COVID-related issues (e.g., diagnostics, treatment, vaccines) and (2) seasonal slowdown of patients around the winter holidays. As additional clinics were onboarded in early 2021 and FD firms became more active, there was a steady increase in incentive issuance and redemption into the spring and summer months of 2021 (with some fluctuations). By design, PPR projects focus on participant health outcomes and improvements in health care utilization and costs and do not necessarily intend to introduce new funding streams into local economies. However, the nine PPR projects represented in the 2019 GusNIP grantee cohort brought an estimated total of \$1,137,540 into communities (Figure 12).

**Figure 11. Issuance and Redemption in Dollars for PPR Projects (2020-2021)**



**Figure 12. Local Economic Impact of PPR Projects (2020-2021)**



\*Incentive Sales = the dollar amount of incentives redeemed at participating PPR firms



## Participant-Level Outcomes

This NTAE Y2 Impact Findings Report provides participant-level outcomes for the first time. During 2019-2020, many grantees were unable to collect participant-level data due to a delay in receiving funding and rapidly adjusting their projects to accommodate the business closures, shelter-in-place ordinances, and social distancing guidelines instituted during the emergence of COVID-19. Therefore, the [Y1 Impact Findings Report](#) relied upon firm-level data only. During Y2 (2020-2021), COVID-19 safety protocols rapidly evolved, vaccines were introduced, and different localities experienced fluctuations with guidelines, ordinances, and mandates. In addition, the Delta variant of COVID-19 also emerged, which introduced further uncertainty about expectations and best practices around participant-level data collection. With these considerations in mind, the NTAE supported grantees to implement safe and alternative procedures for data collection (e.g., guidance on conducting telephone/video conferencing surveys and administering electronic surveys), while also maintaining some flexibility for participant-level data collection in Y2. While some grantees were not able to reach their intended sample size, with support from the NTAE, other grantees were able to meet or exceed the sample size for their projects. In aggregate, a sufficient number of participant-level surveys were collected in order to confidently report participant-level outcomes. The NTAE is continuing to work with each grantee to reach suggested sample sizes for their projects to produce the most robust analysis and reporting possible for the multi-year comprehensive evaluation.

## Core Measures

Participant-level outcomes rely on a standard set of core measures collected by grantees and aggregated by the NTAE. In Y1, the NTAE established a core minimum dataset composed of measures to assess the impact of NI and PPR projects on participants. The [core participant-level survey for NI projects](#) consists of 32 items and

assesses the following: length of time participating in SNAP, NI program use, program satisfaction, FV intake (FVI), household-level food security, perceived health status, COVID-19 impact, as well as sociodemographic and household characteristics. Similarly, the core participant-level surveys for PPR projects consist of a 31 question [baseline survey](#) as well as a 34 question [post-survey](#) and assesses the following: federal food assistance program use, PPR program use, program satisfaction, FVI, food security, perceived health status, COVID-19 impact as well as sociodemographic and household characteristics. Details on the specific survey modules included in the core participant surveys are in [Appendix 7](#). Currently, the core NI and PPR surveys are available in four languages – English, Spanish, Somali, and Arabic – with plans to expand to additional languages in future years based on the populations interfacing with GusNIP.

In developing and administering their surveys, each grantee worked closely with an assigned NTAE Program Advisor and a Reporting Advisor. This process included: identifying a survey platform (e.g., Qualtrics), acquiring IRB approval, tailoring survey items to a grantee's unique project, and in some cases, adding additional survey items as requested by the grantee (see [Appendix 7](#) for description of optional metrics). Program and Reporting Advisors provided support to grantees throughout the data collection process via check-in calls and ad hoc emails. Further, a suite of resources was made available to grantees to aid in participant-level survey administration, including a [Qualtrics tutorial](#), a [data collection training video](#), a [data collection protocol document](#), and a [tip sheet for selecting and sampling participants](#).

The NTAE required grantees to collect surveys from a subsample of their participants according to their cohort year (i.e., 2019 or 2020) and project type (i.e., NI or PPR).<sup>12</sup> Sample sizes were based on the ability to detect a clinically significant (i.e., 0.25 cups/day) change in FVI among participants. For NI projects, NTAE researchers hypothesized that participating in the program for longer amounts of time would demonstrate greater FVI as compared to newer participants. For PPR projects, NTAE researchers hypothesized that participants would increase FVI after receiving the PPR intervention.

<sup>12</sup>2019 NI projects were asked to collect 150-230 surveys based on project type. 2020 NI projects were asked to collect 100-150 surveys based on project type. Both 2019 and 2020 PPR projects were asked to collect 130 surveys.



### Nutrition Incentive Projects

Among 2019 and 2020 NI project grantees, 26 of 28 projects collected participant-level data in Y2. Of the 26 NI projects that collected surveys from participants, 10 were 2019 awards and 16 were 2020 awards. For the purposes of this report, participant results include data collected during Y2,<sup>13</sup> and not by award year.

A majority of grantees began participant-level data collection during Y2 and COVID-19 related challenges continued to limit in-person data collection. These challenges were not uniform across the United States (e.g., jurisdictions with differing rules and regulations, grantees with differing capacity to shift to remote data collection methods). The resulting sample had representation across the four regions of the United States, but with a greater number of surveys collected in the West (63.1% of the NI sample; **Table 1**).<sup>14</sup> All participant-level results tables can be found in [Appendix 8](#). The sample size of each grantee project ranged from 62 to 4,360 participants.<sup>15</sup> As a result of this sampling stratification, some of the results may be skewed by greater representation in certain geographic regions or grant sites.

<sup>13</sup>September 1, 2020 to August 31, 2021

<sup>14</sup>Ibid., 4

<sup>15</sup>Given that COVID-19 continued to present challenges to in-person data collection and other activities, the NTAE remained flexible in working with grantees to reach targeted sample sizes. In addition, the timing of project implementation and data collection impacted sample sizes. Some NI projects were only beginning participant data collection in August 2021 and will continue into the fall of 2021. Data collected after the fiscal year cut-off will roll into next year's Impact Findings Report and contribute to the overall impact analysis that will be completed at the conclusion of the NTAE award period (Y4).

**Table 1.** Amount of NI Surveys Collected Across United States Regions

Region	N (%)
West	5,485 (63.1%)
Midwest	1,867 (21.5%)
South	820 (9.4%)
Northeast	527 (6.1%)
<b>Total</b>	<b>8,699</b>

Sample sizes ranged from 62 to 4,360 participants. One grantee in the West collected 4,360, leading to high representation in that region.

### **Sociodemographics: Nutrition Incentive Projects**

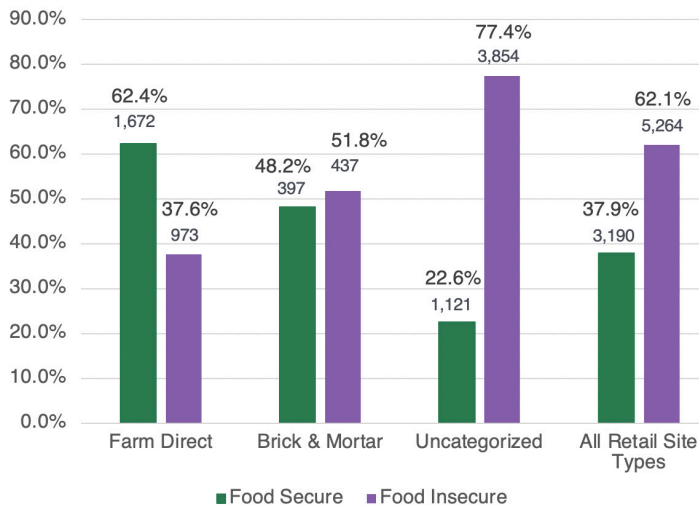
NI grantees collected surveys from a total of 8,699 participants. A majority of NI participants identified as female (62.2%), White (52.6%) or Black/African American (25.5%), and not Hispanic or Latino/a/x (76.3%), with a mean age of 41 years old ([Table A9](#)). A small percentage of NI participants identified as non-binary/third gender (1.2%) or preferred to self-describe (0.1%; [Table A9](#)). In total, 879 surveys were attributed to B&M participants. B&M participants had a mean age of 45 and were overwhelmingly female (81.4%). Relative to all NI participants, B&M participants were more likely to be Hispanic or Latino/a/x (33.3%; [Table A9](#)). B&M participants were primarily White (40.3%), Black/African American (21.1%), or "Other" (17.0%; [Table A9](#)). A total of 2,792 surveys were attributed to FD participants. FD participants had a mean age of 51, and a majority were female (74.3%; [Table A9](#)). As compared to B&M participants, a smaller percentage of FD participants were Hispanic or Latino/a/x (13.3%; [Table A9](#)). A majority of FD participants were White (52.8%) or Black/African American (25.1%; [Table A9](#)). It should be noted that a large proportion of NI participants (n=5,028, 57.8%) completed surveys off-site (e.g., online, via phone) and were not attributed specifically as either FD or B&M participants.



**Food Security: Nutrition Incentive Projects**

Food security was assessed among NI participants by firm type (Figure 13). Among FD participants, 62.4% reported food security and 37.6% reported food insecurity.<sup>16</sup> Among B&M participants, 48.2% reported food security and 51.8% reported food insecurity. A higher proportion of B&M participants were food insecure (51.8%) as compared to the proportion of FD participants who were food insecure (37.6%), a finding that has been previously noted in other NI studies with multiple firm types.<sup>17</sup>

**Figure 13. Food Security Levels Across NI Projects by Firm Type (2020-2021)**



NI participants who were food secure tended to be older than NI participants who were food insecure, with mean ages of 47 and 38, respectively (Table A10). Among participants over the age of 65, nearly 70% were food secure, compared to only 27.4% to 48.0% among age groups below 65.<sup>18</sup> Participants in the two youngest age categories<sup>19</sup> had the highest percentages of food insecurity, at 69.6% and 72.6%, respectively (Table A10).

Among NI participants, males had higher rates of food insecurity (69.2%) when compared to those who identified as females (58.5%) or non-binary/third gender (39.8%; Table A10). Hispanic or Latino/a/x participants in NI projects had slightly higher rates of food insecurity (68.3%) relative to non-Hispanic or Latino/a/x participants (60.1%; Table A10). Other Pacific Islanders experienced the highest rate of food insecurity (87.8%), with other racial populations experiencing food insecurity rates of below 70%, including American Indian and Alaska Native (64.1%), Asian (61.2%), Black/African American (67.5%), Native Hawaiian (63.7%), and White (61.3%; Table A10). As a part of the comprehensive evaluation of Y1 through Y4 data, the NTAE is working to evaluate the impact of NI projects on food security.

<sup>16</sup>Based on the USDA 6-Item Household Food Security Survey Module. 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.

<sup>17</sup>Parks, C. A., Han, P., Fricke, H. E., Parker, H. A., Hesterman, O. B., & Yarooh, A. L. (2021). Reducing food insecurity and improving fruit and vegetable intake through a nutrition incentive program in Michigan, USA. *SSM - Population Health, 15*, 100898. <https://doi.org/10.1016/j.ssmph.2021.100898>

<sup>18</sup>18-24, 25-34, 35-44, and 45-64

<sup>19</sup>18-24 and 25-34

### **Fruit and Vegetable Intake: Nutrition Incentive Projects**

The current United States Dietary Guidelines for Americans emphasize consuming a variety of FVs in order to meet recommendations and to consume 2 to 3 cups of vegetables and 1.5 to 2 cups of fruit per day.<sup>20</sup> Achieving adequate FVI is challenging for households with a low-income given the cost associated with purchasing FVs. A primary goal of GusNIP is to increase FVI among participants.

On average, NI participants reported consuming 1.08 cups of fruits per day,<sup>21</sup> 1.72 cups of vegetables per day,<sup>22</sup> and 2.70 cups of FVs per day ([Table A11](#)).<sup>23</sup> Participants between the ages of 45 to 64 (2.87 FVs cups/day), male (2.97 FVs cups/day), preferred not to answer ethnicity (2.85 FVs cups/day), preferred not to answer race (3.20 FVs cups/day), and living in the Northeast United States (2.90 FVs cups/day) reported the highest FVI across sociodemographic groups ([Table A11](#)). Participants between the ages of 25 to 34 (2.61 FVs cups/day), female (2.55 FVs cups/day), not Hispanic or Latino/a/x (2.70 FVs cups/day), Other Pacific Islander (2.40 FVs cups/day) or living in the Midwest United States (2.70 FVs cups/day; [Table A11](#)) reported the lowest FVI across sociodemographic groups. When asked about gender, a subset of NI participants identified as non-binary or third gender (n=103), preferred to self-describe (n=12), or preferred not to answer (n=108), but also reported FVI data. Given that the FVI measurement tool algorithm (described in [Appendix 7](#)) does not account for non-cis gendered individuals, their intake frequencies across the survey items are reported ([Table A12](#)).<sup>24</sup>

Overall, NI participants reported higher intake of vegetables (1.72 cups/day) versus fruits (1.08 cups/day; [Table A11](#)). The reported FVI among all NI participants was greater than the reported intake levels of the average United States adult, documented as 1.57 cups of vegetables and 0.96 cups of fruit per day.<sup>25</sup>



<sup>20</sup>United States Department of Agriculture and United States Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition. December 2020. Available at [DietaryGuidelines.gov](https://www.dietaryguidelines.gov)

<sup>21</sup>Analyzed as fruits only with the Dietary Screener Questionnaire (DSQ) algorithm.

<sup>22</sup>Analyzed as vegetables with legumes and without French fries with DSQ algorithm.

<sup>23</sup>Analyzed as FVs with legumes without French Fries with DSQ algorithm.

<sup>24</sup>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.

<sup>25</sup>Young, S., Guthrie, J., & Lin, B-H. (2021). *Food consumption and nutrient intakes*. USDA ERS - Food Consumption and Nutrient Intakes. <https://www.ers.usda.gov/data-products/food-consumption-and-nutrient-intakes/>



Importantly, NI participants at FD (2.88 FVs cups/day) and B&M (3.06 FVs cups/day) firms that reported participating for 6 months or more, reported higher levels of FVI than NI participants that reported participating less than 6 months (2.79 FVs cups/day at FD and 2.78 FVs cups/day at B&M) or for their first time (2.67 FVs cups/day at FD and 2.63 FVs cups/day at B&M; **Figure 14**).<sup>26</sup> In 2014, the USDA's Healthy Incentives Pilot (HIP) found almost a quarter cup daily increase in FVI among HIP versus non-HIP participants. **The Y2 GusNIP results demonstrate an increase between first time participants and participants reporting 6 months or more at FD and B&M locations (+0.21 FVs cups/day at FD and +0.43 FVs cups/day at B&M).**<sup>27</sup> These results are considered clinically significant given prior research that demonstrates a dose-response relationship between FVI and health (e.g., increases in FVI lead to a protective impact on health).<sup>28</sup>

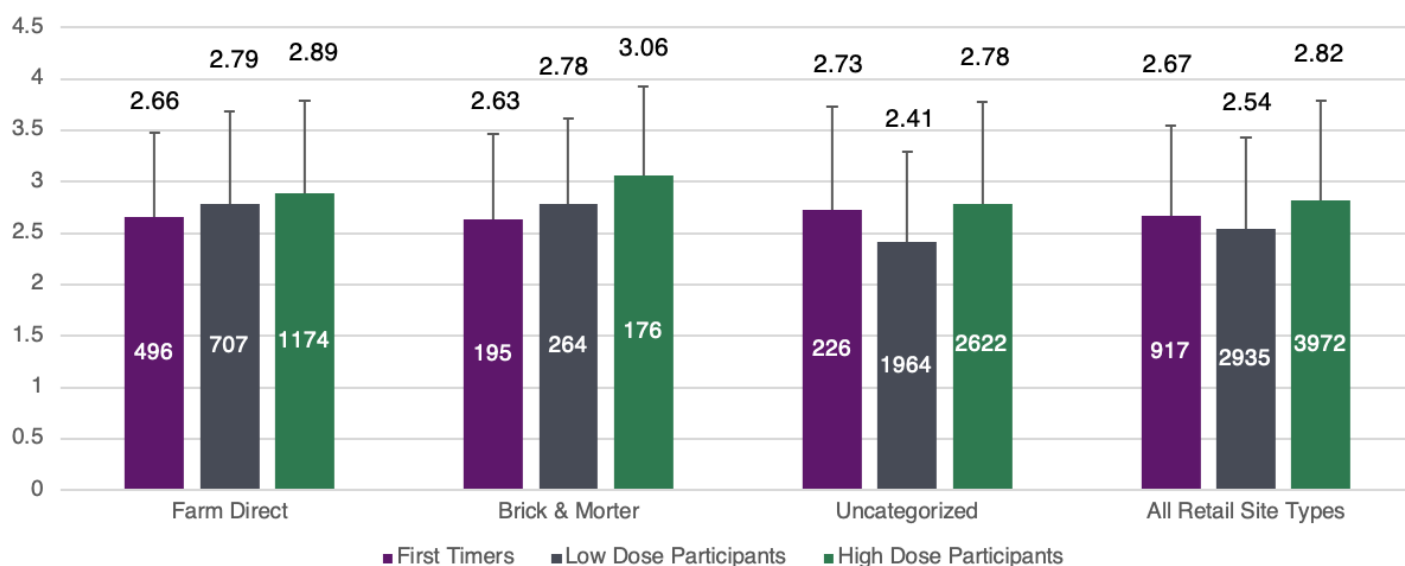


## Key Finding from GusNIP Y2

**Longer participation in NI projects is associated with higher reported FVI**

See text for specific results.

**Figure 14.** Average Daily FV Cup Equivalents Among NI Participants by Firm Type (2020-2021)



<sup>26</sup>Length of time is used to proxy impact since data is cross-sectional. Participants were considered either first time users, <6 months of NI project participation, or 6+ months of NI project participation).

<sup>27</sup>Ibid., 5

<sup>28</sup>Bellavia, A., Larsson, S. C., Bottai, M., Wolk, A., & Orsini, N. (2013). Fruit and vegetable consumption and all-cause mortality: A dose-response analysis. *The American Journal of Clinical Nutrition*, 98(2), 454-9. <https://doi.org/10.3945/ajcn.112.056119>

Across all lengths of participation, participants reporting from all retail sites (i.e., FD, B&M, unspecified) consumed an average of 2.68 FVs cups/day. NI participants who shopped at B&M sites reported slightly higher amounts of FVI (2.82 cups/day) when compared to FD sites (2.78 cups/day) (**Figure 14**). This difference counters previous literature that demonstrates slightly higher FVI from FD sites when compared to B&M.<sup>29,30</sup>

### **COVID-19 Impacts: Nutrition Incentive Projects**

Among NI participants, over half (52.6%) agreed or strongly agreed that COVID-19 made it hard to make ends meet. There were no major differences between first time participants, those who had participated for less than 6 months, and those who had participated for 6 months or more. A similar percentage (48.1%) indicated that they agreed or strongly agreed that COVID-19 made it difficult to purchase FVs (**Table A13**). Interestingly, fewer first-time participants agreed or strongly agreed that COVID-19 made it difficult to purchase FVs (40.8%) as compared to those who had participated less than 6 months (49.5%) and those who had participated 6 months or more (48.9%; **Table A13**). Overall, two-thirds (65.0%) of NI participants indicated that they utilized emergency food sources (e.g., received free food from a food pantry, food bank, faith-based organization, or other place that helps with free food; **Table A13**). Those who had participated for less than 6 months or 6 months or more were more likely to have utilized emergency food sources (68.0% and 66.2%, respectively) when compared to first-time participants (51.8%; **Table A13**).

### **Other Program Impacts: Nutrition Incentive Projects**

For perceived health status, NI participants were most likely to perceive their health as “good” (32.4%), while 26.3% reported “very good” health and 25.7% reported “fair” health (**Table A14**). Participants enrolled for 6 months or more reported “very good” or “excellent” health at a slightly higher rate (39.4%) than participants enrolled for less than 6 months (36.1%), both of which were considerably higher than among first time participants (24.3%; **Table A14**). These promising results indicate that longer-term participation in NI projects may contribute to perception of health (and potentially improved actual health) among participants.

Among all NI participants, self-reported program satisfaction was high, with 76.4% of participants indicating they felt positively or very positively about the NI project (**Table A15**). Program satisfaction was particularly high among FD participants, with 93.7% reporting “positive” or “very positive” experience with the NI project they participated in, compared to 85.6% among B&M participants (**Table A15**). Across all NI participants, only a small proportion (3.4%) reported “very negative” experiences with the NI project (**Table A15**).



<sup>29</sup>Ibid., 23

<sup>30</sup>Jilcott Pitts, S. B., Gustafson, A., Wu, Q., Leah Mayo, M., Ward, R. K., McGuirt, J. T., Rafferty, A. P., Lancaster, M. F., Evenson, K. R., Keyserling, T. C., & Ammerman, A. S. (2014). Farmers' market use is associated with fruit and vegetable consumption in diverse southern rural communities. *Nutrition Journal*, 13, 1. <https://doi.org/10.1186/1475-2891-13-1>

## Produce Prescription Projects

All 2019 PPR project grantees (n=9) and five 2020 PPR project grantees (n=10) collected participant-level data in Y2. The five 2020 projects that did not report participant-level data had yet to launch their project by the end of the federal fiscal year (August 31, 2021) and will report participant-level survey data in the forthcoming year. Unlike NI projects, PPR projects are based upon a cohort model with participants completing a survey before a project is launched (i.e., baseline) and then completing a follow-up survey upon completion of the project (i.e., post). Thus, 2020 PPR projects in their first year of GusNIP may not have had baseline data, as most of the year is spent developing the project, forging partnerships and memorandums of understanding (MOUs) with firms and clinics, and completing the IRB process. In Y2, 14 of 19 total PPR projects conducted baseline data collection with a subsample of their participants (range=14-191 participants per project).<sup>31</sup> With regard to regional representation in the PPR data, the largest number of surveys that collected from PPR projects were in the West (52.6%), followed by the South (36.1%) and the Northeast (11.3%; **Table 2**).<sup>32</sup> There were no 2019 or 2020 PPR projects located in the Midwest.

### Full Sample - Baseline Only Participant Results Sociodemographics: PPR Full Baseline Sample

Of the 19 PPR projects, 14 collected baseline participant surveys that represented urban, rural, and tribal populations in geographical regions located throughout the Northeast, South, and West, indicating a diverse and heterogeneous sample of participants enrolled in GusNIP PPR projects.<sup>2</sup> In Y2, a total of 1,201 baseline participant surveys were collected from PPR project participants. Among these participants, the majority were 45 years of age or older (62.5%), with a mean age of 50.2 years, female (77.4%), not Hispanic or Latino/a/x (61.9%), and Black/African American (33.9%) or White (28.2%; **Table A16**). A significant percentage of participants also reported being American Indian or Alaska Native (8.5%) or Other Race (9.5%; **Table A16**). In comparison to NI participants, PPR participants were generally older (mean age of 50 vs. 41 years, respectively), female (77.4% vs. 62.2%, respectively), and generally more diverse across race and ethnicity categories.



**Table 2.** Amount of PPR Surveys Collected Across United States Regions

Region	N (%)
West	632 (52.6%)
South	433 (36.1%)
Northeast	136 (11.3%)
Midwest	0
<b>Total</b>	<b>1,201</b>

Sample sizes ranged from 14 to 191 participants.

<sup>31</sup>Most PPR projects have rolling enrollment, whereby participants continue to enroll throughout the grant award cycle. Thus, total numbers of enrolled participants for each PPR project will likely increase throughout the entire award cycle, which will be reflected in the total number of baseline surveys each year. For example, a PPR grantee that has 14 baseline surveys in Y2 will continue enrollment into Y3 and Y4 and/or until sample size requirements for their project have been met.

<sup>32</sup>*Ibid.*, 4

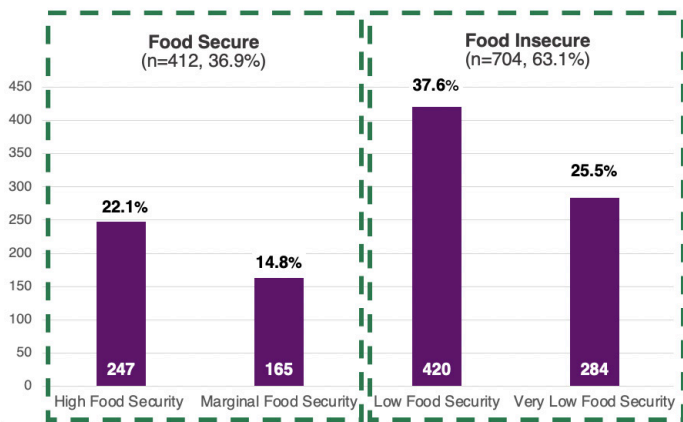


**Food Security: PPR Full Baseline Sample**

A primary goal of GusNIP PPR projects is to reduce food insecurity.<sup>33</sup> In order to understand baseline food security among PPR participants, the USDA 6-item Household Food Security Survey Module was administered and completed by 1,116 participants before receiving or redeeming their first PPR incentives (Table A17). Of these, a large majority of participants were food insecure (63.1%) compared to participants scoring as food secure (36.9%; Figure 15). As expected, the proportion of food insecure PPR participants is high, since one of the main eligibility criteria to participate in PPR projects is ‘screening positive’ for food insecurity, which is routinely tested in health care settings using the 2-item Hunger Vital Sign screener.<sup>34</sup>

In terms of food security relative to sociodemographics, the mean age of PPR participants was 50 years for both the food secure and food insecure categories (Table A17). When broken down by age groups (18-24, 25-34, 35-44, 45-64, 65+), the majority of participants in each stratum were considered food insecure, with the highest rate of food insecurity in the 45-64 age group (69.2%; Table A17). Non-binary/third gender participants had a similar prevalence of food insecurity (60.5%) when compared to their cis-gendered counterparts (60.6%-61.9%; Table A17). Non-Hispanic or Latino/a/x participants in PPR projects had slightly higher rates of food insecurity (62.2%) relative to Hispanic or Latino/a/x participants (58.7%; Table A17). For race, Other Pacific Islander participants experienced the highest rate of food insecurity (100.0%), followed by American Indian and Alaska Native (76.3%), Native Hawaiian (75.0%), and Other Race (70.7%; Table A17). White, Asian, and Black/African American participants had a similar food insecurity rate in each category (56.7%, 57.5%, and 58.5%, respectively; Table A17). Across all race strata, the majority of PPR participants were food insecure.

**Figure 15. Food Security Status Among PPR Participants – Full Baseline Sample (2020-2021)**



<sup>33</sup>United States Department of Agriculture, National Institute of Food and Agriculture. (2020). *The Gus Schumacher Nutrition Incentive Program*. <https://nifa.usda.gov/funding-opportunity/gus-schumacher-nutrition-incentive-grant-program>

<sup>34</sup>Hager, E. R., Quigg, A. M., Black, M. M., Coleman, S. M., Heeren, T., Rose-Jacobs, R., Cook, J. T., Ettinger de Cuba, S. A., Casey, P. H., Chilton, M., Cutts, D. B., Meyers, A. F., & Frank, D. A. (2010). Development and validity of a 2-item screen to identify families at risk for food insecurity. *Pediatrics*, 126(1), e26-32. [http://www.childrenshealthwatch.org/wp-content/uploads/EH\\_Pediatrics\\_2010.pdf](http://www.childrenshealthwatch.org/wp-content/uploads/EH_Pediatrics_2010.pdf)

### *Fruit and Vegetable Intake: PPR Full Baseline Sample*

A primary goal of GusNIP projects is to increase FVI among PPR participants. The current United States Dietary Guidelines for Americans recommend 2 to 3 cups of vegetables and 1.5 to 2 cups of fruit per day.<sup>35</sup> **In comparison, PPR participants at baseline reported consuming 1.47 vegetable cups/day, 0.95 fruit cups/day, and 2.41 FVs cups/day on average (Table A18).** Thus, current FVI of PPR project participants was more than 1 to 2 cups lower than the recommendations for combined daily FVI. Additionally, the reported vegetable intake of all PPR participants was slightly less than the reported intake levels of the average United States adult (1.57 FVs cups/day) and the reported fruit intake of participants was about equal to reported mean daily fruit intake of the average United States adult (0.96 cups/day).<sup>36</sup> However, research indicates that, on average, low-income individuals have lower FVI than the general population<sup>37</sup> and we expect reported FVI among participants in PPR projects is expected to be even lower at baseline.

Across age categories, 18–24 year old participants consumed the least amount of FVs (2.31 cups/day), and 25–34 year old participants consumed the most FVs (2.48 cups/day; [Table A18](#)). Across age group categories, no age groups consumed the recommended amounts of FVs. Among males and females, males tended to report consuming more vegetables (1.68 cups/day vs. 1.42 cups/day, respectively) and total FVs (2.63 cups/day vs. 2.37 cups/day, respectively), while males and females consumed almost equivalent amounts of fruits (0.90 cups/day vs. 0.96 cups/day, respectively; [Table A18](#)). When asked about gender, many participants identified as non-binary or third gender (n=39), preferred to self-describe (n=2), answered ‘don’t know’ (n=3), or preferred not to answer (n=21), also reported FVI data ([Table A19](#)). Given that the FVI measurement tool algorithm (described in [Appendix 7](#)) does not account for non-cis gendered individuals, frequencies of intake across the survey items are reported ([Table A19](#)).<sup>38</sup>

Non-Hispanic or Latino/a/x participants and Hispanic or Latino/a/x participants consumed approximately equivalent amounts of total FVs (2.44-2.47 cups/day), fruits (0.96-0.97 cups/day), and vegetables (1.47-1.51 cups/day). Across race, Asian participants

consumed the most FVs combined (2.69 cups/day), followed by Native Hawaiian participants (2.64 FVs cups/day), while American Indian or Alaska Native and Other Pacific Islander participants consumed the least FVs combined (2.11 cups/day). For FVs separately, Other Race and Black/African American participants consumed the most fruits (0.99-1.02 cups/day) and Asian participants consumed the most vegetables (1.71 cups/day), while Other Pacific Islander and American Indian or Alaska Native consumed the least fruits (0.74-0.81 cups/day) and vegetables (1.31-1.37 cups/day). The differences in FVI among race categories may be influenced by the structural and environmental inequities among these groups. The differences may also be due to limitations of the Dietary Screener Questionnaire which is not tailored to specific race and ethnicity groups (i.e., it does not assess traditional FVs that specific groups frequently consume) and could result in underreporting FVI.<sup>39</sup>

### *Other Program Impacts: PPR Projects*

For perceived health status, the majority of PPR participants reported their health being ‘fair’ or ‘good’ (75.2%), while 12.4% reported ‘poor’ ([Table A20](#)). A small percentage of PPR participants reported their health was ‘very good’ or ‘excellent’ (12.2%; [Table A20](#)). Compared to NI participants, those participating in PPR projects reported poorer perceived health overall. However, this discrepancy is likely due to different evaluation strategies between PPR and NI projects. PPR participants are surveyed at baseline, whereas NI participants complete a one-time, cross-sectional survey at various stages of project participation. In addition, many PPR projects have eligibility criteria such as experiencing diet-related chronic disease, so the NTAE anticipates these participants to report poorer health at baseline.

<sup>35</sup>Ibid., 24

<sup>36</sup>Ibid., 24

<sup>37</sup>Hoy, M. K., Goldman, J. D., & Moshfegh, A. J. (2017). Differences in fruit and vegetable intake of US adults by sociodemographic characteristics evaluated by two methods. *Journal of Food Composition and Analysis*, 64, 97-103. <https://doi.org/10.1016/j.jfca.2017.06.012>

<sup>38</sup>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.

<sup>39</sup>Some grantees tailored the fruit and vegetable examples in the DSQ questions to include culturally relevant foods, however these adaptations to the survey were not validated.



### PPR Project Impact - Partial Baseline-Post Sample Participant Results

Five PPR projects, serving areas of CA, NM, GA, PA, and AK, also collected post-surveys yielding a subsample of participants to report impact findings (total N=196). This subsample provides insight on the early impact of GusNIP PPR projects on food security and FVI – measured as the change in FVI and food security levels from baseline to post-project survey evaluation. However, results from this subsample must be interpreted with caution, as it does not represent the diverse nature of PPR models across GusNIP projects, nor can results be generalized to the impact of PPR projects on Americans’ FVI and food security more broadly given the relatively small sample size. Additionally, the baseline-post analysis demonstrates the change in outcomes (e.g., FVI, food security) over time, but time-variant factors (e.g., seasonality, time-sensitive policies) are not controlled for statistically, which could contribute to the changes seen in this analysis.

### Sociodemographics: PPR Partial Baseline-Post Sample

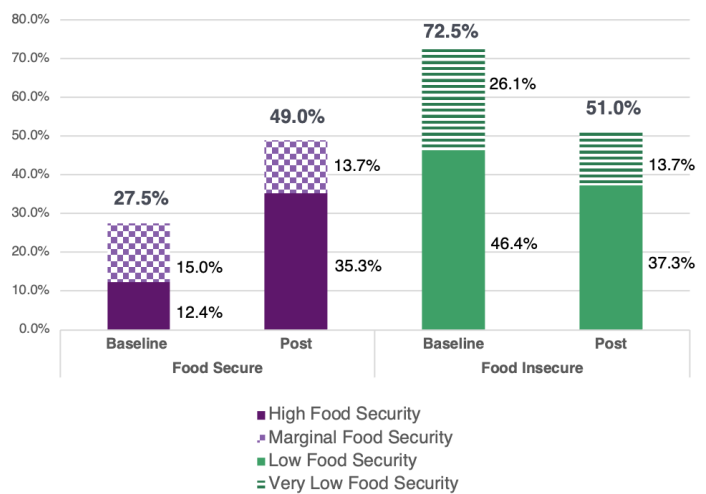
Of the five PPR projects representing a subsample of participants reporting sociodemographic characteristics (N=196), the majority were 45 years of age or older (63.5%), with a mean age of 50.3 years, were female (81.9%), not Hispanic or Latino/a/x (82.5%), and Black/African American (51.8%; [Table A21](#)). Compared to the full baseline sample ([Table A16](#)), characteristics were similarly distributed (i.e., similar percentages between the full baseline sample and this sub-sample), except in the race category, where the full sample had a higher representation of White participants and the partial baseline-post sample had higher representation of Black/African American and American Indian or Alaska Native participants. Differences in race among participants in the baseline-post subsample is a reflection of the predominantly Black/African American and American Indian or Alaska Native populations served by the five projects.

### Food Security: PPR Partial Baseline-Post Sample

Of the subsample that completed a baseline and post-survey, 153 PPR participants completed the USDA 6-item Household Food Security Survey Module. At baseline, 27.5% of participants were food secure, and 49.0% of participants were food secure at post-survey (**Figure 16**).

An inverse trend between the four security levels from baseline to post can be observed, with ‘high’ food security increasing the most among participants (12.4% at baseline and 35.3% at post) and ‘very low’ food security decreasing by almost half (26.1% at baseline and 13.7% at post; **Figure 16**). Although preliminary, the results show a positive change in PPR participants’ food security levels from baseline to post-project participation, which parallel the results observed in the limited literature regarding the impacts of PPR projects on participant food security.<sup>40,41,42</sup>

**Figure 16. Food Security Baseline - Post for PPR (2020-2021; n=153)**



<sup>40</sup>Jones, L. J., VanWassenhove-Paetzold, J., Thomas, K., Bancroft, C., Ziatyk, E. Q., Kim, L. S., Shirley, A., Warren, A. C., Hamilton, L., George, C. V., Begay, M. G., Wilmot, T., Tsosie, M., Ellis, E., Selig, S. M., Gall, G., & Shin, S. S. (2020). Impact of a fruit and vegetable prescription program on health outcomes and behaviors in young Navajo children. *Current Developments in Nutrition*, 4(8), nzaa109. <https://doi.org/10.1093/cdn/nzaa109>

<sup>41</sup>Ridberg, R. A., Bell, J. F., Merritt, K. E., Harris, D. M., Young, H. M., & Tancredi, D. J. (2019). A pediatric fruit and vegetable prescription program increases food security in low-income households. *Journal of Nutrition Education and Behavior*, 51(2), 224-230.e1. <https://doi.org/10.1016/j.jneb.2018.08.003>

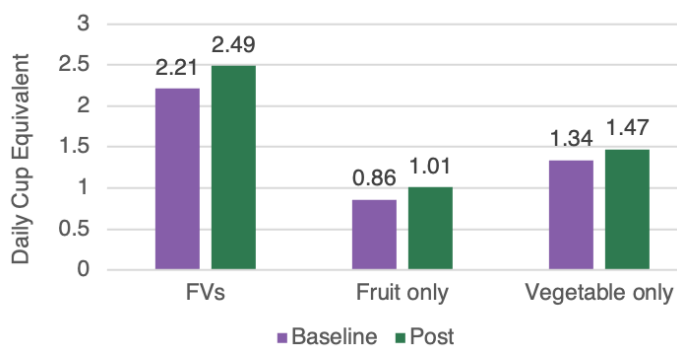
<sup>42</sup>Aiyer, J. N., Raber, M., Bello, R. S., Brewster, A., Caballero, E., Chennisi, C., Durand, C., Galindez, M., Oestman, K., Saifuddin, M., Tektiridis, J., Young, R., & Sharma, S. V. (2019). A pilot food prescription program promotes produce intake and decreases food insecurity. *Translational Behavioral Medicine*, 9(5), 922–930. <https://doi.org/10.1093/tbm/ibz112>

### Fruit and Vegetable Intake: PPR Partial Baseline-Post Sample

Of 178 PPR participants who completed the DSQ for daily FVI, the mean baseline FVI among participants was 2.21 cups/day (**Figure 17**). This is lower than the full baseline sample average (2.41 FVs cups/day) and well below Dietary Guidelines for Americans' recommendations of 3.5 to 5 cups of FVs per day.<sup>43</sup> At post-project, participants' FVI was 2.49 cups/day, roughly a one quarter cup increase of FVs (+0.28) per day, which was approximately the increase observed in the seminal HIP study.<sup>44</sup>

Examining FVI separately, fruit intake increased by 0.15 cups/day (from 0.86 to 1.01 cups/day) and vegetable intake increased by 0.13 cups/day (from 1.34 to 1.47 cups/day; **Figure 17**). While it is encouraging that FVI increased among this subsample, fruit and vegetable post-survey averages were each still 0.5 cups lower than recommended daily amounts for Americans.

**Figure 17.** Daily FV Equivalent Among PPR Projects (2020-2021; n=178-181\*)



\*For FVs and Vegetable only, n=178. For Fruit only, n=181.

PPR research is relatively nascent in the literature (2019-current). Thus, conclusions about the impact of PPR projects remains unclear. Compared to existing literature on the impact of PPR projects on participant FVI, the subsample change estimates noted here were similar to previous findings. For example, a food bank centered PPR project (i.e., participants redeemed doctor prescribed vouchers at a mobile food pantry truck) found that, among adult participants, vegetable intake increased by approximately 0.22 servings, and fruit intake increased by 0.44 servings.<sup>45</sup> In addition, another PPR study found a 0.22 cup/day increase in FVI.<sup>46</sup>

Finally, the single systematic review including PPR projects reported mixed results for change in FVI and indicated no impact when results were pooled.<sup>47</sup>

One of the outstanding issues with understanding the impact of PPR projects on FVI is the variety of ways that impact can be evaluated and disseminated (e.g., cups/day vs. an index score vs. servings/day), making comparisons difficult. Additionally, the heterogeneity of project models available (e.g., store vs. clinic-based) and doses (e.g., amount of incentive, duration of incentive, education programming offered and received) and the limited peer-reviewed literature on impact of PPR projects adds complexity to understanding overall impacts.

Notwithstanding the difficulties in interpreting true causal impact given the nascency and diversity of implementation and evaluation strategies, the change in FVI in the included subsample is likely conservative – all five of these projects were operating during the height of the COVID-19 pandemic and many supportive educational and auxiliary activities were postponed, canceled, or moved to virtual formats. Additionally, most clinics needed to prioritize COVID-19 testing, treatment, and vaccinations, which likely suppressed the full potential of these PPR projects. Since nutrition education and other social and structural supports are a large part of PPR projects, total impacts are projected to increase over time (i.e., post-pandemic).

<sup>43</sup>Ibid., 24

<sup>44</sup>Ibid., 5

<sup>45</sup>Orsega-Smith, E., Slesinger, N., & Cotugna, N. (2019). Local pediatricians partner with food bank to provide produce prescription program. *Journal of Hunger & Environmental Nutrition*, 15(3), 353-359. <https://doi.org/10.1080/19320248.2019.1592051>

<sup>46</sup>Basu, S., Akers, M., Berkowitz, S. A., Josey, K., Schillinger, D., & Seligman, H. (2021). Comparison of fruit and vegetable intake among urban low-income US adults receiving a produce voucher in 2 cities. *JAMA Network Open*, 4(3), e211757. <https://doi.org/10.1001/jamanetworkopen.2021.1757>

<sup>47</sup>De Marchis, E. H., Torres, J. M., Benesch, T., Fichtenberg, C., Allen, I. E., Whitaker, E. M., & Gottlieb, L. M. (2019). Interventions addressing food insecurity in health care settings: A systematic review. *Annals of Family Medicine*, 17(5), 436-447. <https://doi.org/10.1370/afm.2412>



### *COVID-19 Impacts: PPR Partial Baseline-Post Sample*

Among the full baseline sample of PPR participants, more than half agreed or strongly agreed that COVID-19 made it hard to make ends meet (58.8%) and that COVID-19 made it hard to purchase FVs (53.8%; [Table A22](#)). Nearly one-half (48.5%) of PPR participants indicated that they utilized emergency food sources (e.g., received free food from a food pantry, food bank, faith-based organization, or other place that helps with free food; [Table A22](#)).

For the PPR sub-sample (n=196), 67.2% of participants at baseline agreed or strongly agreed that COVID-19 made it hard to make ends meet. This percentage decreased to 58.3% at post-survey ([Table A22](#)). Similarly, 55.9% of sub-sample participants at baseline agreed or strongly agreed that COVID-19 made it hard to purchase FVs, while 49.5% reported the same at post-survey ([Table A22](#)). The percentage of PPR participants indicating that they had utilized emergency food sources was roughly equal from baseline to post-survey (42.5% to 44.0%; [Table A22](#)).

These changes from baseline to post reporting on the impact of COVID-19 on food access among the PPR participant subsample may indicate a protective effect of PPR project participation on hardships due to COVID-19. However, this percentage decrease may also be due to external and time variant factors (e.g., waning rates of COVID-19, relaxed social distancing requirements, reopening of food retail locations, Pandemic EBT). Given the relatively low sample size, these results should be interpreted with caution.

### *Other Program Impacts: PPR Partial Baseline-Post Sample*

#### *Self-reported Health*

For perceived health status, the majority of PPR sub-sample participants (n=196) at baseline reported their health being “fair” or “poor” (56.2%), which was similar to the full baseline PPR sample (55.2%), while 31.6% reported their health was “good,” which was also similar to the full baseline sample of whom 32.4% reported their health was “good” ([Table A23](#)). At baseline, a small percentage of PPR participants reported their health was “very good” or “excellent” (12.3%), which was equal to full baseline sample percentages.

At post-project survey, participants reported improved health overall, with 44.5% of PPR sub-sample participants (n=196) reporting their health as “fair” or “poor,” 41.4% as “good,” and 14.1% as “very good” or “excellent”. These results are encouraging, but should be interpreted with caution at this preliminary stage. In future years, the NTAE is working to evaluate changes in health outcomes (e.g., HbA1c, BMI) in order to corroborate findings on self-reported health.

#### *Program Satisfaction*

The post-project survey also included a rating of satisfaction with PPR projects. More than half of the participants (52.7%) felt “positive” or “very positive” about their PPR participation, 44.6% were neutral, and only 4.5% of participants reported their satisfaction as “negative” or “very negative” ([Table A24](#)). In-depth exploration into specific project characteristics, including outreach and implementation strategies, are warranted to understand the factors that can be improved for participants served by PPR projects. Satisfaction responses may also be affected by the fact that many planned activities (e.g., in-person education, transportation) were unable to be carried out due to pandemic restrictions on in-person gatherings.





## Challenges and Resolutions

During Y2, the NTAE addressed key challenges, implemented resolutions, and developed next steps and opportunities for year three (Y3) and beyond. The COVID-19 pandemic continued to present obstacles to grantees, firms, and partners contributing to GusNIP since most in-person activities remained postponed. **Activities affected included:**

- **Participant-level Data Collection.** Although the NTAE remained flexible and proactive during Y2, providing additional support to grantees regarding data collection and reporting was essential. Continued impacts of COVID-19 limited some grantees' ability to safely collect participant-level surveys. Notwithstanding difficulties attributed to social distancing measures and firm closures, the full aggregate sample of NI project participant surveys was achieved and exceeded.<sup>48</sup> As expected, milestones in data collection were achieved within the PPR sample, even amidst shifting clinic priorities due to COVID-19.<sup>49</sup> The NTAE aided grantees in the following ways:
  - Worked with grantees one-on-one to tailor participant-level surveys and establish appropriate data collection protocols.
  - Offered small grants for grantees to provide stipends to participants for completion of surveys. Further, the NTAE provided grantees with the option to use Rybbon, a service that facilitates safe and easy distribution of electronic stipends, for survey completion.
  - Highlighted alternative methods of data collection by showcasing an NI project's successful data collection process during COVID-19 in two national presentations and one submitted peer-reviewed manuscript.

- **Project Implementation.** Some grantees experienced delays in launching their project due to COVID-19. Other projects were able to launch in alignment with their proposal narrative (e.g., in the summer and early fall months due to seasonal operations of farm-direct sites). Grantees received support from their Program Advisor, Reporting Advisor, and the TA&I team to shift projects to achieve the proposed project objectives and follow COVID-19 precautions.
- **Firm-level Reporting.** Firm-level reporting was delayed in some cases when participating firms failed to submit their data to grantees ahead of NTAE reporting deadlines. Such delays are related to capacity at the firms (e.g., firms being short staffed), grantees or firms pulling data from multiple data collection systems, and the learning curve required for understanding firm-level reporting requirements. In response, the NTAE developed a new secure portal for firm-level reporting and implemented fewer reporting deadlines (from monthly to quarterly) to streamline efforts.
- **Clinic Partners.** PPR projects continue to be uniquely impacted by COVID-19 as many clinical partners must prioritize COVID-19 testing, increased patient care, and vaccine distribution. Several clinical partners were stymied in their ability to enroll participants and collect participant-level surveys and/or clinical data. The NTAE partnered with two additional physician scientists who have expertise in implementing and evaluating PPR projects within their active clinical practices to help troubleshoot issues, develop resources, and provide guidance for GusNIP partnering clinics.

<sup>48</sup>The NTAE intentionally provided oversample target estimates to grantees in order to ensure adequate statistical power to detect differences in FVI. Where necessary, the NTAE continues to work with grantees to collect additional data, which will contribute to the comprehensive dataset and impact evaluation.

<sup>49</sup>PPR projects by design are a cohort model, with participants completing a survey before a project is launched (i.e., baseline) and completing a follow-up survey after they have completed the program (i.e., at 'post'). Therefore, sample size requirements apply to grantees outside of the annual reporting period. We are confident that the full required sample will be reached as cohorts of PPR projects conclude.



- **Institutional Review Board (IRB).** The processes for IRB approval sometimes delayed project implementation and participant-level survey data collection. For some PPR grantees, IRB activities housed within the clinic were temporarily suspended due to competing priorities related to COVID-19. For other grantees, especially nonprofit organizations without an academic affiliation, staff spent significant time and effort finding an IRB. Others experienced delays securing funding to work with a for-profit IRB or waiting for IRB approval after submitting an application. Program Advisors directly assisted all grantees in seeking IRB approval, including providing template IRB protocols, consent forms, guidance to secure CITI training,<sup>50</sup> and corresponding with local IRBs. R&E vetted for-profit IRB options and established a referral relationship with [Advarra](#) for grantees to access as needed and developed a determination guide for the best IRB pathway per grantee.

- **Point of Sale Systems.** Incentive technology is a significant barrier to launching and scaling projects in food retail settings. A comprehensive inventory of shared standards for POS technology providers in B&M firms developed during Y2 provides the foundation to collaborating with grantees to apply this model in FD and clinical settings.
- **Nutrition Education.** Some projects had difficulty implementing nutrition education, which often takes place in-person and requires significant resources and expertise to shift to remote education. Creation of the Nutrition Education Community of Practice was one avenue to address nutrition education needs. During bi-monthly meetings, grantees and nutrition educators learn from and support each other to develop and implement remote access nutrition education opportunities for NI and PPR project participants.
- **In-person Field Visits.** The NTAE and Nutrition Incentive Hub could not conduct in-person site visits with grantees as originally planned. Staff intended to use field visits to provide hands-on training with data collection and other TA and evaluation support. Instead, the NTAE and Nutrition Incentive Hub transitioned to a more adaptive model. For example, Program Advisors built grantees' evaluation capacity through routine check-in calls, webinars, communities of practice, and other ad hoc support. In-person field visits will resume when safe.
- **Nutrition Incentive Hub Convening.** For the second year in a row, the Convening was offered virtually. This change allowed the inclusion of a much broader audience, including potential funders and other interested parties, than in an in-person setting.
- **GusCRR Support.** With the addition of GusNIP COVID-19 Relief and Response (GusCRR) funding from the recent stimulus package, an influx of 35 new projects and add-ons to existing projects require additional R&E and TA&I support. The NTAE and Nutrition Incentive Hub are planning for additional staff (e.g., Program Advisors, Reporting Advisors) and resources needs (e.g., tracking, reporting, and evaluation requirements) to support GusCRR.

<sup>50</sup>Required ethics training for conducting research with human subjects.



## Opportunities

- A major ramification of COVID-19 for NI and PPR projects has been the unforeseen and unrelenting surge in incentive demand. The GusCRR grant opportunity was a critical source of funding to help grantees meet the unexpected increase in incentive spending. Grantees were able to apply for this supplemental funding to help them build on their existing projects, allowing them to offer substantially more incentive dollars to make healthy food accessible during a time when millions of Americans need it most.
- To ensure the best possible experience for grantees, the NTAE has been working to sharpen communications and avoid duplication. We are developing an integrated system for tracking key information about grantees and the supports they request and receive from the NTAE. Further, before the widespread emergence of the COVID-19 Delta variant, an in-person meeting in June 2021 facilitated further alignment between the R&E and TA&I teams, including changes in staffing and systems to be more responsive to grantees' needs and provide even more comprehensive support.
- The NTAE developed individual grantee annual summary reports for all 2019 grantees (i.e., those with complete Y1 data). Using feedback from grantees on the interpretability of some challenging metrics, the NTAE revised reports for greater clarity and understandability. The NTAE is currently working to include participant-level data in these individual grantee reports as Y2 was the first year these data were collected.
- Throughout the year, grantees and core partners identified additional resources to help facilitate project implementation and evaluation. In response, the R&E team developed several new resources. For example: a detailed guide on study design and evaluation for PPR projects, HIPAA and data sharing guides for PPR projects, a guidance document on working with electronic health records (EHR) data for PPR projects, a qualitative methods guide and templates, and an NI Theory of Change.
- In Y2, several PPR projects applied for GusNIP for the first time, while most of the NI applicants in Y2 had already received USDA funding. To support both current and potential grantees, and to build the field of GusNIP-supported NI projects, the NTAE will dedicate additional time and capacity to reach under-represented communities and geographies to inform them of the support services offered by the NTAE and Nutrition Incentive Hub and developing new resources specifically targeting first-time GusNIP applicants.
- In order to generate greater collaboration, understanding, and engagement around R&E, the NTAE established an External Evaluators Community of Practice and an Evaluation Subcommittee. The External Evaluators Community of Practice engaged with grantees and their external evaluators to share best practices and foster collaboration across grantee projects (e.g., development of resources, manuscripts). The Evaluation Subcommittee provided an opportunity for Nutrition Incentive Hub core partners to contribute input to R&E that leveraged core partner expertise (e.g., development of measurement tools specific to target audiences they regularly serve) and fostered a direct line of communication between core partners and the NTAE R&E team to discuss research gaps and solutions.

## Next Steps for Future Years

In Y3 and beyond, combined R&E and TA&I efforts will focus on strengthening the field of NI and PPR grantees and practitioners by expanding the reach and impact of the NTAE as follows:

- Continue developing and training grantees on how to use the public website and secure portal to access all NTAE and Nutrition Incentive Hub resources and enter and manage firm-level reporting.
- Build out data visualizations for both firm- and participant-level data that are available to grantees on the portal “dashboards” and in annual reports.
- Establish USDA-guided firm- and participant-level reporting standards for grantees who hold multiple grants (e.g., FINI, GusNIP, and GusCRR) to ensure all grantees are in compliance and to minimize reporting burden on firms, clinics, practitioners, and participants.
- Continue to plan for and support grantees in collection of rigorous data in order to achieve a robust sample for a rigorous comprehensive evaluation in Y4.
- Accommodate grantees who need support with establishing IRB approval. Specifically, the NTAE will build on existing guides, protocols, and templates, and develop resources including: a single IRB determination letter, IRB reliance letter, email templates to query IRBs, and a step-by-step guide for working with for-profit IRBs.
- Continue improving team development and increased collaboration between R&E, TA&I, and core partners by holding an in-person team retreat in 2022 (if viable).
- Expand evaluation resources for PPR projects such as data sharing agreements, health measures protocols, and engaging with the NTAE’s team of physician scientist consultants.
- Develop surveys for grantees to administer to their partnering firms (e.g., stores, clinics) to assess impact, feasibility, satisfaction, and suggested areas for improvement related to project implementation and reporting.
- Expand statistical and study design support by collaborating with experts in the fields of NI and PPR research.
- Enhance protocols for working with grantees who experience R&E challenges and work closely with USDA to strategize solutions for supporting these grantees.
- Continue to learn from grantees, practitioners, and participants regarding their need for assistance and additional resources and respond to requests for these supports in a timely and science-driven manner.
- Help grantees navigate the uncertainties of project demand due to COVID-19’s economic implications. At present, demand for incentives to make healthy food more affordable shows little sign of slowing. The NTAE and Nutrition Incentive Hub will continue to closely monitor trends in project uptake to help grantees adjust to shifts in enrollment, including strategies for participant engagement, project expansion, and capacity building.
- Provide \$1M in targeted investments to build the technology and organizational capacity of under-represented and/or lower-capacity organizations, states, and regions through the Capacity Building and Innovation Fund.
- Launch industry-specific curriculum to help both FD and B&M firm operators and their respective grantee partners to implement incentives.
- Provide targeted fundraising resources for NI practitioners to raise necessary match funds and PPR practitioners to supplement GusNIP funding. TA&I will help grantees and potential applicants understand state-level funding opportunities, communicate the impact of incentive projects to potential funders and cultivate philanthropic investments.
- Develop and deploy DEI trainings to help NTAE partners, grantees, and practitioners build racial equity in the food system. We are working with an external DEI consultant to develop a curriculum for NTAE and Nutrition Incentive Hub partners and grantees, aimed at raising awareness of barriers to equity in the food system and approaches to authentic communication.

# Appendices

## Appendix 1. Glossary of Acronyms/Abbreviations

Abbreviation/Acronym	Full Name/Description
<b>B</b>	
B&M	brick and mortar
<b>C</b>	
CSA	community supported agriculture
<b>D</b>	
DEI	diversity, equity, and inclusion
<b>E</b>	
EBT	Electronic Benefits Transfer
EHR	electronic health record
<b>F</b>	
FFN	Fair Food Network
FD	farm direct
FI	food insecurity
FINI	Food Insecurity Nutrition Incentive Program
FPP	GusNIP Pilot Projects (USDA NIFA program code)
FIP	GusNIP Projects (USDA NIFA program code)
FLSP	GusNIP Large Scale Projects (USDA NIFA program code)
FQHC	Federally Qualified Health Center
FVs or F&Vs	fruits and vegetables
FVI	fruit and vegetable intake
<b>G</b>	
GSCN	Gretchen Swanson Center for Nutrition
GusCRR	GusNIP COVID Relief and Response
GusNIP	Gus Schumacher Nutrition Incentive Program (formerly the FINI Program)
<b>H</b>	
HIP	Healthy Incentives Pilot
HIPAA	Health Insurance Portability and Accountability Act
<b>I</b>	
IRB	Institutional Review Board
<b>M</b>	
MIFMA	Michigan Farmers Market Association
MSU CRFS	Michigan State University Center for Regional Food Systems
MVP	minimum viable product
<b>N</b>	
NGAF	National Grocers Association Foundation
NI	nutrition incentive (includes SNAP incentives)
NIFA	National Institute of Food and Agriculture, USDA
NTAE	Nutrition Incentive Program Training, Technical Assistance, Evaluation, and Information Center  <i>Note: GSCN serves as the NTAE for GusNIP, also known as the NTAE Center or GusNIP NTAE Center</i>

Abbreviation/Acronym	Full Name/Description
<b>P</b>	
POS	point of sale
PPR	produce prescription (general); GusNIP Produce Prescription Project (USDA NIFA program code)
<b>R</b>	
R&E	Reporting and Evaluation
RFA	request for applications
<b>S</b>	
SNAP	Supplemental Nutrition Assistance Program
SNAP-Ed	Supplemental Nutrition Assistance Program Education
<b>T</b>	
TA	technical assistance
TA&I	Technical Assistance and Innovation
<b>U</b>	
UAT	user acceptance testing
USDA	United States Department of Agriculture
<b>Y</b>	
Y	year

## Appendix 2. Core Partner Structure

USDA NIFA

### GusNIP NTAE Center

Gretchen Swanson Center for Nutrition

#### Project Director

Amy Lazarus Yaroch, PhD



### Reporting & Evaluation

#### R&E Lead

Gretchen Swanson Center for Nutrition

#### Research Partners

Data Management and Analysis Center,  
Cincinnati Children's Hospital Medical Center

University of California San Francisco

Hilary Seligman, MD, MAS

Melissa Akers, MPH, CPH

Bailey Houghtaling, PhD, RDN, LDN

Victoria Raschke, MA

Laurel Sanville, MS, RDN, LD

Justin Shanks, PhD

Lydia Soo-Hyun Kim, MD, MPH

Sarah Stotz, PhD, MS, RD, CDE

### Technical Assistance & Innovation

#### TA&I Lead

Fair Food Network

#### Farm Direct

Farmers Market Coalition

Michigan Farmers Market Association

Ecology Center

#### Grocery Retail

National Grocers Association Foundation

#### Produce Prescription

Michigan Farmers Market Association

Legend Consulting

#### DEI, Local Sourcing, & Partnership Development

Michigan State University Center for Regional Food Systems

#### Corner Stores & Nutrition Education

The Food Trust

### Appendix 3. TA&I Webinar and Online Training Topics

Over 700 practitioners and stakeholders joined webinars and online training opportunities focusing on an array of topics:

- Thinking Inside the Box: Making Healthy Food Accessible with Curbside/Drive-Thru Models at Farmers Markets During COVID-19
- Promising Practices when Implementing Nutrition Incentive Programs with Mobile Delivery Routes
- Working with Food Hubs to Source Local Products for Your Nutrition Incentive Program
- Capacity Building and Innovation Fund Information Session
- Diversity, Equity, and Inclusion in Community Engagement and Advisory Groups
- Match the Market: Adapting Nutrition Incentives to Various Food Outlets
- Working with Food Hubs to Source Local Products
- Navigating the GusNIP and GusCRR RFAs
- Local Food and Local Solutions: Advocating for No-Cost Wireless SNAP Equipment at Farm Direct Outlets
- Food System Justice Equity Diversity Inclusion (3-part series)
- Technology Coffee Hour
- Promising Practices When Implementing Nutrition Incentives with Mobile Delivery Routes
- Incorporating Stakeholder Values in Incentive Local Sourcing Efforts
- SNAP Incentives in Community Supported Agriculture (CSA) Programs



## Appendix 4: Description of 2020 GusNIP Grantees

### Description of 2020 GusNIP Grantees: Produce Prescription Projects (PPR)

The table below describes key elements of the 10 GusNIP Produce Prescription Projects (PPR) funded in 2020, including grantee name, amount funded, award term, geographic reach of the project, the type and number of firms offering the incentive, and a brief project initiation description. PPR projects are aimed at groups developing county, multi-county, and/or state-wide projects that partner with one or more health care entities and seek to **increase fruit and vegetable (FV) purchases, increase FV intake (FVI), and decrease food insecurity (FI), and decrease healthcare utilization and costs in the longer term.** Awards are up to \$500,000 and the project period is up to 3 years. Descriptions of 2019 PPR grantees can be found in the Y1 report.

*“The NTAE has been a life-saver for administering this grant. The staff is always working hard to make sure that we are up to date with our own data as well as looking at trends from other grantees. The greatest part is how quickly questions are answered. The NTAE is also helping us find ways to be more expeditious with our processes. It’s great to have such a wonderful team that is constantly cheering for your success and helping you make it happen.”*

– GusNIP PPR Grantee

**All PPR projects have included as their goals to increase FV purchases, increase FVI, decrease FI, and improve health outcomes among project participants, given that these outcomes are specified as the overarching purpose of PPR projects.** Project initiation descriptions include a brief project summary with additional goals of interest.

Grantee	Total Grant Amt. and Time Period	Geographic Reach	Type and # of Firms	Project Initiation Description
<a href="#">County of Los Angeles</a>	\$500,000 over 3 years	Los Angeles County, California	4 brick and mortar stores 1 clinic	This project will serve FI Medicaid patients with a type 2 diabetes diagnosis or enrollment in the National Diabetes Prevention Program. Participants receive \$40 per household loaded on an electronic debit card, refreshed monthly for 6 months. Additional goals: reduce the risk of developing diet-related chronic diseases.
<a href="#">Delta Health Alliance</a>	\$499,979 over 3 years	Washington County, Mississippi	1 clinic	This project will work with rural families and provide 1:1 matching (e.g., 50% off) for SNAP funds spent on qualifying FVs, \$30 maximum incentive dollar amount per week through vouchers.
<a href="#">Foundation of District 304</a>	\$374,473 over 3 years	Skagit County, Washington	5 farm direct sites, 3 clinics, 5 brick and mortar stores	This project will work with health care providers to identify and recruit up to 130 participants, who will complete assessments at baseline, mid-project, and post-intervention. “FVRx Bucks” will be distributed during monthly nutrition and cooking classes. Participants will receive prescription (e.g., script) for \$1/day/ household member, redeemable for fresh FVs. Additional goals: improve participants’ chronic disease self-management.
<a href="#">Fresh Approach</a>	\$151,989 over 2 years	East Palo Alto, California	3 clinics, 3 farmers markets	This project will work with pediatric and adult patients who have been screened for FI and diet-related health disorders. The project is administered in a series of 16 weeks (four series, each with 15 participants). Each series will consist of at least two health screenings and eight trauma-informed nutrition and cooking group sessions. Participants will receive vouchers with each visit, redeemable for FVs. Participants will receive a \$20 voucher per person in each household per week. Additional goals: improve health outcomes.

Grantee	Total Grant Amt. and Time Period	Geographic Reach	Type and # of Firms	Project Initiation Description
<a href="#">Friends of Zenger Farms</a>	\$492,827 over 3 years	Portland Metropolitan Area, Oregon	11 clinics, 4 CSA sites	This project will subsidize the cost of CSA shares to low-income health clinic patients while gathering additional data needed by insurers to cover the project as a regular benefit through Medicaid. A co-pay of \$5 per week in cash or SNAP is exchanged for \$28 worth of whole FVs, grains, and beans. Goals: quantify impact of CSA prescriptions on BMI and hemoglobin A1c.
<a href="#">Heritage Ranch, Inc.</a>	\$499,950 over 3 years	6 North and West rural Hawaii Island districts	1 clinic	This project will work in conjunction with 12 clinics in six rural North and West Hawaii Island districts to identify 500 patients with chronic illness that can be improved through dietary changes. Project funds up to \$600 in incentives per “Veggie Rx” patient. Additional goals: increase access to fresh, local FVs and reach historically underserved households at risk of serious health conditions.
<a href="#">Kokua Kalihi Valley Comprehensive Family Services</a>	\$498,105 over 3 years	Kalihi Valley near Honolulu, Hawaii	1 clinic, 1 farm direct site	This project will provide prescriptions written by clinical providers for 210 very low-income patients with diet-related chronic medical conditions. “FVRx” patients will have a weekly allotment of \$1.42/ per person/day per week. Bags of produce will be created with unit values based on weight and cost. Additional goals: increase integration of project’s clinical care services and the Roots Food Hub, provide culturally appropriate nutrition education, uplift and build food agency among patients with chronic conditions.
<a href="#">New Mexico Farmers Marketing Association</a>	\$499,998 over 3 years	11 counties in New Mexico	19 clinics, 2 CSA sites, 16 farm direct sites	This project will enroll participants throughout New Mexico to a 12–16-week “FreshRx” project at their health clinic, provide participants with incentives for fresh, New Mexico grown FVs, and provide nutrition education to clients. Participants will be provided with weekly incentives ranging from \$15-\$30. Clinics will determine incentive amounts based on knowledge of their client base and cost of produce in different regions. Additional goals: support the development of the local food system and economy.
<a href="#">Reinvestment Partners</a>	\$500,000 over 3 years	Central and Eastern North Carolina	3 clinics, 35 brick and mortar stores	This project, “RP Rx-VA,” will provide low-income patients who receive SNAP benefits with a \$40 monthly prescription to purchase FVs from Food Lion (a regional grocery chain). Additional goals: reduce barriers to healthy eating among low-income veterans and their families and demonstrate effective use of technology to allow for greater participant engagement.
<a href="#">Waianae District Comprehensive Health and Hospital Board, Inc.</a>	\$499,479 over 3 years	Waianae Coast of Oahu, Hawaii	1 clinic, 1 farmers market	This project will work with medically underserved, economically distressed communities and enroll a total of 400 participants. Participants may remain in the project for up to 18 months. Participants will receive vouchers for fresh produce worth \$50 per month. Additional goals: implement a sustainable, integrated PPR project that will improve the health and wellness among low-income patients with nutrition-related chronic diseases.

## Appendix 4: Description of 2020 GusNIP Grantees

### Description of 2020 GusNIP Grantees: GusNIP Large Scale Projects (FLSP)

The table below describes key elements of the eight GusNIP Large Scale Projects (FLSP) funded in 2020, including grantee name, amount funded, award term, geographic reach, the type and number of firms offering incentives, and a brief project initiation description. FLSP aim to create multi-county, state-wide, and/or regional incentive projects, and often involve the expansion of an existing incentive project. FLSP have included as their goals to **increase fruit and vegetable (FV) purchases, increase FV intake (FVI), and decrease food insecurity (FI) among project participants**. Awards are \$500,000 or greater and the project period is up to 4 years. Descriptions of 2019 FLSP grantees can be found in the Y1 report.

*“As a first-time GusNIP grantee, I’ve had many questions about how to properly administer a large-scale federal grant. Beyond support with the nuances of grant administration, the Hub offers extensive guidance on how to best design and implement our grant’s NI program. As a large statewide program with many components, we have received TA on a wide variety of topics, ranging from point-of-sale technologies to implementing an effective program evaluation. I’ve especially appreciated my participation in the “Holistic TA” pilot program, which connects me with a cohort of peers from across the country for quarterly check-in meetings. No matter what type of question I have, I know that there is somebody in the Hub with relevant expertise who can help.”*

– GusNIP Large Scale NI Grantee

**All FSLP have included as their goals to increase FV purchases, increase FVI, and decrease FI among project participants, given that these outcomes are specified as the overarching purpose of GusNIP.** Project initiation descriptions include a brief project summary and project goals.

Grantee	Total Grant Amt. and Time Period	Geographic Reach	Type and # of Firms	Project Initiation Description
<a href="#">Farmers Market Fund</a>	\$1,921,875 over 3 years	Statewide, Oregon	67 farm direct sites, 16 brick and mortar stores	This project will work with SNAP participants to increase their purchases of fresh, local FVs. Offering a dollar-for-dollar match of up to \$20 per day at farmers markets; offering a dollar-for-dollar match at grocery stores of up to \$10 per day; and at CSAs by offering a dollar-for-dollar match of up to \$200 per share per season. Goal: increase the purchase and intake of Oregon-grown FVs at farmers markets.
<a href="#">Field &amp; Fork Network, Inc.</a>	\$797,553 over 4 years	Western, Eastern, and Central New York State, Adirondacks	44 farm direct sites, 6 mobile markets, 28 brick and mortar stores	This project will match SNAP benefits dollar-for-dollar of up to \$20 per day to provide nutritionally vulnerable residents with access to fresh, healthy foods that are also associated with a lower incidence of chronic disease. Goals: increase purchase and intake of FVs by providing incentives at point of purchase using effective and efficient benefit redemption technologies.
<a href="#">Fund for Public Health in NY, Inc.</a>	\$5,513,510 over 4 years	New York City	132 farm direct sites, 7 brick and mortar stores	This project will expand “Health Bucks” to reach new participants and provide more Health Bucks to existing participants through provision of a \$2 Health Bucks coupon for every \$2 spent in SNAP, with a transaction cap of \$10. Goals: increase purchase and intake of locally grown FVs among SNAP participants by providing incentives at point of purchase.

Grantee	Total Grant Amt. and Time Period	Geographic Reach	Type and # of Firms	Project Initiation Description
<a href="#">Mid-America Regional Council Community Services Corporation</a>	\$4,050,237 over 3 years	Kansas and Western Missouri	31 brick and mortar stores, 50 farm direct sites, 1 mobile market	This project will serve new locations in rural and urban communities with high rates of SNAP participation. At farmers markets, tokens purchased with SNAP dollars receive up to \$25 as a match. At grocery stores, customers buy fresh FVs with their SNAP EBT card and earn “Double Up Food Bucks” on their loyalty card or as a coupon, voucher, or a direct discount. Goals: increase purchase and intake of FVs and expand project to new farmers markets and grocery stores.
<a href="#">Nourish Colorado</a>	\$2,655,483 over 3 years	Statewide in Colorado	30 brick and mortar stores, 59 farm direct sites	This project will broaden reach to SNAP participants while increasing farmer viability throughout the state. For every \$1 purchased of SNAP-eligible items, \$1 of incentive will be available to purchase Colorado grown FVs, up to \$20/visit. Goals: expand incentives, increase FV purchases and intake, and reach new customers.
<a href="#">The Experimental Station: 6100 Blackstone</a>	\$881,018 over 2 years	Statewide in Illinois	12 brick and mortar stores, 63 farm direct sites	This project will increase the purchase of FVs by consumers participating in SNAP by providing incentives at the point of purchase. SNAP shoppers will receive a double value incentive with a \$25 incentive limit. Goals: establish a network of partner sites and venues across the state, support incentive use through strong branding and promotion for “Link Match,” ensure a base of state funding for nutrition incentives, increase FV purchase and intake, and support regional farmers.
<a href="#">The Food Trust</a>	\$749,682 over 3 years	Rural, Central and Eastern Pennsylvania, and New Jersey	30 farm direct sites, 17 brick and mortar stores	This project will continue to build upon previous successes in high-need urban and rural areas across Pennsylvania and New Jersey by increasing the incentive ratio from 40% to 100% in response to COVID-19. Goals: increase fresh FV purchases and intake by shoppers using SNAP benefits by implementing and evaluating an expanded “Food Bucks” incentive project at supermarkets, corner stores, farmers/mobile markets and other non-traditional retail outlets.
<a href="#">Washington State Department of Health</a>	\$4,797,199 over 3 years	34 counties in Washington	202 brick and mortar stores, 117 farm direct sites	This project will distribute \$3,620,860 of FV incentives in 34 of 39 counties where 99% of Washington SNAP participants live. Goals: increase FV access, decrease FI, improve health outcomes, improve the state’s food and agricultural system.

## Appendix 4: Description of 2020 GusNIP Grantees

### Description of 2020 GusNIP Grantees: GusNIP Projects (FIP)

The following table describes key elements of the 10 GusNIP Projects (FIP) funded in 2020, including grantee name, amount funded, award term, geographic reach of the project, the type and number of firms offering incentives, and a brief project initiation description. FIP target mid-size groups developing incentive projects at the local and/or state level and typically have established relationships with partners and collaborators. FIP have included as their goals to **increase fruit and vegetable (FV) purchases, increase FV intake (FVI), and decrease food insecurity (FI) among project participants**. Awards are up to \$500,000 and the project period is up to 4 years. Descriptions of 2019 FIP grantees can be found in the Y1 report.

*“The GusNIP NTAE partnership team is the north star for grantees navigating the complexities of the GusNIP program. Their comprehensive services guide us through processes for data collection, reporting, and evaluation, and connect us to critical technical assistance for program innovation. Their tireless work has reduced our program’s data collection and entry burden by 50% and the new custom portal is sure to increase engagement at the firm-level. Their genuine care, expertise, and wisdom is one of our greatest assets, and I look forward to working with the NTAE for the next three years at least!”*

– GusNIP Mid-Size NI Grantee

**All FIP have included as their goals to increase FV purchases, increase FVI, and decrease FI among project participants, given that these outcomes are specified as the overarching purpose of GusNIP.** Project initiation descriptions include some detail about these and other goals.

Grantee	Total Grant Amt. and Time Period	Geographic Reach	Type and # of Firms	Project Initiation Description
<a href="#">Community Food and Agriculture Coalition</a>	\$500,000 over 4 years	Statewide in Montana	25 farm direct sites (1 CSA site, 2 farm stands, 1 other, 21 farmers markets), 3 brick and mortar stores	This project will meet the health needs of low-income community members. Upon completion of a cooking class, SNAP participants will receive a \$10 or \$20 voucher and CSA incentives are capped at \$200 off of a CSA share. Goals: increase purchase and consumption of Montana- grown FVs, diversify communities offering “Double SNAP Dollars,” increase participation through marketing, and advance equity.
<a href="#">DC Central Kitchen</a>	\$500,000 over 3 years	Washington, DC	32 brick and mortar stores	This project will support 38 small retailers in low-income, low-access neighborhoods to become robust, reliable access points for FVs through the implementation of a digitized, produce-for-produce SNAP incentive model. A purchase of \$5 or more will trigger a coupon for \$5 worth of FVs. Goals: increase purchase of FVs at participating corner stores and small retailers, establish a produce-for-produce model, expand from fresh FVs to include frozen produce, and leverage innovative technology solutions.
<a href="#">Market Umbrella</a>	\$500,000 over 4 years	New Orleans, LA	5 farmers markets, 2 CSA sites, 1 brick and mortar store	This project will expand the use and impact of SNAP incentives, creating the “New Orleans Market Match Program.” Nutrition education activities include educational materials, cooking classes, and tastings. Participants will receive a dollar-for-dollar match on FVs up to \$20 per day, and a dollar-for-dollar match on Top Box Foods produce-only boxes (up to \$20 per box for home delivery and community hub pick-up). Goal: increase access to FVs among low-income residents.

Grantee	Total Grant Amt. and Time Period	Geographic Reach	Type and # of Firms	Project Initiation Description
<a href="#">Michigan Physical Fitness, Health and Sports Foundation, Inc.</a>	\$500,000 over 4 years	8 communities across Michigan	8 CSA sites	This project will provide a 75% incentive for SNAP participants to purchase shares in locally offered CSAs and work to improve access to FVs, improve FVI for families facing FI, and strengthen linkages in local food systems. Goals: increase purchase and intake of FVs and provide access to a safe, nutritious, and secure food supply.
<a href="#">Nebraska Community Foundation</a>	\$500,000 over 3 years	Statewide in Nebraska	8 farm direct sites, 14 brick and mortar stores	This project will provide dollar-for-dollar matches on fresh FVs. "Double Up Food Bucks" sites will offer in-store nutrition education, food demonstrations, promotion and marketing to help participants access FVs. Goals: reduce financial barriers to increase purchase and intake of FVs and improve the diet quality and health of SNAP participants by expanding a point-of-purchase fresh FV incentive project to rural food access points.
<a href="#">Rhode Island Public Health Institute</a>	\$500,000 over 4 years	Statewide in Rhode Island	3 mobile market sites	This project will meet the needs of older adults with chronic disease. "Food on the Move" is a year-round mobile produce market that brings fresh produce to the people and places that need it most and makes healthy food more affordable by offering a 50% discount on produce purchased with SNAP dollars. Goals: improve diet related chronic disease by increasing the purchase and intake of FVs.
<a href="#">St. Joseph Community Health Foundation, Inc.</a>	\$500,000 over 4 years	Allen County, Indiana	3 brick and mortar stores, 6 farm direct sites	This project will extend current work to also include a commercial retailer located in low-income census tracts to increase the accessibility of FVs to those with SNAP benefits. The project will increase SNAP match dollars from 4% to 50% of total sales. Goals: improve the amount and quality of fresh FV purchases and intake among identified populations.
<a href="#">Tulsa Community Foundation</a>	\$500,000 over 2 years	Statewide in Oklahoma	9 brick and mortar stores, 21 farm direct sites	This project seeks to increase FV purchases among SNAP participants, improve livelihoods of farmers, and improve FI by incentivizing produce purchases at the point-of-sale through "Double Up Oklahoma." This project will increase purchasing power by doubling SNAP dollars to buy approved produce. Participants will receive a \$1:1 match up to \$20 per day. Goals: increase purchase and intake of FVs, increase access to FVs, and improve livelihood of local farmers.
<a href="#">Urban Food Initiative (Daily Table)</a>	\$500,000 over 4 years	Boston Metropolitan Area, Massachusetts	3 brick and mortar stores	This project will work to address pervasive food access problems utilizing a unique nonprofit grocer model to efficiently deliver incentives. The project intends to increase the incentive offerings above the \$10 limit (\$5 SNAP + \$5 incentive) with increased funding. Goals: increase the amount of FVs purchased and increase intake of local and regional produce.
<a href="#">West Virginia Food and Farm Coalition, Inc.</a>	\$500,000 over 4 years	Statewide, West Virginia	10 brick and mortar stores, 38 farm direct sites	This project will expand "SNAP Stretch" to increase the purchase of fresh FVs. The project will match SNAP purchases at farmers markets, roadside stands, CSAs, local grocers, and mobile markets at a dollar-for-dollar rate for adults. SNAP purchases will be matched at a 1:2 rate for families with children and a 1:2 rate for senior citizens. Goals: diversify SNAP Stretch sites, integrate nutrition education, and increase access, purchase, and intake of FVs.

## Appendix 4: Description of 2020 GusNIP Grantees

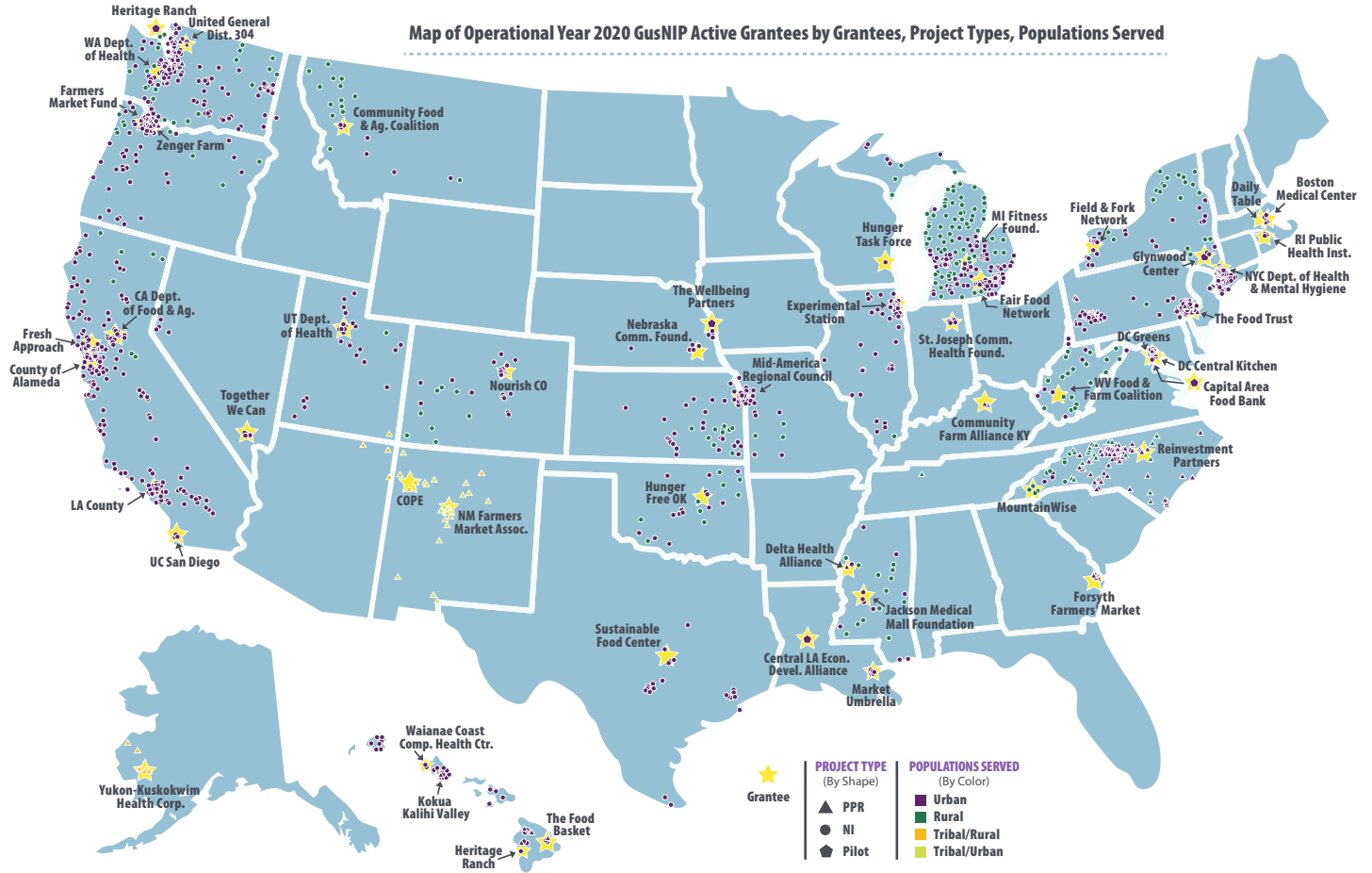
### Description of 2020 GusNIP Grantees: GusNIP Pilot Projects (FPP)

The table below describes key elements of the two GusNIP Pilot Projects (FPP) funded in 2020, including grantee name, amount funded, award term, geographic reach of the project, the type and number of firms offering the incentive, and a brief project initiation description. GusNIP FPP support the development of projects with an infusion of federal dollars to pilot innovative strategies to **increase fruit and vegetable (FV) purchases, increase FV intake (FVI), and decrease food insecurity (FI) among project participants**. Awards are up to \$100,000 and the project period is one year. Descriptions of 2019 FPP grantees can be found in the Y1 report.

**All FPP have included as their goals to increase FV purchases, increase FVI, and decrease FI among project participants, given that these outcomes are specified as the overarching purpose of GusNIP.** Project initiation descriptions include some detail about these and other goals.

Grantee	Total Grant Amt. and Time Period	Geographic Reach	Type and # of Firms	Project Initiation Description
<a href="#">Capital Area Food Bank</a>	\$40,000 over 1 year	Ward 8, Washington DC	1 mobile market with 9 stops	This project will implement a mobile grocery truck, "Curbside Groceries," at nine community partner stops to increase access to and purchase of fresh FVs and other nutritious items among low-income individuals. Patrons can double the amount of FVs they receive upon purchase of any GusNIP qualifying FVs through SNAP EBT. Goal: increase convenience and remove transportation barriers to result in higher demand, purchase, and intake of low cost, nutritious foods, particularly fresh produce.
<a href="#">The Wellbeing Partners</a>	\$100,000 over 1 year	Douglas County, Nebraska	Unknown	This project will engage in consumer outreach and in-store education to promote "Double Up Food Bucks" to distribute more fresh FVs to SNAP participants and to encourage increased consumption of these nutrient rich and healthy foods. Goal: increase project utilization and FV purchases and intake among Latino consumers and to amplify shoppers' voices in how they wish to receive culturally relevant messaging.

# Appendix 5. Map of Operational Year 2020 GusNIP Active Grantees by Grantees, Firm Types, Populations Served





## Appendix 6. Firm-Level Results Tables

**Table A1. Financial Instruments for Incentive Redemption by Project Type and Firm Type (2020-2021)<sup>1</sup>**

	<b>PPR (N=65)</b>	<b>NI (N=1,637)</b>	<b>B&amp;M (N=504)</b>	<b>FD (N=1,142)</b>	<b>Clinics (N=56)</b>	<b>Overall (N=1,702)</b>
<b>Token</b> N (%)	4 (6.2%)	452 (27.6%)	7 (1.4%)	448 (39.2%)	1 (1.8%)	456 (26.8%)
<b>Paper Voucher/Coupon</b> N (%)	36 (55.4%)	872 (53.3%)	293 (58.1%)	580 (50.8%)	35 (62.5%)	908 (53.4%)
<b>Loyalty Account<sup>2</sup></b> N (%)	8 (12.3%)	175 (10.7%)	143 (28.4%)	32 (2.8%)	8 (14.3%)	183 (10.8%)
<b>Discount at Register</b> N (%)	0	122 (7.5%)	55 (10.9%)	67 (5.9%)	0	122 (7.2%)
<b>EBT Card</b> N (%)	0	35 (2.1%)	14 (2.8%)	21 (1.8%)	0	35 (2.1%)
<b>Other<sup>3</sup></b> N (%)	18 (27.7%)	6 (0.4%)	3 (0.6%)	8 (0.7%)	13 (23.2%)	24 (1.4%)

B&M = brick and mortar firms; EBT = electronic benefit transfer; FD = farm direct firms; NI = nutrition incentive; PPR = produce prescription

<sup>1</sup>Firms that did not report on financial instruments for incentive redemption (i.e., cases where this question was not applicable) were removed from the sample. Percentages are column percentages. Number of firms (n) in each column header is based on the number of firms that have data for this metric, not the total number of firms operating this year. Firms may select multiple options for financial instruments for incentive redemption so the rows in each column may not add up to the number of firms (n).

<sup>2</sup>Loyalty account includes firms with online loyalty accounts, loyalty cards, and/or ID-based loyalty accounts.

<sup>3</sup>Other responses included CSAs shares, pre-paid debit card, and paper rosters.

**Table A2. SNAP Purchases/Products Eligible to Trigger Incentives by Firm Type (Nutrition Incentive Projects Only) (2020-2021)<sup>1</sup>**

	<b>B&amp;M (N=504)</b>	<b>FD (N=1,133)</b>	<b>Total NI (N=1,637)</b>
<b>All SNAP Eligible Items</b> N (%)	71 (14.1%)	1,072 (94.6%)	1,143 (69.8%)
<b>All Fresh FVs Only</b> N (%)	180 (35.7%)	28 (2.5%)	208 (12.7%)
<b>All Fresh FVs (plus canned, frozen, dried, plants, and/or seeds)</b> N (%)	213 (42.3%)	4 (0.3%)	217 (13.3%)
<b>Only State or Regionally Grown FVs</b> N (%)	40 (7.9%)	16 (1.4%)	56 (3.4%)
<b>Other</b> N (%)	11 (2.2%)	4 (0.4%)	15 (0.9%)
<b>Unable to Discern<sup>2</sup></b>	0	12 (1.1%)	12 (0.7%)

B&M = brick and mortar firms; FD = farm direct firms; FV = fruit and vegetable; NI = nutrition incentive; SNAP = Supplemental Nutrition Assistance Program

<sup>1</sup>Percentages are column percentages. Number of firms (n) in each column header is based on the number of firms that have data for this metric, not the total number of firms operating this year. Firms may select multiple options for SNAP purchases eligible to trigger incentives so the rows in each column will not add up to the number of NI firms (n).

<sup>2</sup>“Unable to discern” refers to responses where multiple mutually exclusive responses were selected (e.g., All SNAP eligible items + Only state or regionally grown FVs) making it impossible to categorize accurately

**Table A3.** Fruits and Vegetables (FVs) Eligible for Incentives by Project Type and Firm Type (2020-2021)<sup>1</sup>

	<b>PPR (N=235)</b>	<b>NI (N=1,637)</b>	<b>B&amp;M (N=670)</b>	<b>FD (N=1,201)</b>	<b>Clinics (N=1)</b>	<b>Overall (N=1,872)</b>
<b>All Fresh FVs Only</b> N (%)	67 (28.5%)	578 (35.3%)	258 (38.5%)	386 (32.1%)	1 (100.0%)	645 (34.5%)
<b>All Fresh FVs (plus canned, frozen, dried, plants, and/or seeds)</b> N (%)	143 (60.9%)	466 (28.5%)	358 (53.4%)	251 (20.9%)	0	609 (32.5%)
<b>Only State or Regionally Grown FVs</b> N (%)	51 (10.2%)	560 (34.2%)	51 (7.6%)	533 (44.4%)	0	584 (31.2%)
<b>Other</b> N (%)	1 (0.4%)	37 (2.3%)	7 (1.0%)	31 (4.9%)	0	38 (2.0%)

B&M = brick and mortar firms; FD = farm direct firms; FV = fruit and vegetable; NI = nutrition incentive; PPR = produce prescription

<sup>1</sup>Firms that did not report on FVs eligible for incentives (i.e., cases where this question was not applicable) were removed from the sample. Percentages are column percentages. Number of firms (n) in each column header is based on number of firms that have data for this metric, not the total number of firms operating this year. Firms may select multiple options for FVs eligible for incentives so the rows in each column will not add up to the number of firms (n).

**Table A4. Nutrition Education Activities Offered by Project Type and Firm Type (2020-2021)<sup>1</sup>**

	<b>PPR (N=101)</b>	<b>NI (N=516)</b>	<b>B&amp;M (N=117)</b>	<b>FD (N=444)</b>	<b>Clinics (N=56)</b>	<b>Overall (N=617)</b>
<b>DPP Classes</b> N (%)	6 (5.9%)	4 (0.8%)	0	4 (0.9%)	6 (10.7%)	10 (1.6%)
<b>SNAP-Ed Programs</b> N (%)	25 (24.8%)	212 (41.1%)	37 (31.6%)	192 (43.2%)	8 (14.3%)	237 (38.4%)
<b>One-on-one Coaching</b> N (%)	41 (40.6%)	6 (1.2%)	0	9 (2.0%)	38 (67.9%)	47 (7.6%)
<b>Support Groups</b> N (%)	11 (10.9%)	3 (0.6%)	1 (0.9%)	2 (0.5%)	11 (19.6%)	14 (2.3%)
<b>Consultation with a Registered Dietitian</b> N (%)	26 (25.7%)	2 (0.4%)	2 (1.7%)	5 (1.1%)	21 (37.5%)	28 (4.5%)
<b>Teaching Kitchens</b> N (%)	9 (8.9%)	12 (2.3%)	1 (0.9%)	12 (2.7%)	8 (14.3%)	21 (3.4%)
<b>Tours</b> N (%)	6 (6.0%)	39 (7.6%)	8 (6.8%)	36 (8.1%)	1 (1.8%)	45 (7.3%)
<b>Taste Tests/Cooking</b> N (%)	18 (17.8%)	166 (32.2%)	13 (11.1%)	166 (37.4%)	5 (8.9%)	184 (29.8%)
<b>E-Interventions</b> N (%)	13 (12.9%)	0	0	0	13 (23.2%)	13 (2.1%)
<b>Nutrition Ed Materials</b> N (%)	56 (55.5%)	257 (49.8%)	45 (38.5%)	231 (52.0%)	37 (66.1%)	313 (50.7%)
<b>Recipes or Cookbooks</b> N (%)	62 (61.4%)	324 (62.8%)	77 (65.8%)	281 (63.3%)	28 (50.0%)	386 (62.6%)
<b>Team Nutrition</b> N (%)	4 (4.0%)	0	0	0	4 (7.1%)	4 (0.7%)
<b>WIC Nutrition Ed</b> N (%)	8 (7.9%)	1 (0.2%)	0	1 (0.2%)	8 (14.3%)	9 (1.5%)
<b>Other<sup>2</sup></b> N (%)	11 (10.9%)	130 (25.2%)	14 (12.0%)	120 (27.0%)	7 (12.5%)	141 (22.9%)

B&M = brick and mortar firms; DPP = Diabetes Prevention Program; Ed = Education; FD = farm direct firms; NI = nutrition incentive; PPR = produce prescription; WIC = Special Supplemental Nutrition Program for Women, Infants, and Children

<sup>1</sup>Firms that did not report on nutrition education activities (i.e., cases where this question was not applicable) were removed from the sample. Percentages are column percentages. Number of firms (n) in each column header is based on number of firms that have data for this metric, not the total number of firms operating this year. Firms may select multiple options for nutrition education activities so the rows in each column will not add up to the number of firms (n). 1,319 firms selected "None" as a response option; 200 PPR, 1,119 NI; 547 B&M, 756 FD, and 16 Clinics. Cell percentages include all responses that were not "None."

<sup>2</sup>Other responses included seed starting kits, market scavenger hunt, and educational booths.

**Table A5. Auxiliary Services Offered by Project Type and Firm Type (2020-2021)<sup>1</sup>**

	<b>PPR (N=99)</b>	<b>NI (N=419)</b>	<b>B&amp;M (N=137)</b>	<b>FD (N=318)</b>	<b>Clinics (N=63)</b>	<b>Overall (N=518)</b>
<b>Benefit Application Assistance</b> N (%)	28 (28.3%)	70 (16.7%)	8 (5.8%)	63 (19.8%)	27 (42.9%)	98 (18.9%)
<b>COVID Testing</b> N (%)	49 (49.5%)	41 (9.8%)	23 (16.8%)	20 (6.3%)	47 (74.6%)	90 (17.4%)
<b>COVID Vaccination</b> N (%)	52 (52.5%)	51 (12.2%)	15 (11.0%)	42 (13.2%)	46 (73.0%)	103 (19.9%)
<b>Delivery Services</b> N (%)	20 (20.2%)	124 (29.6%)	97 (70.8%)	37 (11.6%)	10 (15.9%)	144 (27.8%)
<b>Resource Referrals</b> N (%)	51 (51.5%)	71 (17.0%)	21 (15.3%)	64 (20.1%)	37 (58.7%)	122 (23.6%)
<b>Voter Registration</b> N (%)	16 (16.2%)	16 (3.8%)	3 (2.2%)	17 (5.4%)	12 (19.1%)	32 (6.2%)
<b>Transportation Services</b> N (%)	24 (24.2%)	31 (7.4%)	26 (19.0%)	11 (3.5%)	18 (28.6%)	55 (10.6%)
<b>Fitness Programs</b> N (%)	11 (11.1%)	27 (6.4%)	1 (0.7%)	29 (9.1%)	8 (12.7%)	38 (7.3%)
<b>Shopping Assistance</b> N (%)	17 (17.2%)	97 (23.2%)	49 (35.8%)	61 (19.2%)	4 (6.4%)	114 (22.0%)
<b>Other<sup>2</sup></b> N (%)	6 (6.1%)	34 (8.1%)	3 (2.2%)	36 (11.3%)	1 (1.6%)	40 (7.7%)

B&M = brick and mortar firms; COVID = coronavirus disease of 2019; FD = farm direct firms; NI = nutrition incentive; PPR = produce prescription  
<sup>1</sup>Percentages are column percentages. Number of firms (n) in each column header is based on number of firms that have data for this metric, not the total number of firms operating this year. Firms may select multiple options for auxiliary services so the rows in each column will not add up to the number of firms (n). 1,425 firms selected "None" as a response option; 207 PPR, 1,218 NI; 533 B&M, 883 FD, and 9 Clinics. Cell percentages include all responses that were not "None."

<sup>2</sup>Other responses included Census promotion, behavioral health screenings, and flu shots.

**Table A6.** Project Marketing Activities Offered by Project Type and Firm Type (2020-2021)<sup>1</sup>

	<b>PPR (N=75)</b>	<b>NI (N=1,374)</b>	<b>B&amp;M (N=330)</b>	<b>FD (N=1,085)</b>	<b>Clinics (N=34)</b>	<b>Overall (N=1,449)</b>
<b>On-site Signage or In-store Announcements</b> N (%)	36 (48.0%)	1,216 (88.5%)	284 (86.1%)	958 (88.3%)	10 (29.4%)	1,252 (86.4%)
<b>Promotions Distributed by Direct Mail</b> N (%)	6 (8.0%)	342 (24.9%)	84 (25.5%)	259 (23.9%)	5 (14.7%)	348 (24.0%)
<b>Promotions Distributed by Email</b> N (%)	18 (24.0%)	344 (25.0%)	28 (8.5%)	329 (30.3%)	5 (14.7%)	362 (25.0%)
<b>Promotions Distributed by Phone</b> N (%)	8 (10.7%)	27 (2.0%)	4 (1.2%)	26 (2.4%)	5 (14.7%)	35 (2.4%)
<b>Radio or TV Advertisements</b> N (%)	0	207 (15.1%)	26 (7.9%)	181 (16.7%)	0	207 (14.3%)
<b>Print Advertisements</b> N (%)	53 (70.7%)	487 (35.4%)	120 (36.4%)	399 (36.8%)	21 (61.8%)	540 (37.3%)
<b>Directories</b> N (%)	1 (1.3%)	23 (1.7%)	7 (2.1%)	17 (1.6%)	0	24 (1.7%)
<b>Online Advertisements</b> N (%)	34 (45.3%)	592 (43.1%)	147 (44.6%)	478 (44.1%)	1 (2.9%)	626 (43.2%)
<b>Outdoor, Transit, or Billboard Advertisements</b> N (%)	10 (13.3%)	117 (8.5%)	37 (11.2%)	85 (7.8%)	0	122 (8.4%)
<b>Multi-lingual Promotions</b> N (%)	10 (13.3%)	450 (32.8%)	51 (15.5%)	405 (37.3%)	4 (11.8%)	460 (31.8%)
<b>Public Relations and Events</b> N (%)	2 (2.7%)	90 (6.6%)	18 (5.5%)	74 (6.8%)	0	92 (6.4%)
<b>Other<sup>2</sup></b> N (%)	1 (1.3%)	244 (17.8%)	41 (12.4%)	203 (18.7%)	1 (2.9%)	245 (16.9%)

B&M = brick and mortar firms; FD = farm direct firms; NI = nutrition incentive; PPR = produce prescription; TV = television

<sup>1</sup>Percentages are column percentages. Number of firms (n) in each column header is based on number of firms that have data for this metric, not the total number of firms operating this year. Firms may select multiple options for auxiliary services so the rows in each column will not add up to the number of firms (n). 494 firms selected "None" as a response option; 231 PPR, 263 NI; 340 B&M, 116 FD, and 38 Clinics. Cell percentages include all responses that were not "None."

<sup>2</sup>Other responses included social media advertisements and community food advocates.

**Table A7.** Eligibility Criteria for PPR Program Participation (2020-2021)<sup>1</sup>

Eligibility Criteria	Enrollment Site (N=73) <sup>2</sup>
<b>Medicaid/Medicare Participant</b> N (%)	36 (49.3%)
<b>SNAP Participant</b> N (%)	18 (24.7%)
<b>Screen Positive for Food Insecurity</b> N (%)	47 (64.4%)
<b>Screen Positive for a Chronic Health Condition (e.g., diabetes)</b> N (%)	51 (69.9%)
<b>Adult</b> N (%)	46 (63.0%)
<b>Child</b> N (%)	9 (12.3%)
<b>Other<sup>3</sup></b> N (%)	18 (24.7%)

SNAP = Supplemental Nutrition Assistance Program; PPR = produce prescription

<sup>1</sup>Firms that did not report on eligibility criteria (i.e., cases where this question was not applicable) were removed from the sample.

<sup>2</sup>Percentages are column percentages. Number of firms (n) in the column header is based on number of firms that have data for this metric, not the total number of firms operating this year. Firms may select multiple options for eligibility so the rows will not add up to the number of PPR firms (n).

<sup>3</sup>Other responses included expecting mothers and residents of specific regions.

**Table A8.** Annual Incentive Issuance and Redemption by Project Type and Firm Type (2020-2021)<sup>1</sup>

Incentive Issuance and Redemption	PPR (N=261)	NI (N=1,615)	B&M (N=657)	FD (N=1163)	Clinics (N=56)	All Firms (N=1,876)
Annual Incentives Issued						
Total	\$886,975	\$30,600,464	\$19,301,176	\$11,579,740	\$606,524	\$31,487,440
Mean	\$3398	\$18,948	\$29,378	\$9,957	\$10,831	\$16,784
Annual Incentives Redeemed						
Total	\$579,995	\$20,340,434	\$11,595,720	\$9,188,739	\$135,970	\$20,920,429
Mean	\$2222	\$12,595	\$17,649	\$7901	\$2428	\$11,152
Annual Redemption Rate						
Total <sup>2</sup>	65.4%	66.5%	60.1%	79.4%	22.4%	66.4%
Mean <sup>3</sup>	84.8%	78.8%	54.9%	92.0%	62.6%	79.0%

<sup>1</sup>Number of firms (n) in each column header is based on number of firms that have data for this metric, not the total number of firms participating.

<sup>2</sup>Total annual redemption rate is the total annual incentives redeemed over the total annual incentives issued in each column as a percentage. Note that this is a different calculation from mean annual redemption rate.

<sup>3</sup>The mean presented here is the average annual redemption rate for all firms with complete data for annual redemption rate. Annual redemption rate is the annual value of incentives redeemed over the annual value of incentives issued for every firm with a non-zero value of annual incentives issued as a percentage. Note that this is a different calculation from total annual redemption rate. The majority of firms submit redemption data even when it is zero, but some do not submit this data given unique project models so the mean annual redemption rate per firm may be slightly positively skewed.

## Appendix 7. Participant Survey Methodology

The table below shows the sample size requirements by cohort year and project type. Program Advisors worked with each of their grantees one-on-one to determine the best sampling and survey administration procedures to achieve the sample size requirements.

### Sample Size Requirements for Participant-level Survey, by Cohort Year and Project Type

Year	GusNIP Pilot Projects	GusNIP Projects	GusNIP Large-Scale Projects	GusNIP Produce Prescription Projects
2019	Not required	230	150	100-130
2020	Not required	150	100	100-130

### Participant-Level Survey Modules

Rationale for the selection of each survey module is described in further detail on the Nutrition Incentive Hub website for [NI projects](#) and for [PPR projects](#).

### Sociodemographics

Sociodemographic data were limited to age, sex, race, and ethnicity. Basic demographic information allows us to understand who NI and PPR projects are reaching and whether project impacts differ across populations.

### Food Security

Participants were asked to respond to the [USDA 6-Item Household Food Security Survey Module](#). The module includes six questions about food eaten in the household in 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. 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)

Participants were asked about their intake frequency of 10 food and beverage items in order to assess FVI: 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](#). 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," "2-3 times per day," "4-5 times per day," and "6 or more times per day."<sup>1</sup> Frequency responses were converted to daily frequencies according to the table below.<sup>2</sup>

<sup>1</sup>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."

<sup>2</sup>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/>

## 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
2-3 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](#) developed specifically for the DSQ to determine *daily cup equivalents* of FVI.

### COVID-19

In order to determine the impact of COVID-19 on food access among participants, three items were included in the survey. These items were:

- “The coronavirus (COVID-19) has made it hard for me and others in my household to make ends meet.” Response options were on a 5-point Likert scale of strongly disagree to strongly agree.
- “The coronavirus (COVID-19) has made it hard for me and others in my household to get fresh fruits and vegetables.” Response options were on a 5-point Likert scale of strongly disagree to strongly agree.
- “Since the coronavirus (COVID-19) outbreak, have you or anyone in your household gotten free groceries from a food pantry, food bank, church, or other place that helps with free food?” Response options were “yes,” “no,” or “I don’t know.”

### 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 item about their health status: “Would you say in general that your health is poor, fair, good, very good, or excellent?”

### Optional Metrics

The NTAE also developed a list of [optional topic 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 tradeoff behaviors, transportation, food literacy and preferences, and health conditions, among others). Finally, with a growing number of GusNIP grantees focusing on families, the NTAE developed and made available a suite of youth and parent survey items and modules. These tools are designed to be used jointly when a PPR project has a child-focused component and when exploring youth health outcomes is of interest. The full versions of these tools, which include a baseline and post-survey for both children and parents, can be found on the [Supplementary and Recommended Metrics](#) page of the website.



## Appendix 8. Participant-Level Results Tables

**Table A9.** Sociodemographic Characteristics of NI Project Participants by Firm Type

	<b>Brick and Mortar (N=879)</b>	<b>Farm Direct (N=2,792)</b>	<b>Uncategorized (N=5,028)</b>	<b>Overall (N=8,699)</b>
<b>Age (Years)</b>				
N	869	2,731	4,956	8,556
Mean (SD)	45.42 (14.97)	50.76 (17.30)	35.63 (10.65)	41.45 (15.25)
<b>Age Group (Years)</b>				
18 to 24	56 (6.4%)	124 (4.5%)	432 (8.7%)	612 (7.2%)
25 to 34	174 (20.0%)	520 (19.0%)	2,202 (44.4%)	2,896 (33.9%)
35 to 44	233 (26.8%)	481 (17.6%)	1,591 (32.1%)	2,305 (26.9%)
45 to 64	293 (33.7%)	876 (32.1%)	584 (11.8%)	1,753 (20.5%)
More than 65	113 (13.0%)	728 (26.7%)	140 (2.8%)	981 (11.5%)
Missing <sup>1</sup>	10	61	72	143
<b>Gender</b>				
Male	137 (15.7%)	604 (21.9%)	2,286 (46.1%)	3,027 (35.3%)
Female	711 (81.4%)	2,046 (74.3%)	2,579 (52.0%)	5,336 (62.2%)
Non-binary/Third Gender	11 (1.3%)	65 (2.4%)	27 (0.5%)	103 (1.2%)
Prefer to Self-describe	2 (0.2%)	4 (0.2%)	6 (0.1%)	12 (0.1%)
Prefer Not to Answer	12 (1.4%)	36 (1.3%)	60 (1.2%)	108 (1.3%)
Missing	6	37	70	113
<b>Ethnicity</b>				
Not Hispanic or Latino/a/x	540 (63.3%)	2,307 (83.6%)	3,690 (74.4%)	6,537 (76.3%)
Hispanic or Latino/a/x	284 (33.3%)	367 (13.3%)	1,091 (22.0%)	1,742 (20.3%)
Prefer Not to Answer	29 (3.4%)	87 (3.2%)	177 (3.6%)	293 (3.4%)
Missing	26	31	70	127
<b>Race</b>				
American Indian or Alaskan Native	25 (3.0%)	32 (1.2%)	295 (6.0%)	352 (4.1%)
Asian	12 (1.5%)	106 (3.9%)	206 (4.2%)	324 (3.8%)
Black or African American	175 (21.1%)	684 (25.1%)	1,313 (26.5%)	2,172 (25.5%)
Native Hawaiian	1 (0.1%)	24 (0.9%)	70 (1.4%)	95 (1.1%)
Other Pacific Islander	1 (0.1%)	11 (0.4%)	70 (1.4%)	82 (1.0%)
White	334 (40.3%)	1,442 (52.8%)	2,697 (54.5%)	4,473 (52.6%)
Other	141 (17.0%)	125 (4.6%)	22 (0.4%)	288 (3.4%)
More Than One Race	39 (4.7%)	119 (4.4%)	93 (1.9%)	251 (3.0%)
Don't Know/Not Sure	40 (4.8%)	43 (1.6%)	25 (0.5%)	108 (1.3%)
Prefer Not to Answer	60 (7.3%)	144 (5.3%)	161 (3.3%)	365 (4.3%)
Missing	51	62	76	189
<b>Total<sup>2</sup></b>	<b>879 (10.1%)</b>	<b>2,792 (32.1%)</b>	<b>5,028 (57.8%)</b>	<b>8,699</b>

NI = nutrition incentive

<sup>1</sup>Missing values for age group, gender, ethnicity, and race not included in percentage calculations.

<sup>2</sup>Total displayed as row percentage (e.g., of the total sample, 10.1% of participants can be attributed to brick and mortar firms, 32.1% to farm direct firms, and 57.8% were uncategorized).

**Table A10.** Frequency and Percentage of Food Security Status Among NI Project Participants by Sociodemographics

	<b>Food Secure (N=3,270)</b>	<b>Food Insecure (N=5,350)</b>
<b>Age<sup>1</sup> (Years)</b>		
N	3,220	5,295
Mean (SD)	46.72 (17.24)	38.16 (12.83)
<b>Age Group (Years)</b>		
18 to 24	186 (30.4%)	426 (69.6%)
25 to 34	793 (27.4%)	2,097 (72.6%)
35 to 44	742 (32.3%)	1,553 (67.7%)
45 to 64	833 (48.0%)	902 (52.0%)
More than 65	660 (67.8%)	314 (32.2%)
Missing <sup>2</sup>	50	55
<b>Gender</b>		
Male	929 (30.8%)	2,088 (69.2%)
Female	2,205 (41.6%)	3,102 (58.5%)
Non-binary/Third Gender	62 (60.2%)	41 (39.8%)
Prefer to Self-describe	6 (50.0%)	6 (50.0%)
Prefer Not to Answer	43 (39.8%)	65 (60.2%)
Missing	25	48
<b>Ethnicity</b>		
Not Hispanic or Latino/a/x	2,597 (40.0%)	3,905 (60.1%)
Hispanic or Latino/a/x	552 (31.7%)	1,189 (68.3%)
Prefer Not to Answer	89 (30.8%)	200 (69.2%)
Missing	32	56
<b>Race</b>		
American Indian or Alaskan Native	125 (35.9%)	223 (64.1%)
Asian	123 (38.8%)	194 (61.2%)
Black or African American	703 (32.6%)	1,457 (67.5%)
Native Hawaiian	33 (36.3%)	58 (63.7%)
Other Pacific Islander	10 (12.2%)	72 (87.8%)
White	1,730 (38.7%)	2,736 (61.3%)
Other	140 (48.6%)	148 (51.4%)
More Than One Race	127 (51.2%)	121 (48.8%)
Don't Know/Not Sure	57 (53.3%)	50 (46.7%)
Prefer Not to Answer	163 (44.9%)	200 (55.1%)
Missing	59	91
<b>Region<sup>3</sup></b>		
West	1,449 (26.6%)	3,990 (73.4%)
Midwest	1,143 (62.2%)	696 (37.9%)
South	398 (48.8%)	418 (51.2%)
Northeast	280 (53.2%)	246 (46.8%)
<b>Total<sup>4</sup></b>	<b>3,270 (37.9%)</b>	<b>5,350 (62.1%)</b>

NI = nutrition incentive

<sup>1</sup>Table displays row percentages (age group, gender, ethnicity, race, region, and total sample). Example: Of participants aged 18 to 24, 30.4% were food secure and 69.6% were food insecure.

<sup>2</sup>Missing values for age group, gender, ethnicity, and race not included in percentage calculations.

<sup>3</sup>United States Department of Agriculture, Agricultural Research Service. (2021) States by Census Region and Division. <https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/docs/regions/>

<sup>4</sup>NI participants without enough data to compute food insecurity (n=79) and are not included in this table.

**Table A11.** Daily FV Cup Equivalents Among NI Participants Across Sociodemographic Characteristics

	<b>Fruits and Vegetables<sup>1</sup> (N=8,218)</b>	<b>Fruits Only (N=8,299)</b>	<b>Vegetables<sup>1</sup> Only (N=8,235)</b>
<b>Age Group (Years)</b>			
18 to 24	2.76 (1.00)	1.21 (0.67)	1.71 (0.60)
25 to 34	2.61 (0.92)	1.07 (0.59)	1.69 (0.59)
35 to 44	2.67 (0.90)	1.04 (0.54)	1.76 (0.60)
45 to 64	2.87 (1.01)	1.13 (0.56)	1.77 (0.67)
More than 65	2.73 (0.83)	1.05 (0.44)	1.66 (0.55)
<b>Gender</b>			
Male	2.97 (1.05)	1.11 (0.64)	1.97 (0.69)
Female	2.55 (0.83)	1.06 (0.52)	1.58 (0.50)
<b>Ethnicity</b>			
Not Hispanic or Latino/a/x	2.70 (0.92)	1.07 (0.55)	1.71 (0.60)
Hispanic or Latino/a/x	2.70 (0.96)	1.11 (0.59)	1.75 (0.62)
Prefer Not to Answer	2.85 (1.05)	1.22 (0.66)	1.87 (0.66)
<b>Race</b>			
American Indian or Alaskan Native	2.65 (1.08)	1.04 (0.61)	1.73 (0.67)
Asian	2.77 (0.98)	1.05 (0.49)	1.78 (0.63)
Black or African American	2.56 (0.89)	1.03 (0.56)	1.63 (0.59)
Native Hawaiian	2.57 (0.97)	1.04 (0.63)	1.65 (0.63)
Other Pacific Islander	2.40 (1.09)	0.93 (0.67)	1.63 (0.65)
White	2.73 (0.93)	1.08 (0.55)	1.74 (0.60)
Other	2.83 (0.87)	1.18 (0.53)	1.69 (0.51)
More Than One Race	2.92 (0.95)	1.18 (0.52)	1.79 (0.62)
Don't Know/Not Sure	2.76 (0.89)	1.12 (0.48)	1.70 (0.55)
Prefer Not to Answer	3.20 (0.94)	1.42 (0.68)	2.03 (0.67)
<b>Region<sup>2</sup></b>			
West	2.67 (0.96)	1.05 (0.56)	1.75 (0.64)
Midwest	2.70 (0.87)	1.08 (0.53)	1.63 (0.54)
South	2.84 (0.92)	1.19 (0.61)	1.68 (0.54)
Northeast	2.90 (0.90)	1.16 (0.56)	1.75 (0.53)
<b>Total (Mean, SD)</b>	<b>2.70 (0.93)</b>	<b>1.08 (0.56)</b>	<b>1.72 (0.61)</b>

NI = nutrition incentive, FV = fruit and vegetable

<sup>1</sup>Vegetables calculated with legumes and without French fries.

<sup>2</sup>United States Department of Agriculture, Agricultural Research Service. (2021) States by Census Region and Division.

<https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/docs/regions/>

**Table A12.** Daily FV Frequency Among Non-Cis Gendered and Preferred to Self-Describe NI Participants (N=115)

Response	Fruit Juice <sup>1</sup>	Fruit	Salad	Fried Potatoes	Other Potatoes	Beans	Vegetables <sup>2</sup>	Salsa	Pizza	Tomato Sauce
Never	20 (17.4%)	1 (0.9%)	1 (0.9%)	13 (11.3%)	13 (11.3%)	9 (7.8%)	1 (0.9%)	26 (22.6%)	15 (13.0%)	14 (12.2%)
1 time last month	18 (15.7%)	5 (4.4%)	1 (0.9%)	17 (14.8%)	11 (9.6%)	5 (4.4%)	4 (3.5%)	17 (14.8%)	31 (27.0%)	24 (20.9%)
2-3 times last month	30 (26.1%)	8 (7.0%)	12 (10.4%)	28 (24.4%)	29 (25.2%)	23 (20.0%)	4 (3.5%)	23 (20.0%)	34 (29.6%)	30 (26.1%)
1 time per week	18 (15.7%)	4 (3.5%)	6 (5.2%)	20 (17.4%)	18 (15.7%)	16 (13.9%)	7 (6.1%)	8 (7.0%)	15 (13.0%)	14 (12.2%)
2 times per week	6 (5.2%)	9 (7.8%)	14 (12.2%)	17 (14.8%)	18 (15.7%)	17 (14.8%)	10 (8.7%)	14 (12.2%)	4 (3.5%)	12 (10.4%)
3-4 times per week	12 (10.4%)	22 (19.1%)	34 (29.6%)	8 (7.0%)	13 (11.3%)	21 (18.3%)	18 (15.7%)	11 (9.6%)	6 (5.2%)	9 (7.8%)
5-6 times per week	3 (2.6%)	11 (9.6%)	12 (10.4%)	2 (1.7%)	1 (0.9%)	7 (6.1%)	17 (14.8%)	5 (4.4%)	2 (1.7%)	3 (2.6%)
1 time per day	2 (1.7%)	11 (9.6%)	20 (17.4%)	7 (6.1%)	5 (4.4%)	12 (10.4%)	13 (11.3%)	5 (4.4%)	1 (0.9%)	3 (2.6%)
2 or more times per day	0 (0%)	44 (38.3%)	15 (13.0%)	3 (2.6%)	7 (6.1%)	5 (4.4%)	41 (35.7%)	6 (5.2%)	6 (5.2%)	5 (4.4%)
2-3 times per day	5 (4.4%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-5 times per day	0 (0%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 or more times per day	1 (0.9%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

NI = nutrition incentive, FV = fruit and vegetable

<sup>1</sup>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”).

<sup>2</sup>Vegetables calculated with legumes and without French fries.

**Table A13. COVID-19 Impacts Among NI Project Participants by Program Participation Length**

	<b>First Time Participants (N=1,020)</b>	<b>&lt; 6 Months Participation (N=3,120)</b>	<b>≥ 6 Months Participation (N=4,240)</b>	<b>Overall (N=8,699)</b>
<b>COVID-19 Made it Hard to Make Ends Meet</b>				
Strongly Disagree	69 (7.2%)	178 (6.1%)	270 (7.2%)	520 (6.7%)
Disagree	200 (20.7%)	639 (22.0%)	791 (21.0%)	1,640 (21.3%)
Neither Disagree nor Agree	162 (16.8%)	523 (18.0%)	753 (20.0%)	1,461 (19.0%)
Agree	322 (33.4%)	1,055 (36.3%)	1,292 (34.2%)	2,689 (34.8%)
Strongly Agree	200 (20.7%)	502 (17.3%)	656 (17.4%)	1,370 (17.8%)
Don't Know/ Prefer Not to Answer	12 (1.2%)	9 (0.3%)	11 (0.3%)	38 (0.5%)
Missing <sup>1</sup>	55	214	467	981
<b>COVID-19 Made it Hard to Purchase FVs</b>				
Strongly Disagree	83 (8.6%)	222 (7.6%)	316 (8.2%)	628 (8.0%)
Disagree	280 (28.8%)	663 (22.6%)	940 (24.5%)	1,895 (24.2%)
Neither Disagree nor Agree	202 (20.8%)	583 (19.9%)	705 (18.4%)	1,511 (19.3%)
Agree	282 (29.0%)	1,006 (34.3%)	1,316 (34.3%)	2,623 (33.6%)
Strongly Agree	115 (11.8%)	446 (15.2%)	560 (14.6%)	1,131 (14.5%)
Don't Know/ Prefer Not to Answer	9 (0.9%)	10 (0.3%)	5 (0.1%)	29 (0.4%)
Missing	49	190	398	882
<b>COVID-19 has Resulted in Utilization of Emergency Food Outlets</b>				
No	434 (45.9%)	866 (29.2%)	1,294 (31.7%)	2,631 (32.6%)
Yes	490 (51.8%)	2,013 (68.0%)	2,705 (66.2%)	5,240 (65.0%)
Don't Know/ Prefer Not to Answer	22 (2.3%)	83 (2.8%)	87 (2.1%)	197 (2.4%)
Missing	74	158	154	631
<b>Total<sup>2</sup></b>	<b>1,020 (12.2%)</b>	<b>3,120 (37.2%)</b>	<b>4,240 (50.6%)</b>	<b>8,699</b>

NI = nutrition incentive

<sup>1</sup>Missing values for "COVID-19 made it hard to make ends meet," "COVID-19 made it hard to purchase FVs," and "COVID-19 has resulted in utilization of emergency food outlets" not included in percentage calculations.

<sup>2</sup>Total displayed as row percentage calculated without missing responses (n=319) for duration (e.g., of the total sample, 12.2% were first time participants, 37.2% participated for less than 6 months, and 50.6% participated for 6 months or more).

**Table A14. Perceived Health Status Among NI Project Participants by Program Participation Length**

	<b>First Time Participants (N=1,020)</b>	<b>&lt; 6 Months Participation (N=3,120)</b>	<b>≥ 6 Months Participation (N=4,240)</b>	<b>Overall (N=8,699)</b>
<b>Perceived Health Status</b>				
Poor	72 (7.1%)	163 (5.3%)	224 (5.3%)	465 (5.6%)
Fair	314 (31.0%)	829 (26.9%)	987 (23.5%)	2,151 (25.7%)
Good	381 (37.6%)	977 (31.6%)	1,328 (31.6%)	2,714 (32.4%)
Very Good	181 (17.9%)	783 (25.4%)	1,220 (29.1%)	2,199 (26.3%)
Excellent	65 (6.4%)	331 (10.7%)	433 (10.3%)	832 (9.9%)
Don't Know/Prefer Not to Answer	1 (0.1%)	5 (0.2%)	5 (0.1%)	14 (0.2%)
Missing <sup>1</sup>	6	32	43	324
<b>Total<sup>2</sup></b>	<b>1,020 (12.2%)</b>	<b>3,120 (37.2%)</b>	<b>4,240 (50.6%)</b>	<b>8,699</b>

NI = nutrition incentive

<sup>1</sup>Missing values for perceived health status not included in percentage calculations.

<sup>2</sup>Total displayed as row percentage calculated without missing responses (n=319) for duration (e.g., of the total sample, 12.2% were first time participants, 37.2% participated for less than 6 months, and 50.6% participated for 6 months or more).

**Table A15.** Program Satisfaction Among NI Project Participants by Firm Type

	<b>Brick and Mortar (N=879)</b>	<b>Farm Direct (N=2,792)</b>	<b>Uncategorized (N=5,028)</b>	<b>Overall (N=8,699)</b>
<b>Program Satisfaction</b>				
Very Negative	2 (0.3%)	9 (0.4%)	262 (5.4%)	273 (3.4%)
Negative	3 (0.5%)	18 (0.7%)	473 (9.7%)	494 (6.1%)
Neutral	27 (4.0%)	115 (4.5%)	911 (18.7%)	1,053 (13.0%)
Positive	163 (24.3%)	627 (24.7%)	1,909 (39.2%)	2,699 (33.4%)
Very Positive	411 (61.3%)	1,752 (69.0%)	1,310 (26.9%)	3,473 (43.0%)
Don't Know/Prefer Not to Answer	4 (0.6%)	20 (0.8%)	2 (0.0%)	26 (0.3%)
Unknown	60 (9.0%)	0	0	60 (0.7%)
Missing <sup>1</sup>	209	251	161	621
<b>Total<sup>2</sup></b>	<b>879 (10.1%)</b>	<b>2,792 (32.1%)</b>	<b>5,028 (57.8%)</b>	<b>8,699</b>

NI = nutrition incentive

<sup>1</sup>Missing values for program satisfaction not included in percentage calculations.

<sup>2</sup>Total displayed as row percentage (e.g., of the total sample, 10.1% of participants can be attributed to brick and mortar firms, 32.1% to farm direct firms, and 57.8% were uncategorized).

**Table A16.** Sociodemographic and Participant Characteristics of PPR Project Participants (Full Baseline Sample)

	<b>Overall (N=1,201)</b>
<b>Age (Years)</b>	
N	1,136
Mean (SD)	50.2 (14.77)
<b>Age Group (Years)</b>	
18 to 24	52 (4.4%)
25 to 34	185 (15.8%)
35 to 44	202 (17.2%)
45 to 64	543 (46.3%)
More than 65	190 (16.2%)
Missing <sup>1</sup>	29
<b>Gender</b>	
Male	175 (16.7%)
Female	809 (77.4%)
Non-binary/Third Gender	39 (3.7%)
Prefer to Self-describe	2 (0.2%)
Prefer Not to Answer	21 (2.0%)
Missing	155
<b>Ethnicity</b>	
Not Hispanic or Latino/a/x	570 (61.9%)
Hispanic or Latino/a/x	325 (35.6%)
Prefer Not to Answer	23 (2.5%)
Missing	283
<b>Race</b>	
American Indian or Alaskan Native	88 (8.5%)
Asian	50 (4.8%)
Black or African American	351 (33.9%)
Native Hawaiian	4 (0.4%)
Other Pacific Islander	18 (1.7%)
White	292 (28.2%)
Other	98 (9.5%)
More Than One Race	32 (3.1%)
Don't Know/Not Sure	12 (1.2%)
Prefer Not to Answer	91 (8.8%)
Missing	165

PPR = produce prescription

<sup>1</sup>Missing values for age group, gender, ethnicity, and race not included in percentage calculations.

**Table A17.** Frequency and Percentage of Food Security Status Among PPR Project Participants (Full Baseline Sample) by Sociodemographics

	<b>Food Secure (N=412)</b>	<b>Food Insecure (N=704)</b>
<b>Age<sup>1</sup> (Years)</b>		
N	382	674
Mean (SD)	50.3 (15.89)	50.2 (14.25)
<b>Age Group (Years)</b>		
18 to 24	19 (38.8%)	30 (61.2%)
25 to 34	71 (41.0%)	102 (59.0%)
35 to 44	71 (37.6%)	118 (62.4%)
45 to 64	154 (30.8%)	346 (69.2%)
More than 65	84 (46.4%)	97 (53.6%)
Missing <sup>2</sup>	13	11
<b>Gender</b>		
Male	65 (39.4%)	100 (60.6%)
Female	287 (38.1%)	467 (61.9%)
Non-binary/Third Gender	15 (39.5%)	23 (60.5%)
Prefer to Self-describe	0	2 (100.0%)
Prefer Not to Answer	9 (42.9%)	12 (57.1%)
Missing	36	100
<b>Ethnicity</b>		
Not Hispanic or Latino/a/x	199 (37.8%)	328 (62.2%)
Hispanic or Latino/a/x	128 (41.3%)	182 (58.7%)
Prefer Not to Answer	10 (43.5%)	13 (56.5%)
Missing	75	181
<b>Race</b>		
American Indian or Alaskan Native	19 (23.8%)	61 (76.3%)
Asian	20 (42.6%)	27 (57.5%)
Black or African American	134 (41.5%)	189 (58.5%)
Native Hawaiian	1 (25.0%)	3 (75.0%)
Other Pacific Islander	0	18 (100.0%)
White	123 (43.3%)	161 (56.7%)
Other	27 (29.4%)	65 (70.7%)
More Than One Race	12 (37.5%)	20 (62.5%)
Don't Know/Not Sure	4 (33.3%)	8 (66.7%)
Prefer Not to Answer	36 (46.2%)	42 (53.9%)
Missing	36	110
<b>Region<sup>3</sup></b>		
West	207 (37.0%)	353 (63.0%)
South	151 (36.0%)	269 (64.1%)
Northeast	54 (39.7%)	82 (60.3%)
Midwest	0	0
<b>Total</b>	<b>412 (36.9%)</b>	<b>704 (63.1%)</b>

PPR = produce prescription

<sup>1</sup>Table displays row percentages (age group, gender, ethnicity, race, region, and total sample). Example: Of participants aged 18 to 24, 38.8% were food secure and 61.2% were food insecure.

<sup>2</sup>Missing values for age group, gender, ethnicity, race, and region not included in percentage calculations.

<sup>3</sup>United States Department of Agriculture, Agricultural Research Service. (2021) States by Census Region and Division.

<https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/docs/regions/>



**Table A18.** Daily FV Cup Equivalents Among PPR Participants (Full Baseline Sample) Across Sociodemographic Characteristics

	<b>Fruits and Vegetables<sup>1</sup> (N=906)</b>	<b>Fruits Only (N=916)</b>	<b>Vegetables<sup>1</sup> Only (N=909)</b>
<b>Age Group (Years)</b>			
18 to 24	2.31 (0.70)	0.95 (0.51)	1.38 (0.38)
25 to 34	2.48 (0.85)	1.11 (0.64)	1.41 (0.37)
35 to 44	2.38 (0.80)	0.95 (0.50)	1.46 (0.45)
45 to 64	2.42 (0.81)	0.91 (0.46)	1.49 (0.48)
More than 65	2.42 (0.80)	0.89 (0.38)	1.50 (0.54)
<b>Gender</b>			
Male	2.63 (0.86)	0.90 (0.45)	1.68 (0.55)
Female	2.37 (0.79)	0.96 (0.50)	1.42 (0.43)
<b>Ethnicity</b>			
Not Hispanic or Latino/a/x	2.44 (0.81)	0.96 (0.49)	1.47 (0.47)
Hispanic or Latino/a/x	2.47 (0.82)	0.97 (0.51)	1.51 (0.47)
Prefer Not to Answer	3.26 (1.40)	1.38 (0.95)	1.98 (0.86)
<b>Race</b>			
American Indian or Alaskan Native	2.11 (0.59)	0.81 (0.39)	1.31 (0.32)
Asian	2.69 (0.88)	0.95 (0.45)	1.71 (0.62)
Black or African American	2.46 (0.85)	0.99 (0.52)	1.46 (0.47)
Native Hawaiian	2.64 (0.57)	0.95 (0.57)	1.62 (0.28)
Other Pacific Islander	2.11 (0.68)	0.74 (0.26)	1.37 (0.42)
White	2.42 (0.75)	0.92 (0.45)	1.50 (0.48)
Other	2.56 (0.75)	1.02 (0.50)	1.55 (0.42)
More Than One Race	2.42 (0.95)	0.96 (0.41)	1.46 (0.57)
Don't Know/Not Sure	2.36 (0.74)	0.84 (0.27)	1.53 (0.47)
Prefer Not to Answer	2.39 (0.97)	1.01 (0.67)	1.41 (0.48)
<b>Region<sup>2</sup></b>			
West	2.34 (0.74)	0.89 (0.42)	1.46 (0.44)
South	2.57 (0.95)	1.04 (0.58)	1.53 (0.55)
Northeast	2.42 (0.75)	1.03 (0.54)	1.39 (0.39)
Midwest	0	0	0
<b>Total (Mean, SD)</b>	<b>2.41 (0.81)</b>	<b>0.95 (0.49)</b>	<b>1.47 (0.47)</b>

PPR = produce prescription

<sup>1</sup>Vegetables calculated with legumes and without French fries.

<sup>2</sup>United States Department of Agriculture, Agricultural Research Service. (2021) States by Census Region and Division. <https://www.ars.usda.gov/northeast-area/beltsville-md-bhnrc/beltsville-human-nutrition-research-center/docs/regions/>

**Table A19.** Daily FV Frequency Among Non-Cis Gendered and Preferred to Self-Describe PPR Participants (n=41)

Response	Fruit Juice <sup>1</sup>	Fruit	Salad	Fried Potatoes	Other Potatoes	Beans	Vegetables <sup>2</sup>	Salsa	Pizza	Tomato Sauce
Never	11 (26.8%)	2 (4.9%)	4 (9.8%)	5 (12.2%)	5 (12.2%)	2 (4.9%)	4 (9.8%)	5 (12.2%)	14 (34.2%)	10 (24.4%)
1 time last month	3 (7.3%)	3 (7.3%)	2 (4.9%)	10 (24.4%)	6 (14.6%)	2 (4.9%)	5 (12.2%)	3 (7.3%)	18 (43.9%)	11 (26.8%)
2-3 times last month	7 (17.1%)	5 (12.2%)	6 (14.6%)	6 (14.6%)	10 (24.4%)	7 (17.1%)	4 (9.8%)	6 (14.3%)	4 (9.8%)	9 (22.0%)
1 time per week	6 (14.6%)	5 (12.2%)	7 (17.1%)	10 (24.4%)	7 (17.1%)	3 (7.3%)	5 (12.2%)	6 (14.6%)	4 (9.8%)	5 (12.2%)
2 times per week	5 (12.2%)	3 (7.3%)	2 (4.9%)	5 (12.2%)	8 (19.5%)	4 (9.8%)	5 (12.2%)	6 (14.6%)	1 (2.4%)	3 (7.3%)
3-4 times per week	5 (12.2%)	7 (17.1%)	11 (26.8%)	2 (4.9%)	4 (9.8%)	10 (24.4%)	9 (22.0%)	6 (14.6%)	0 (0%)	2 (4.9%)
5-6 times per week	0 (0%)	4 (9.76%)	3 (7.32%)	0 (0%)	0 (0%)	3 (7.32%)	1 (2.44%)	1 (2.44%)	0 (0%)	0 (0%)
1 time per day	1 (2.4%)	6 (14.6%)	3 (7.3%)	0 (0%)	0 (0%)	6 (14.6%)	6 (14.6%)	2 (4.9%)	0 (0%)	1 (2.4%)
2 or more times per day	0 (0%)	5 (12.2%)	3 (7.3%)	1 (2.44%)	0 (0%)	4 (9.8%)	2 (4.9%)	6 (14.6%)	0 (0%)	0 (0%)
2-3 times per day	1 (2.4%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
4-5 times per day	0 (0%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
6 or more times per day	0 (0%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

PPR = produce prescription

<sup>1</sup>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”).

**Table A20.** Perceived Health Status of PPR Project Participants

Perceived Health Status	
Poor	129 (12.4%)
Fair	445 (42.8%)
Good	337 (32.4%)
Very Good	91 (8.8%)
Excellent	35 (3.4%)
Don't Know/Prefer Not to Answer	2 (0.2%)
Missing <sup>1</sup>	162

PPR = produce prescription

<sup>1</sup>Missing values for perceived health status not included in percentage calculations.

**Table A21.** Sociodemographic and Participant Characteristics of PPR Project Participants with Baseline and Post Data (Baseline Shown)

<b>Characteristic</b>	<b>Analytic Sample at Baseline<sup>1</sup> (N=196)</b>
<b>Age (Years)</b>	
N	192
Mean (SD)	50.3 (14.70)
<b>Age Group<sup>2</sup> (Years)</b>	
18 to 24	5 (2.6%)
25 to 34	33 (17.2%)
35 to 44	32 (16.7%)
45 to 64	87 (45.3%)
More than 65	35 (18.2%)
Missing	4
<b>Gender</b>	
Male	33 (17.1%)
Female	158 (81.9%)
Non-binary/Third Gender	0
Prefer to Self-describe	1 (0.5%)
Prefer Not to Answer	1 (0.5%)
Missing	3
<b>Ethnicity</b>	
Not Hispanic or Latino/a/x	132 (82.5%)
Hispanic or Latino/a/x	28 (17.5%)
Prefer Not to Answer	0
Missing	36
<b>Race</b>	
American Indian or Alaskan Native	36 (18.7%)
Asian	6 (3.1%)
Black or African American	100 (51.8%)
Native Hawaiian	1 (0.5%)
Other Pacific Islander	0
White	14 (7.3%)
Other	9 (4.7%)
More Than One Race	4 (2.1%)
Don't Know/Not Sure	0
Prefer Not to Answer	23 (11.9%)
Missing	3

PPR = produce prescription

<sup>1</sup>PPR participants (n=196) with both baseline and post-intervention survey data (baseline data only shown in table).

<sup>2</sup>Missing values for age group, gender, ethnicity, and race not included in percentage calculations.

**Table A22. COVID-19 Impacts Among PPR Project Participants**

	<b>Full Sample at Baseline (N=1,201)</b>	<b>Baseline (N=196)</b>	<b>Post (N=196)</b>
<b>COVID-19 Made it Hard to Make Ends Meet</b>			
Strongly Disagree	53 (6.8%)	9 (6.7%)	6 (6.6%)
Disagree	108 (13.8%)	16 (11.9%)	16 (17.6%)
Neither Disagree nor Agree	143 (18.3%)	19 (14.2%)	16 (17.6%)
Agree	267 (34.2%)	50 (37.3%)	41 (45.1%)
Strongly Agree	192 (24.6%)	40 (29.9%)	12 (13.2%)
Don't Know/ Prefer Not to Answer	18 (2.3%)	0	0
Missing <sup>1</sup>	420	62	105
<b>COVID-19 Made it Hard to Purchase FVs</b>			
Strongly Disagree	53 (6.8%)	11 (8.2%)	9 (9.9%)
Disagree	148 (18.9%)	27 (20.2%)	26 (28.6%)
Neither Disagree nor Agree	150 (19.2%)	21 (15.7%)	11 (12.1%)
Agree	291 (37.2%)	44 (32.8%)	38 (41.8%)
Strongly Agree	130 (16.6%)	31 (23.1%)	7 (7.7%)
Don't Know/ Prefer Not to Answer	10 (1.3%)	0	0
Missing	419	62	105
<b>COVID-19 has Resulted in Utilization of Emergency Food Outlets</b>			
No	386 (49.2%)	73 (54.5%)	47 (51.7%)
Yes	380 (48.5%)	57 (42.5%)	40 (44.0%)
Don't Know/ Prefer Not to Answer	18 (2.3%)	4 (3.0%)	4 (4.4%)
Missing	417	62	105

PPR = produce prescription

<sup>1</sup>Missing values for "COVID-19 made it hard to make ends meet," "COVID-19 made it hard to purchase FVs," and "COVID-19 has resulted in utilization of emergency food outlets" not included in percentage calculations.

**Table A23.** Self-Reported Health Status of PPR Participants at Baseline and Post

<b>Self-reported Health (N, %)</b>	<b>Baseline (N=196)</b>	<b>Post (N=196)</b>
Poor	25 (13.4%)	14 (7.3%)
Fair	80 (42.8%)	71 (37.2%)
Good	59 (31.6%)	79 (41.4%)
Very Good	18 (9.6%)	21 (11.0%)
Excellent	5 (2.7%)	6 (3.1%)
Missing <sup>1</sup>	9	5

PPR = produce prescription

<sup>1</sup>Missing values for self-reported health not included in percentage calculations.

**Table A24.** Program Satisfaction Among PPR Participants at Post

<b>Program Satisfaction (N, %)</b>	<b>Post (N=196)</b>
Very Negative	2 (1.8%)
Negative	3 (2.7%)
Neutral	49 (44.6%)
Positive	56 (50.9%)
Very Positive	2 (1.8%)
Missing <sup>1</sup>	86

PPR = produce prescription

<sup>1</sup>Missing values for program satisfaction not included in percentage calculations.