2023 DOUBLE UP FOOD BUCKS EVALUATION REPORT

Prepared for Fair Food Network

May 2024







EXECUTIVE SUMMARY





The 2023 evaluation of Double Up Food Bucks relied on **304** participant surveys and an economic analysis of Double Up dollars redeemed. The participant survey occurred during a time of rising food prices, post-pandemic reductions in Bridge Card (SNAP/EBT) allocations, and a new \$10 per day Double Up earning and spending limit, which was introduced to maintain program operations while Fair Food Network sought additional funding. Within this context, the 2023 survey found increased rates of food insecurity, a larger portion of people reporting fruits and vegetables are too expensive to buy regularly, a smaller portion of people using Double Up frequently, and smaller average savings from Double Up than seen previously.

Frustration with the \$10 earning and spending cap was a prominent theme in participants' comments about challenges with the program. Comments revealed that the lower cap reduced the value of the program for a range of reasons, including limited mobility, limited transportation, or limited time available for frequent grocery shopping.

Despite the potentially reduced impact from Double Up within this context, through written comments, the vast majority of respondents (93%) shared at least one positive impact from Double Up participation. This included, most prominently, 49% who reported dietary improvement and 27% who described the ability to save money and make purchases they could not otherwise afford.

While some of the health behavior and health outcome indicators were inconsistent with previous survey findings, for the third year in a row, participants using Double Up for at least six months and using the program more often reported better health on average.

"Me ahorro un poquito de dinero usando Double Up y con eso ahorro vuelvo a comprar más frutas o verduras." - Detroit resident

"I save a little bit of money using Double Up and with what I save, I return to buy more fruits and vegetables."

Key Findings:

- ➤ The reductions in Bridge Card (SNAP) funds combined with the lower Double Up earning and earning cap in 2023 and higher food prices took a toll on households.
- ► Participants used Double Up in many different ways, indicating program flexibility is important.
- ▶ Program satisfaction was high and most participants described positive impacts.
- Measurable impact on health behaviors and health outcomes was mixed.
- ► Participants described a range of challenges that collectively impacted a sizeable minority.
- ► Email and text messages were the preferred communication methods for program information.
- ▶ Double Up generated nearly six million dollars in economic impact for Michigan in 2023.

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Quotations used in this report have been transcribed using the clean verbatim style. Speech errors, false starts, stutters, repetitions, and filler words have been omitted so long as their removal did not change the meaning or sentiment of the statement.



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INTRODUCTION





Program Background

Double Up Food Bucks, launched by Fair Food Network in 2009, matches fruit and vegetable purchases dollar for dollar at more than 250 participating sites for Michigan shoppers with a Bridge Card (Michigan's Food Assistance program, also known as SNAP or EBT). The program makes fresh, local produce more widely accessible while also increasing investments in Michigan farmers.

The 2023 participant survey was administered during a time of rising food prices and substantial changes in both Double Up policies and SNAP funding. Food retail prices increased by more than 11% in 2022, faster than any year since 1979, and nearly 6% in 2023.¹

During the COVID-19 pandemic, the Double Up program responded to heightened need by raising the earning limit to \$50 or eliminating it completely at some sites. This, along with temporary increases in SNAP benefits and expanded eligibility, resulted in participation, and subsequently the program spending, more than doubling. To keep the program operational while securing additional federal, state, and philanthropic funds, Fair Food Network instituted a temporary pause on earning at participating grocery stores (excluding Flint locations) from August 1, 2022 to January 15, 2023. The program has historically exempted sites in Flint from pauses to ensure participants affected by the city's ongoing water crisis maintain essential access to the nutrient-dense fruits and vegetables shown to mitigate the health effects of lead exposure.

When Double Up restarted, the earning limit dropped to \$10 per day, compared to \$20 previously. The program also added, for the first time, a \$10 daily spending cap and a 90-day expiration policy for all Double Up dollars earned. In October 2023, once the program secured sufficient funds, the earning limit was returned to \$20 per day and the spending limit was eliminated.

Alongside the Double Up changes, the federal emergency allotments, which had provided over \$131 million to more than 705,000 households across Michigan,² ended in February 2023. This led to a decrease in the average monthly SNAP benefit per person from \$270 to \$167.³ Also, the Pandemic-EBT program, which provided Bridge Card funds to 900,000 Michigan students, ended in July 2023. In short, the 2023 survey occurred during a time when fewer households had Bridge Cards, households with Bridge Cards received less monthly funding, the Double Up program earning potential was cut in half, and rising food prices meant that money spent on food did not go as far.

All of these changes appeared to have reduced participation in Double Up, based on both total dollars redeemed and comments shared by participants. Anecdotally, many farmers market staff and managers shared with the data collection team that they were seeing far fewer Double Up customers over the summer of 2023 than they had in the summer of 2022.

Purpose & Evaluation Questions

The 2023 evaluation of the Double Up Food Bucks program was guided by five overarching questions, as shown in Table 1. We used surveys with individuals currently participating in the Double Up program to answer the questions related to program experiences and outcomes. We collected 304 participant surveys through in-person visits to 30 Double Up locations, social media promotion, and direct email messages to previous survey respondents. We used Double Up redemption records to estimate the program's economic impact.

In the analysis of participant surveys, the report includes several comparisons between 2022 and 2021 survey responses. However, each year's survey sample represents a cross-section of the overall population of Double Up participants, meaning the respondents are not necessarily the same each year. This means that differences from year to year may be attributable to differences in the people responding to the survey, rather than change over time.



Table 1: 2023 Evaluation Questions

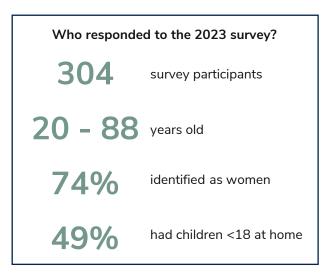
Ev	aluation Question	Data Collection Strategy	
1	How do Double Up participants compare to the population of SNAP users in Michigan?		
2	How do Double Up participants use the program and what are the barriers to program use?	Participant survey	
3	To what extent does program participation improve health outcomes: fruit and vegetable consumption, food security, and health status?	r articipant survey	
4	What information about Double Up do participants want and through what channels?		
5	What is the economic impact of the Double Up program in Michigan?	Economic analysis	

PARTICIPANT EXPERIENCES

SURVEY RESPONDENTS

A total of 304 people responded to the 2023 Double Up Participant Survey. Both the age range and portion of respondents identifying as women were similar to previous participant surveys.

Figure 1 shows the portion of respondents by age range for the previous three survey years, as well as the portion of the adult population in Michigan in 2022.⁴ With the exception of 30–39-year-olds in the 2021 survey, the age distribution has been fairly consistent. The figure also reveals that either the survey responses, the Double Up program, or both are over-representing adults aged 30-39 and under-representing adults aged 60 and over when compared to the overall adult population of the state. Nearly half of survey respondents had children under 18 at home, which is slightly higher than the 42% of Michigan households receiving SNAP in 2022 who had children under 18 at home.





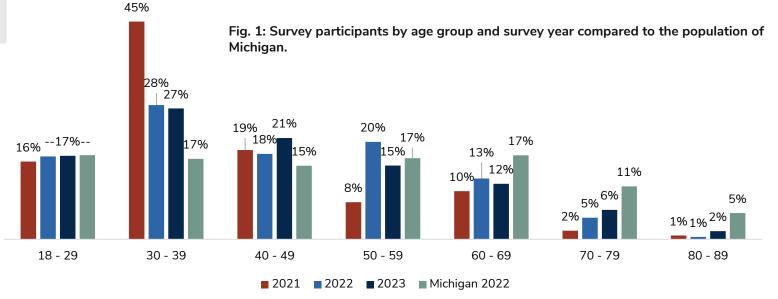
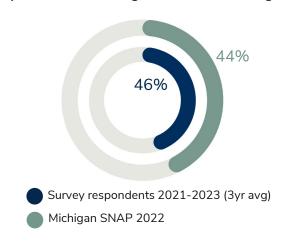


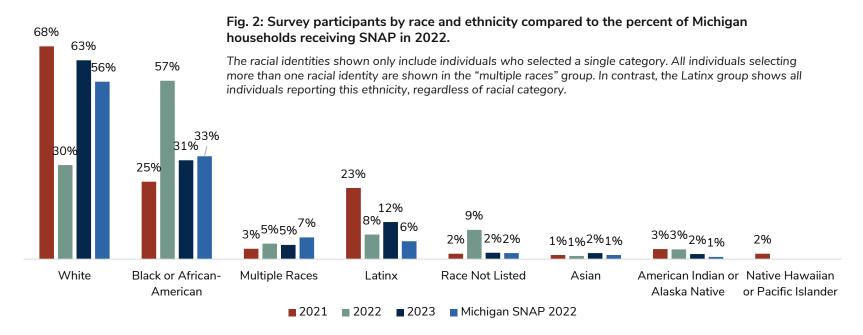
Figure 2 shows that the composition of racial and ethnic identities across survey respondents can vary substantially from year to year. We can likely attribute this variation to changes in the survey sample rather than to changes in the composition of program participants.

Figure 2 also shows that when compared with Michigan households receiving SNAP,⁵ the survey has consistently had stronger representation from individuals identifying as Latinx and American Indian or Alaska Native than would be expected based on SNAP participants statewide.

Looking at the average of the three previous survey years, approximately half of individuals were people of color, which is similar to the portion among Michigan residents receiving SNAP (Figure 3).

Fig. 3: The percent people of color is similar among survey respondents and Michigan residents receiving SNAP.





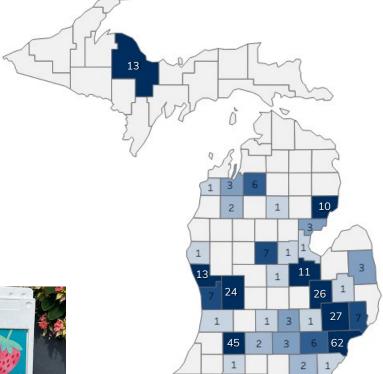
PARTICIPANT GEOGRAPHY

The 2023 survey participants came from 35 counties and 130 zip codes – 13 more counties and 54 more zip codes than represented in the 2022 survey sample. Participants from Wayne, Oakland, Genesee, Kent, and Kalamazoo counties collectively comprised more than sixty percent of the survey sample. In other words, individuals from urban areas with multiple Double Up locations comprise the majority of the survey sample.

There were seven sites which more than ten people reported as their primary Double Up location:

- Oakland County Farmers Market
- Eastern Market (Detroit)
- Flint Farmers Market
- Midtown Fresh Market (Kalamazoo)
- Muskegon Farmers Market
- Park Street Market (Kalamazoo)
- Marquette Food Co-Op

Fig. 4: Survey participants were clustered in Michigan's urban centers (N = 301).







SHOPPING PATTERNS

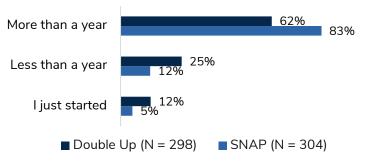
The lower earning cap and new spending cap may have led to less frequent use of Double Up. The large majority of 2023 survey respondents (86%) were current Double Up program participants. Another 12% reported using the program for the first time on the day of the survey, usually because they learned about the program from the data collection team. Six people were former program participants.⁶

The majority of respondents had been using both SNAP and Double Up for more than a year (Figure 6). As in 2022, we found that more participants were new to Double Up than new to SNAP, providing further evidence of a lag between eligibility for Double Up and utilization of the program.

Current participants reported using Double Up at an average of 2.5 site types. About a quarter (27%) of participants indicated using Double Up at a single site type. We classified **43% of current participants as high-frequency shoppers**, meaning they used Double Up at two or more different site types, each at least twice per month. This **portion of high-frequency shoppers is**

notably smaller than we saw in either 2022 (68%) or in 2021 (67%). Participant comments indicate that the sharp drop in frequent program usage likely relates to the lower earning cap (\$10 per day instead of \$20 per day)and new \$10 spending cap that was in place from January to September 2023. Supporting this theory, Figure 5 shows that regular Double Up usage at several site types was lower in 2023 than in previous years.

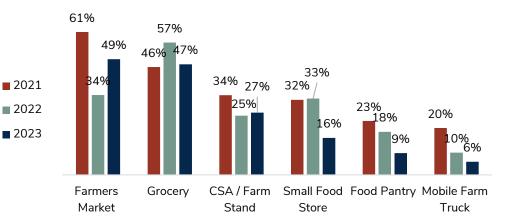
Fig. 6: Most participants reported using SNAP longer than they had used Double Up.



"Driving around to get to a marketplace that accepts the card for ten dollars isn't worth it when you are dealing with high gas prices."

- Detroit resident

Fig. 5: Farmers markets and grocery stores are consistently the most common site types for regular use of Double Up. Participation at some site types was lower in 2023.



\$19

average amount saved from Double Up per household member per month - \$3 per person less than in 2022 Overall levels of program satisfaction were similar to previous survey years. In 2023, 75% of respondents reported feeling welcome when using Double Up, the same portion seen in 2022 but lower than the 83% seen in 2021. In 2023, 81% of respondents rated their experience with the program as "positive" or "very positive," compared to 85% in 2022 and 84% in 2021.

On average, survey respondents reported using 2.2 different incentive types (out of 5 total incentive types), similar to the average number of site types visited. Double Up tokens and cards were the most frequently used incentive type among the 2023 respondents. A smaller portion of the survey sample reported using coupons, store loyalty accounts, or Yes Cards on a regular basis than in 2022. Since the average number of incentive types used was similar to the average in 2022, this likely reflects a smaller number of respondents shopping at the sites using coupons, loyalty accounts and the Yes Card, rather than a change in behavior.

The average amount of monthly savings from Double Up was \$19 per person in the household, a decrease of \$3 per person from the average of \$22 in 2022.⁷ This decrease is consistent with the lower levels of program utilization seen in the shopping patterns and likely reflects both the \$10 earning and spending cap and reductions in Bridge Card funds for many households.

Another way to see this change is by looking at the portion of respondents by range of monthly savings from Double Up for the previous two survey years, as shown in Figure 8. While in 2022, 36% of program participants reported total savings of over \$50 each month, in 2023, 29% of program participants reported this same level of savings.

Fig. 7: The Double Up Card and Tokens are Consistently among the Most Common Incentive Types.

Percent of Participants Using Incentive Type Twice a Month or More by Survey Year

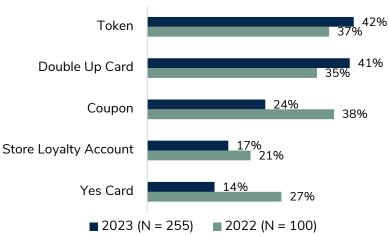
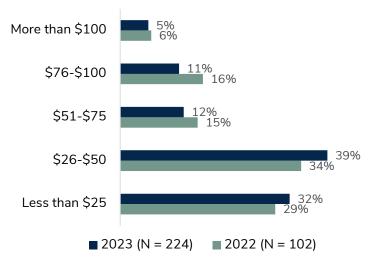


Fig. 8: A Larger Portion Reported Saving ≤ \$50 Each Month in 2023 than in 2022.



Redemption patterns can vary widely, which means program flexibility is important. Redeeming Double Up dollars at each shopping trip was the most common way to use the program, which we also saw in the 2022 findings. However, a smaller portion of people reported saving Double Up for when Bridge Card funds run low in 2023 than in 2022, which may reflect the lower earning cap.

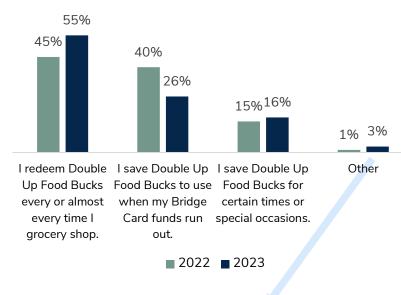
Comments explaining other patterns of using Double Up indicate that there is a wide variety in redemption patterns and that redemption can vary not only monthly but also by season and by incentive type. Some people may need to adjust their redemption pattern in light of the new 90-day expiration window, as illustrated in one of the comments.

Among the Double Up participants stating they save Double Up for certain times, in 2022 the most frequently named occasion was holidays (23 people) followed closely by gatherings with family or friends (18 people) and bulk purchases of seasonally available foods (16 people). By contrast, in 2023 the most frequently named occasion was bulk purchases of seasonally available foods (22 people), with holidays and gatherings noted by far fewer people (8 and 7 people respectively). In written comments about other special occasions, one person described saving Double Up for when fruits and vegetables are on sale and another mentioned using Double Up when they did not have a produce prescription.

In addition to the comments on special occasions, participants also described other patterns of use.

Collectively the survey findings on redemption patterns show that Double Up participants are using the program in many different ways according to their needs, preferences, and other resources. The wide range of redemption patterns points to the importance of maintaining as much flexibility as possible on when, where, and how the Double Up dollars earned can be redeemed.

Fig. 9: Redeeming Double Up on Each Shopping Trip is the Most Common Way to Use the Program.



Selected explanations of other ways to use Double Up.

"I earn during the first half of the month and spend during the second half of the month."

- Grand Rapids resident

"I use the tokens to get produce at the farmers market and the double up card I use and save up some funds so I can use it when I am low on money." – Grand Rapids resident

"I use double up during winter when the price of fresh produce skyrockets, but can't anymore because now they expire too quickly."

- Grand Rapids resident

"I use them when the farmers market is open in summer. Normally every time." - Jackson resident

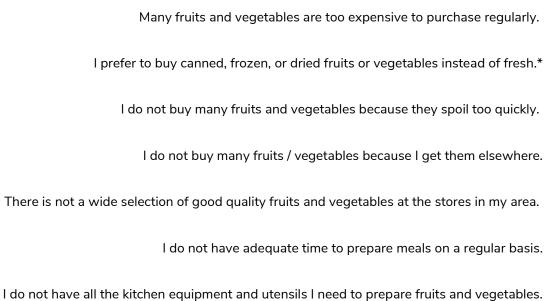
BARRIERS TO PARTICIPATION

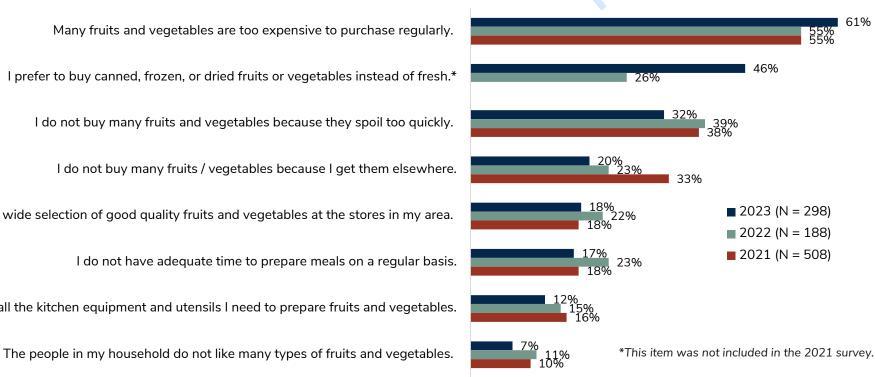
The portion of Double Up participants concerned about produce prices rose in 2023.

"The amounts we can receive daily keep getting smaller and smaller despite increasing inflation of costs of food & living." - Grand Rapids resident "I feel I shouldn't have a limit on earning or spending per trip because of the high prices of fruits and vegetables. This adds to limiting my selections and stocking up on items such as onions, apples, oranges, etc." - Flint resident

"[Double Up] helps slightly but not much due to the rise in cost of food." - Oak Park resident

Fig. 10: Produce prices are a consistent barrier for Double Up participants.

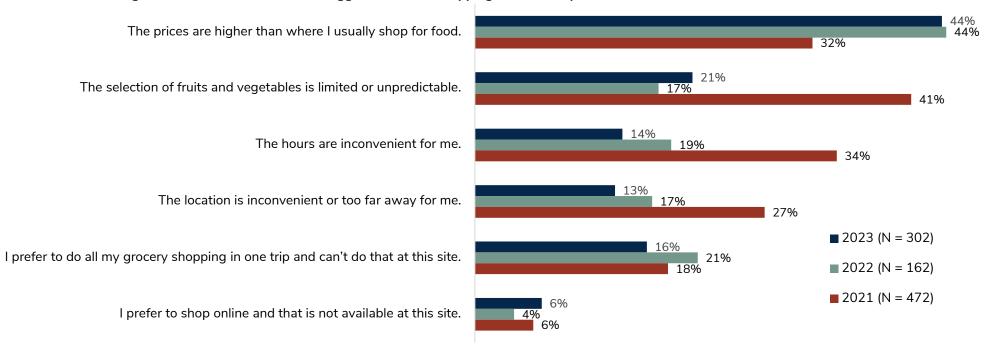




The two indicators used to assess whether produce affordability is a concern for Double Up participants – agreement that fruits and vegetables are too expensive to purchase regularly and agreement that prices are higher at the Double Up site than where they usually shop – either increased or held steady in 2023. In open-ended comments, 13 people brought up rising food prices without prompting. While some people spoke of high prices generally, others noted that food prices at the Double Up sites in their area were especially high. For some individuals, the combination factors, including higher prices at Double Up sites, the distance to Double Up sites, the lower earning cap, and the expiration policy meant that participating in Double Up was not worth it.

"I probably will not participate in Double Up further unless you can make the program available at less expensive stores where low income folks have to shop for better prices." – Grand Rapids resident

Fig. 11: Prices continue to be the biggest barrier to shopping at Double Up sites.



When asked about challenges with Double Up, the \$10 earning and spending cap was the dominant theme, mentioned by 48 people. Comments show the range of impacts program participants experienced from the reduced earning cap and newly imposed spending cap.

"I can't afford the gas to go down to [the market] the three days a week they are open." – Muskegon resident

"I am disabled and need help on most trips to buy groceries. Limiting the amount I can redeem to \$10 per day is very frustrating, because often I am not getting to the store more than once per week, often less than that in the winter." - Harvey resident (near Marquette)

"The \$10 limit per day makes it hard when the store is on the other side of town." - Grand Rapids resident

"Most farmers markets are only one day per week. . . We should be able to get up to \$25-\$30/one day per week to make it fair for those of us with such low income that we don't have reliable transportation available to us." – Tecumseh resident

Fig. 12: The reduced Double Up earning limit and newly imposed spending cap impacted participants in a range of ways.

"It takes a week and 5 visits just to secure the ingredients for making a vegetable soup!" – Lansing resident



"Vendors are raising prices on their produce, not lowering it!"

- Kalamazoo resident

rising prices

"I now find myself buying LESS produce on a shopping visit... I will try *not* to buy more than \$10 of produce on a visit so that I don't miss the opportunity to earn Double Up bucks." – Grand Rapids resident Altogether, 108 people, or 36% of survey respondents, mentioned one or more challenges with the Double Up program. In addition to the frustration with the \$10 earning and spending cap and comments about high prices, participants shared six other types of challenges experienced with the Double Up program, as shown in the table below and continued on the following page.

Fig. 13: About one-third of survey respondents shared one or more challenges with Double Up.



Table 2: Challenges with Double Up

Limited sites



27
people

Participants would like Double Up to be available in more places, particularly at the large, chain supermarkets where they shop regularly and find better prices. Several people also mentioned that they have limited transportation or mobility and, if Double Up sites are not nearby, they can only reach them infrequently.

"I would love to have double up bucks available for purchases at Walmart, Daily Deals, and Meijer." – Grand Rapids resident

Challenging transaction process



21 people Participants expressed frustration with cashiers not understanding the program, the scanning system not working, the challenge of navigating different incentive types, and the limitations of \$2 tokens with no form of change available.

"Sometimes the cashier is not trained in how to use the Double Up Bucks card, which results in a long wait and frustration for the people behind me. It also often happens that the iPad needed to scan the Double Up Bucks card is not turned on or signed in, so I (and all the people behind me) have to wait for someone to log in and complete my transaction." – Grand Rapids resident

Program confusion



10 people Some participants shared they did not fully understand how to use the program, where the program was available, or which products were eligible. Suggestions included information on the new policy changes, more signage at sites that accept the program, and signage indicating eligible foods.

"It's hard to know which merchants and items qualify for benefits and the staff is usually bothered when inquiring." – Flint resident





Limited site hours



Some participants mentioned the desire for Double Up sites to have more availability, People whether open longer hours, open more days, or open additional months of the year.

"I wish I could use it more places and yearround. I can only use it in summer. I would love if I could get more produce year-round." Jackson resident

Limited eligible items



people

A few people shared they would like to use Double Up on additional items or that they had produce." – Holland resident a hard time finding eligible items.

"I wish you could spend it on more than just

Expiration policy



people

A few participants expressed frustration with the expiration policy. Some people were angry because they did not know they would lose their credit until after it happened.

"At the local grocery store, I got a coupon towards a future purchase that has an expiration date. I was out of town for months for a family emergency and they expired and the store wouldn't honor them." – Detroit resident The 2023 survey attempted, for the first time, to understand Double Up participants' experiences with stigma. Survey respondents were asked "How often, if at all, do you feel you are treated negatively or treated differently than other shoppers when using Double Up Food Bucks?" Thirty-four people, 15% of survey respondents, reported they had these experiences either sometimes, often, or very often. Geographically, these individuals were spread across the state. The largest numbers were in the Detroit metro area (7), Flint (7), Southwest Michigan (6), and Grand Rapids (4). Openended comments provide insights on the nature of these experiences.



Fig. 14: 15% of shoppers reported experiencing stigma.

15%

"The farmers and market employees seem to treat me as if processing the information on the card was more work than it was worth."

- Detroit resident

"Other customers and cashiers get frustrated when it takes longer to process Double Up."

- Detroit resident

"Stop the judgement." – Holland resident

"Treat people the same as other shoppers."

- Flint resident

PARTICIPANT OUTCOMES

EXPERIENCES OF FOOD INSECURITY

"We wouldn't be able to afford to feed ourselves if we didn't have this program to double the small amount MDHHS says we qualify for, which is still not enough. I work two jobs and am still in a deficit with my expenses."

- Grand Rapids resident

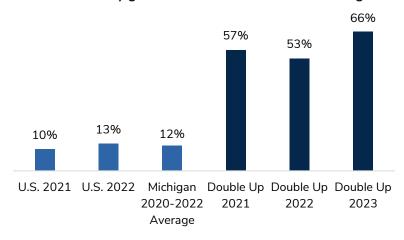
Rates of food insecurity have been consistently higher among Double Up participants than among the state and national population more broadly and were even higher in 2023. Furthermore, more than one quarter of survey respondents reported very low food security (27%), compared to 5% for the state of Michigan.⁸

Individuals who were new to Double Up were somewhat more likely to be food insecure – with 70% of those with less than 6 months of participation reporting food insecurity compared to 63% of those with 6 or more months of participation. This could indicate that participation in Double Up is helping mitigate food insecurity, although needs still remain high. The same trend was seen in the 2021-2022 national evaluation of nutrition incentive projects, where rates of food insecurity decreased by length of program participation.⁶

People of color and people with more than one racial identity were also more likely to be food insecure, with 71% (N = 106) and 83% (N = 12) reporting food insecurity respectively. (For full demographic comparisons by food security status, see Table A3, p. 27.)

In open-ended comments, 27 people mentioned that Double Up had increased food access for their household, providing another indication of the importance of Double Up in mitigating food insecurity.

Fig. 15: Food Insecurity among Double Up participants has been consistently greater than state and national averages.⁷





FRUIT AND VEGETABLE CONSUMPTION

Half of participants reported diet improvements from Double Up.

Fruit and vegetable consumption was higher for those redeeming more Double Up dollars. In 2023, Double Up participants consumed an average of 2.6 cups of fruits and vegetables per day, 9 compared to the recommended consumption of 3.5 to 5 cups per day. 10 Figure 16 shows that average consumption of fruit across the previous three surveys was similar to averages for both nutrition incentive programs nationally and the U.S. population. 11

Like we saw in 2022, the average fruit and vegetable intake was higher for those redeeming the most Double Up Food Bucks dollars per household member, with a difference of about a third of a cup. This suggests that participation in the Double Up program helps to increase fruit and vegetable consumption.

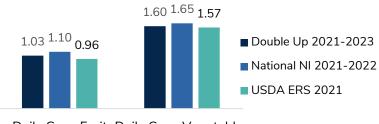
Open-ended comments provide further evidence of Double Up's impact on diet. Nearly half of respondents, 148 people, shared that participating in the program helped them generally eat healthier, eat more fruits and vegetables specifically, or both.

"It means a lot. It helps stretch out the opportunity to be able to buy fresh fruits and vegetables even when I run out of funds in my EBT card." – Flint resident

"It helps to feed my family more healthy options." – Oscoda resident

"Double Up means more fresh fruits and veggies everyday without having to question whether or not I can afford it." – Marquette resident

Fig. 16: Average Fruit and Vegetable Intake by Data Source.



Daily Cups Fruit Daily Cups Vegetables

Fig. 17: Fruit and vegetable intake was higher for households with more Double Up savings.







We did not see a relationship between fruit and vegetable consumption and length of participation in the program, as was seen in the 2021 and 2022 Double Up Food Bucks participant surveys and the year 3 GusNIP impact findings. The comparison of fruit and vegetable consumption by food security status also broke from previous survey findings in 2023, leading to uncertainty in the level of program impact of produce consumption. (For specific results, see Tables A4-A6, pp. 28-29.)

One possibility is that, while Double Up facilitates produce consumption, the impact is not large enough to measure in daily cups consumed. Based on comments shown in the following table, another possibility is that some participants use Double Up to purchase higher

quality produce or shop from local vendors, rather than to purchase larger quantities of produce.

Beyond changes to produce consumption, participant comments reveal the Double Up program provides a range of benefits. When asked "What has participating in Double Up meant for you or your household?" the vast majority of respondents (93%) shared at least one positive impact. The table below shows the themes in addition to those discussed previously: dietary improvements (148 people) and greater food access (27 people). Additionally, 22 people described Double Up as a helpful program without any further elaboration. Collectively, the comments make clear that Double Up is an important program for many participating households.

Table 3: Impacts from Double Up

Stretched food budget



82 people Participants shared that Double Up helped them stretch their food budget and save money, allowing them to make purchases they could not otherwise afford. "It has meant that I can stretch the money for food and can afford fresh, healthy options that I normally couldn't." – Muskegon resident

Offered opportunity to buy local



22 people

Some participants shared that they appreciated how Double Up gave them an opportunity to support local farmers through their purchases.

"I love feeling like a part of community. It's a fun thing to do (and I don't have money for fun things). Plus, I'm helping my community!!!" – Midland resident

Gave access to high-quality produce



A few participants specifically mentioned that Double Up allowed them to purchase people fresh, high-quality produce.

"Double Up improves the quality of fruits and vegetables in my home." – Commerce Township resident

HEALTH STATUS

In all three survey years, participants using Double Up for at least six months and using the program more often reported better health on average.

"[Double Up means] lots of fresh food, more homemade food, and improved health."

- Holland resident

Perceived health status is a validated self-report measure of overall health. ¹² In the 2018-19 and 2021 surveys, about one fourth of participants reported their overall health status as "poor" or "fair", whereas in 2022 and 2023, more than one third did so. Across all four surveys, the portion of Double Up respondents with poor or fair health was notably higher than that of the overall Michigan and U.S. population. ¹³

The GusNIP Year 3 Impact Findings found that individuals participating in a nutrition incentive program for six months or more reported "very good" or "excellent" health at a slightly higher rate that those who participated for less time and both groups did so more frequently than first-time participants (Figure 19).¹⁴ Among Double Up participants, the trends have varied across the three most recent surveys, with the portion of people participating for less than six months reporting "very good" or "excellent" health in the middle of the three time points (2021), the highest of the three timepoints (2022), and the lowest of the three timepoints (2023). However, in all three survey years, the portion of people with high self-reported health rankings was larger for participants in the program for at least six months than for first-time participants.

In all three survey years, individuals using Double Up frequently (visiting at least two site types, each at least twice a month), had higher average health status than those not using Double Up frequently (Table A7 p. 29). While this could reflect greater ability to shop on a regular basis among those who are healthier, this data together with the trends in relation to the length of program participation indicate the Double Up program support participant health.

Fig. 18: The portion of Double Up Participants reporting poor or fair health has been consistently higher than the state and nation overall.

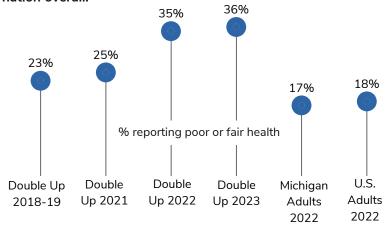
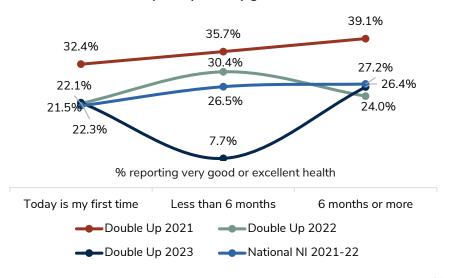


Fig. 19: Double Up participants in the program for at least 6 months are more likely to report very good or excellent health.



PROGRAM COMMUNICATION

The 2023 survey asked, for the first time, about preferred ways to hear from the Double Up Food Bucks team about future program changes. Responses showed that **email and text message were by far the most popular**, each selected by more than half of respondents. Only one person selected each of the other listed social media platforms (Instagram, TikTok, and Threads). In write-in fields, three people mentioned the Providers mobile application and two people requested a phone call.

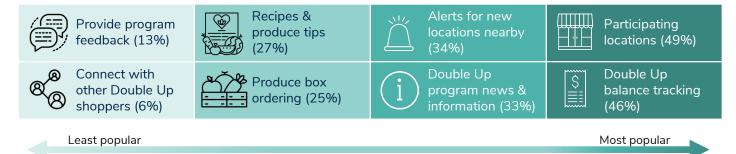
The survey also asked participants which four features they would be most likely to use in a Double Up mobile application, if available. Just over one in ten people (12%) said they would not use a Double Up mobile app, indicating that other communication channels will remain important. For those comfortable using an app, finding participating locations and balance tracking were the most popular features. The survey findings align with feedback shared in focus groups held June-July 2023. Current myFresh Wallet app users most often used for balance tracking or locating program sites and interest in the app as a social connection tool was limited. 15

Fig. 20: Email and text messages were the most popular methods for Double Up communication.

Percent selecting communication method in top 3 preferred ways to receive notifications about Double Up (N = 268)



Fig. 21: Information on Double Up locations and the ability to track Double Up balances were the most popular potential features in a mobile application (N = 268).



ECONOMIC IMPACT

An economic multiplier represents the total increase in output in an economy from a \$1 increase in spending. These estimates used a 1.4 economic multiplier for grocery stores and 1.7 for farm direct sites.

We used the economic multiplier estimates developed for the GusNIP NTAE Nutrition Incentive Economic Impact Calculator¹⁶ to estimate the total economic impact of the Double Up program in 2023. This estimated total economic impact takes into account both the Double Up incentives redeemed to purchase fruits and vegetables as well as how those incentive dollars circulate through the economy when other businesses and individuals make purchases with the revenue from Double Up.

In 2023, Double Up operated at 124 farm direct sites and 112 grocery stores. While the average value of Double Up dollars redeemed was lower at farm direct sites, as shown in Table 3, the economic multiplier at farm direct sites is higher. In other words, every Double Up dollar redeemed at a farm direct site, because it is

more likely to be spent locally, has a greater economic impact on the state. Figure 22 shows the economic impact for grocery stores and farm direct sites as well as the total economic impact from the program. Altogether, Double Up generated nearly six million in economic impact for Michigan in 2023.

Table 3: 2023 Double Up Redemption

Site Type	Average Double Up Redeemed
Farm Direct	\$5,147
Independent Grocery	\$27,700
Spartan Nash Grocery	\$34,792

Fig. 22: Economic Impact of Michigan Double Up Food Bucks – January – December 2023.



KEY FINDINGS





The reductions in Bridge Card funds and the new Double Up restrictions in 2023 took a toll on households.

Likely related to these policy changes coupled with the rising food prices at this time, the 2023 survey found increased rates of food insecurity, a larger portion of people reporting fruits and vegetables are too expensive to buy regularly, a smaller portion of people using Double Up frequently, and smaller average savings from Double Up than seen previously. Participant comments revealed that, for many people, the \$10 earning and spending cap reduced the value of the program for a range of reasons, including limited mobility, limited transportation, or limited time available for frequent grocery shopping.

Participants used Double Up in many different ways, indicating program flexibility is important.

While redeeming Double Up dollars at each shopping trip was the most common way to use the program, survey findings showed a wide variety in redemption patterns. Comments revealed that shoppers strive to maximize their available cash and food assistance resources in light of prices, availability, and preferences. While some people use Double Up when produce is on sale, to stretch their dollars further, others use Double Up when prices are high and they would not otherwise be able to afford produce. Still others use Double Up like a food savings account, drawing on the funds when other food assistance resources run low.

Program satisfaction was high and most participants described positive impacts.

A large portion of Double Up participants reported a positive experience with the program (81%) and an even larger portion (93%) described at least one positive impact, with half (49%) describing dietary improvements.

Measurable impact on health behaviors and health outcomes was mixed.

In contrast with the written comments, the quantitative measures of program impact were mixed. On one hand, fruit and vegetable consumption was higher for those redeeming the most Double Up dollars and health status was better for those using the program more often and for those participating at least six months. On the other hand, there was no relationship between fruit and vegetable consumption and length or frequency of program participation or food security status in 2023.

Participants described a range of challenges that collectively impacted a sizeable minority.

Survey respondents shared challenges related to the Double Up program through an open-ended question. While no single challenge was mentioned by more than about 15% of respondents, collectively more than a third mentioned at least one challenge. Together the comments reveal a range of deterrents, most notably that Double Up is not available at stores with the best prices, that likely keep some people from participating altogether.

Email and text messages were the preferred communication methods for program information.

When asked how they would like to be notified of program changes, the largest portions of people selected email and text messages.

Double Up generated nearly six million dollars in economic impact for Michigan in 2023.

Across 236 sites, Double Up Food Bucks generated \$5.86 million in economic impact from \$4.1 million in incentives redeemed.

APPENDIX A: Data Tables

Table A1: Mean Fruit and Vegetable Intake and Standard Deviation by Sociodemographic Groups by Survey Year.

	Double Up 2022 (N = 208)					Doub	le Up 2023 (N = 304	1)
	N	Fruits and Vegetables ¹⁷	Fruits	Vegetables ¹⁸	N	Fruits and Vegetables ¹⁷	Fruits	Vegetables ¹⁸
Overall	186	2.48 (0.88)	1.03 (0.62)	1.53 (0.53)	277	2.64 (0.89)	1.05 (0.58)	1.60 (0.51)
Age Group								
18-24	11	2.50 (0.77)	1.18 (0.65)	1.42 (0.43)	15	2.96 (1.04)	1.62 (1.03)	1.43 (0.32)
25-34	51	2.41 (0.83)	1.05 (0.65)	1.47 (0.46)	70	2.56 (0.80)	1.06 (0.49)	1.53 (0.46)
35-44	39	2.62 (0.84)	1.09 (0.67)	1.63 (0.44)	70	2.60 (0.93)	0.99 (0.51)	1.63 (0.59)
45-64	63	2.44 (0.93)	0.98 (0.63)	1.52 (0.57)	91	2.67 (0.95)	1.03 (0.59)	1.64 (0.54)
65+	22	2.53 (1.00)	0.90 (0.45)	1.63 (0.71)	31	2.71 (0.69)	0.99 (0.43)	1.67 (0.40)
Gender								
Female	137	2.38 (0.84)	1.00 (0.57)	1.46 (0.49)	210	2.50 (0.80)	1.01 (0.53)	1.50 (0.43)
Male	49	2.76 (0.94)	1.11 (0.76)	1.76 (0.58)	67	3.08 (1.01)	1.17 (0.69)	1.93 (0.60)
Ethnicity								
Not Latinx	165	2.45 (0.81)	1.01 (0.62)	1.51 (0.46)	233	2.63 (0.90)	1.02 (0.54)	1.62 (0.53)
Latinx	14	3.20 (1.38)	1.33 (0.69)	2.02 (0.99)	35	2.71 (0.84)	1.25 (0.71)	1.49 (0.37)
Race								
American Indian or Alaska Native	6	2.63 (1.10)	1.29 (1.16)	1.65 (0.41)	10	2.04 (0.63)	0.79 (0.32)	1.26 (0.29)
Asian	1	2.71 (-)	0.92 (-)	1.65 (-)	6	2.62 (1.14)	0.98 (0.45)	1.81 (0.72)
Black or African American	101	2.46 (0.83)	1.06 (0.67)	1.50 (0.50)	86	2.62 (0.85)	1.00 (0.50)	1.61 (0.49)
White	55	2.55 (0.90)	0.94 (0.46)	1.61 (0.52)	163	2.68 (0.91)	1.08 (0.62)	1.61 (0.53)
More than one race	8	2.78 (1.40)	1.07 (0.74)	1.80 (0.90)	12	2.07 (0.61)	0.77 (0.35)	1.33 (0.31)
Race not listed	14	2.19 (0.81)	1.00 (0.52)	1.32 (0.53)	6	2.44 (0.87)	1.02 (0.48)	1.36 (0.36)

APPENDIX A: Data Tables Continued

Table A2: Perceived Health Status by Program Participation Length and Survey Year

	First Time F	Participants	< 6 Months		≥ 6 Months Participation		Total	
Perceived Health Status	2022	2023	2022	2023	2022	2023	2022	2023
Poor	3.4%	_	4.3%	5.1%	2.1%	8.3%	2.8%	6.9%
Fair	28.8%	30.6%	21.7%	41.0%	32.3%	27.3%	29.8%	26.6%
Good	45.8%	47.2%	43.5%	46.2%	41.7%	38.0%	43.3%	40.2%
Very Good	10.2%	16.7%	21.7%	5.1%	11.5%	21.3%	12.4%	18.6%
Excellent	11.9%	5.6%	8.7%	21.3%	12.5%	5.1%	11.8%	4.8%
Total	59 (33%)	36 (12%)	23 (13%)	39 (13%)	96 (54%)	216 (74%)	178	291

The percentages in the total row are the percentages of the survey sample with listed length of program participation.

APPENDIX A: Data Tables Continued

Table A3: Number and Percent of Respondents by Food Security Status and Sociodemographic Groups for 2022 and 2023 Double Up Respondents

	Double Up Particip	Double Up Participants 2022 (N = 208)		ants 2023 (N = 304)
	Food Secure	Food Insecure	Food Secure	Food Insecure
Age Group (Years)				_
18-24	9 (75.0%)	3 (25.0%)	4 (25.0%)	12 (75.0%)
25-34	29 (54.7%)	24 (45.3%)	26 (34.7%)	49 (65.3%)
35-44	15 (36.6%)	26 (63.4%)	24 (34.8%)	45 (65.3%)
45-64	31 (45.6%)	37 (54.4%)	30 (33.3%)	60 (66.7%)
65+	11 (50%)	11 (50%)	15 (45.5%)	18 (54.5%)
Female	71 (49.0%)	74 (51.0%)	71 (34.5%)	135 (65.5%)
Male	23 (46.0%)	27 (54.0%)	24 (36.4%)	42 (63.6%)
Non-binary/third gender	1 (33.3%)	2 (66.6%)	1 (20.0%)	4 (80.0%)
Not Latinx	84 (48.0%)	91 (52.0%)	84 (35.7%)	151 (64.3%)
Latinx	6 (40.0%)	9 (60.0%)	12 (34.3%)	23 (65.7%)
		_		
American Indian or Alaska Native	1 (16.7%)	5 (83.3%)	2 (20.0%)	8 (80.0%)
Asian	1 (100%)	0 (0.0%)	2 (28.6%)	5 (71.4%)
Black or African American	48 (44.0%)	61 (56.0%)	25 (28.4%)	63 (71.6%)
White	34 (58.6%)	24 (41.4%)	64 (39.0%)	100 (61.0%)
More than once race	2 (20.0%)	8 (80.0%)	2 (16.7%)	10 (83.3%)
Total	98 (47.1%)	110 (52.8%)	99 (34.5%)	188 (65.5%)

In 2021, food secure program participants had higher average fruit and vegetable consumption. In 2022, the averages were very similar for food secure and food insecure participants. In 2023, food insecure participants had higher average fruit and vegetable consumption.

Looking by the duration of program participation also reveals variation in findings between survey years. In short, the relationship between food security and fruit and vegetable consumption has been inconsistent.

Table A4: Average Daily Cups Fruits and Vegetables (without fries) Consumed by Survey Year and Food Security Status

	Average daily fruit and vegetable consumption in cups (standard deviation)				
	Food Insecure	Food Secure			
2021 (N = 503)	2.48 (0.77)	Higher 2.71 (0.83)			
2022 (N = 184)	2.65 (0.93)	2.70 (0.81)			
2023 (N = 260)	Higher 2.68 (0.89)	2.55 (0.90)			

Table A5: Average Daily Cups Fruits and Vegetables (without fries) Consumed by Survey Year, Food Security Status, and Duration of Program Participation

	2021		2022		2023	
	Food Insecure	Food Secure	Food Insecure	Food Secure	Food Insecure	Food Secure
Today is my first time	2.25	2.90	2.45	2.23	3.00	3.30
Less than a year	2.48	2.65	2.36	2.47	2.62	2.52
One year or more	2.54	2.75	2.48	2.66	2.62	2.49
Change	Increase	Decrease	Flat	Increase	Decrease	Decrease

Table A6: Average Fruit and Vegetable Consumption in Cups per Day by Length of Program Use and Survey Year

	Average fru			
	Today is my first time	Less than a year	One year or more	Trend
2021 (N = 503)	2.58 (0.84)	2.54 (0.81)	2.64 (0.80)	Increase between 1 st
	n = 37	n = 294	n = 172	time and 1 year +
2022 (N = 185)	2.58 (0.93)	2.63 (0.82)	2.77 (0.86)	Increase at each time
	n = 54	n = 42	n = 0.86)	interval
2023 (N = 169)	3.04 (1.14)	2.57 (0.80)	2.57 (0.83)	Decrease from 1 st time
	n = 35	n = 67	n = 169	to other time intervals

Table A7: Average Health Status by Frequency of Program Use and Survey Year

	Average health status on scale of 1 (poor) to 5 (excellent) (standard deviation)				
	Low-frequency user	High-frequency user			
2021 (N = 446)	2.8 (0.96)	3.3 (0.93)			
2022 (N = 130)	2.7 (0.96)	3.1 (1.02)			
2023 (N = 261)	2.7 (1.02)	3.0 (0.89)			

PARTICIPANT SURVEY

Survey Design

With the 2023, we returned our focus to current program participants, screening out former participants. The survey was primarily self-administered, as both an in-person intercept survey, completed either on paper or a by tablet, and through electronic distribution. If requested by a respondent, a member of the data collection team administered the survey orally. Respondents were offered a \$5 stipend upon completion of the survey. For surveys completed in person, this stipend was given as cash. For electronically-completed surveys, the stipend was given in the form of a link to Tango Rewards Genius, which allowed recipients to select a gift card of their choice.

Survey Instrument

The majority of the survey questions on the instrument were required as part of the national evaluation led by the GusNIP Training, Technical Assistance, Evaluation, and Information Center (NTAE). In addition to these required items, the 2023 survey replicated several items added in 2022: one question assessing approximate amount saved in the past month through the use of Double Up, two questions on Double Up use patterns, two questions assessing program participation by caregivers of young children, one question on experiences of using multiple incentive types, and a more detailed question on frequency of visits to Double Up sites.

The 2023 survey also added new items: two questions capturing experiences with stigma, an open-ended question on program challenges, one question on program-related communication, one question on desired features in a Double Up mobile application, and two questions granting Fair Food Network permission to use quotes from the survey responses and contact

respondents in the future. Three 2022 questions on how the COVID-19 pandemic affected food access were eliminated from the 2023 survey.

Sampling Strategy

We selected 30 Double Up sites for in-person survey recruitment based. To select sites, we looked for sites not previously visited, areas of the state under-represented in previous surveys, sites funded by the Gus-CRR grant, sites with medium-high Double Up redemption rates, and diversity in both site type and state geography.

Data Collection

Thirty-one individuals completed the 2022 version of the survey instrument between January – April 2023, in conjunction with participant interviews conducted at that time. As such, there are a few questions unique to the 2023 survey instrument where the respondent pool is smaller. The remaining 273 individuals completed the 2023 survey between July and October 2023. Of these 273 individuals, 130 people completed the survey in person with a data collection team member, 85 people completed the survey electronically after receiving an individual link to the survey by email, and 58 completed the survey through a link distributed on social media and through flyers and postcards at Double Up sites.

Data Cleaning and Analysis

We analyzed survey results using IBM SPSS Statistics Version: 28.0.1.0. Univariate analyses included calculating means, standard deviations, and frequencies. We converted Likert scale variables into dichotomous variables in some cases, converting "strongly disagree, disagree, or neither" into "no" and "agree, strongly agree" into "yes" when calculating how many barriers a person experiences, for example. We conducted multivariate analyses including comparing frequencies and means by subgroup and running cross-tabulations.

APPENDIX B: Methodology Continued

We used secondary data sources for comparative analyses between the participant survey data and the broader population of SNAP participants in Michigan. The American Community Survey 1-Year estimates provide state-level data about household composition and the demographics of individuals who use SNAP. The most recent release of this dataset was from 2022. Although it serves as a useful point of reference, the dataset does not cleanly align with all survey data, leaving some demographic information from the Double Up Food Bucks survey without a point of reference in the SNAP data.

Food Security

The survey included the USDA 6-Item Household Food Security Survey Module. ¹⁹ To analyze these responses, we followed the USDA's scoring procedure in which each affirmative response to the questions about whether the participant is able to afford food needed is given a score of one. The total possible score, therefore, ranges from 0-6. Scores of 0-1 are then classified as "high or marginal food security," scores of 2-4 are considered "low food security," and scores of 5-6 are considered "very low food security." We then further simplified these into just two categories: "food secure" (high or marginal food security) and "food insecure" (low or very low food security).

Fruit and Vegetable Intake

The survey included ten questions about the frequency of eating different categories of fruits and vegetables over the last month. Response options, which ranged from "never" to "2-3 times per day" were first converted into a cup equivalent measure. These cup equivalents were then multiplied by an age-sex specific portion size in order to account for variances in the volume consumed at any one time across population subgroups. These values were then multiplied by

regression coefficients identified by the National Cancer Institute in order to account for both different quantities of fruits and vegetables in different food items and average margin of error. Finally, the values for selected food groups were added together to calculate 1) daily cup equivalents of fruits and vegetables excluding fried potatoes and including legumes; 2) daily cup equivalents of fruits; and 3) daily cup equivalents of vegetables excluding fried potatoes and including legumes. Full details of this scoring algorithm are available on the National Cancer Institute webpage.²⁰

After calculating fruit and vegetable intake, we compared mean fruit and vegetable intakes by level of barriers to shopping at Double Up sites and to the level of barriers to purchasing produce generally. We also compared fruit and vegetable intake by experience of the two items related to price constraints – affordability of food at Double Up sites and affordability of produce generally. We saw little to no differences in all of these comparisons.

Limitations

Although the 2023 sample size was larger than in 2022, it was smaller than in 2021. Representation in the Upper Peninsula and in the northeast, lower peninsula was limited. Without data on the total number or demographic distribution of Double Up participants, we cannot know the extent to which the survey sample was representative of the population participating in the program at the time of data collection.

APPENDIX B: Methodology Continued

ECONOMIC ANALYSIS

We utilized the GusNIP NTAE Nutrition Incentive Economic Impact Calculator to estimate the economic impact of the Double Up program based on the total value of Double Up Food Bucks incentives redeemed by site type between January and December of 2023. The calculator was developed by Colorado State University in partnership with the Gretchen Swanson Center for Nutrition and the Nutrition Incentive Hub. To develop the tool, researchers customized the economic data embedded within IMPLAN Economic Software to better reflect the nature of nutrition incentive programs as well as differences in the economies of states with nutrition incentive programs.

The calculator drew on evidence showing that farm direct sites have higher economic multipliers than grocery stores. In other words, more of the money spent at farm direct sites will, on average, circulate locally in the economy and generate economic impact for the state (or region) when compared to the money spent at grocery stores. The tool grouped Michigan in a region with New York, Pennsylvania, Illinois, Wisconsin, and Minnesota based on the characteristics of both the agricultural sector and the overall state economies. For the states in this region, the calculator estimates an economic multiplier of 1.4 for brick and mortar sites (grocery stores) and 1.7 for farm direct sites. The calculator is based on 2021 agricultural and food sector data and, therefore, represents economic activity at that time.

END NOTES

¹USDA Economic Research Service. (2024). Summary Findings: Food Price Outlook, 2024. https://www.ers.usda.gov/data-products/food-price-outlook/summary-findings/

²State Template – FFCRA SNAP Emergency Allotment Request – Michigan. February 2023. https://fins-prod.azureedge.us/sites/default/files/resource-files/MI-SNAP-COVID-EA-Extension-February-2023-Acknowledged.pdf

³ The average monthly per person SNAP benefit decreased from \$270 in December 2022 – February 2023 to \$167 in March – May 2023. Hall, L. (2023). End of SNAP's Temporary Emergency Allotments Resulted in Substantial Benefit Cut. Center on Budget and Policy Priorities. Available from: https://www.cbpp.org/blog/end-of-snaps-temporary-emergency-allotments-resulted-in-substantial-benefit-cut

⁴United States Census Bureau. (2023). 2022 American Community Survey 1-Year Estimates – Age and Sex. Available from: https://data.census.gov/table?q=population%20age%20range%20Michigan

⁵United States Census Bureau. (2023). 2022 American Community Survey 1-Year Estimates – Food Stamps/Supplemental Nutrition Assistance Program (SNAP). Available from: https://data.census.gov/table?q=Michigan%20SNAP&y=2022

⁶These 6 individuals completed the 2022 version of the participant survey as part of the interviews we conducted at the beginning of 2023. The 2023 version of the participant survey, launched in June 2023, screened out former participants.

⁷To calculate an average, we used the midpoint of the ranges in the survey, e.g. \$12.50 for the "less than \$25" category. We then divided this number by the number of household members to determine savings her household member.

⁸Rabbitt, M.P., Hales, L.J., Burke, M.P., & Coleman-Jensen, A. (2023). Household food security in the United States in 2022 (Report No. ERR-325). U.S. Department of Agriculture, Economic Research Service. https://doi.org/10.32747/2023.8134351.ers

⁹The survey included the ten-question Dietary Screener Questionnaire. Responses to these questions were converted to daily cup equivalents using a series of scoring algorithms developed by the National Cancer Institute. Total fruit and vegetable consumption was calculated including legumes and excluding fried potatoes. Vegetable consumption also includes legumes and excludes fried potatoes. For details on the scoring algorithms, see: https://epi.grants.cancer.gov/nhanes/dietscreen/scoring/

¹⁰United 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.

¹¹GusNIP NTAE. Gus Schumacher Nutrition Incentive Program (GusNIP): Impact Findings Y3: September 1, 2021 to August 31, 2022. Prepared for U.S. Department of Agriculture, National Institute of Food and Agriculture; 2023. Available from: https://nutritionincentivehub.org/gusnip-ntae-y3-impact-findings

¹²Idler, E. L., & Benyamini, Y. (1997). Self-rated Health and Mortality: A Review of Twenty-seven Community Studies. Journal of Health and Social Behavior, 21-37.

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¹³KFF analysis of the Centers for Disease Control and Prevention (CDC)'s 2013-2022 Behavioral Risk Factor Surveillance System (BRFSS). Available from: https://www.kff.org/other/state-indicator/adult-self-reported-health-status/?currentTimeframe=0&sortModel=%7B%22colld%22:%22Location%22,%22sort%22:%22asc%22%7D

¹⁴GusNIP NTAE. Gus Schumacher Nutrition Incentive Program (GusNIP): Impact Findings Y3: September 1, 2021 to August 31, 2022. Prepared for U.S. Department of Agriculture, National Institute of Food and Agriculture; 2023. Available from: https://nutritionincentivehub.org/gusnip-ntae-y3-impact-findings

¹⁵Helegda, K., Colasanti, K., and Reberg, J. (2023). Double Up Food Bucks myFresh Wallet Mobile App Focus Group Results. Prepared for Fair Food Network by the Program Evaluation Group. August 2023.

¹⁶For more information on the GusNIP NTAE Nutrition Incentive Economic Impact Calculator, see: https://www.nutritionincentivehub.org/resources/economic-impact-calculator

¹⁷Fruits and vegetables are calculated with legumes and without French fries.

¹⁸Vegetables are calculated with legumes and without French fries.

¹⁹Economic Research Service, USDA. (2012). U.S. Household Food Security Survey Module: Six-Item Short Form. Available from: https://www.ers.usda.gov/media/8282/short2012.pdf

²⁰National Cancer Institute Division of Cancer Control and Population Studies. (N.D.) Dietary Screener Questionnaire in the NHANES 2009-10: Data Processing & Scoring Procedures Using Current Methods. Available from: https://epi.grants.cancer.gov/nhanes/dietscreen/scoring/current/