

VERMONT EVERYONE EATS ECONOMIC ANALYSIS

VEE'S DUAL INVESTMENT IN THE LOCAL FOOD ECONOMY AND FOOD SECURITY FOR VERMONTERS

MAY 2023 // PREPARED BY ELIZABETH SCHUSTER AND MICHELLE KLIEGER



Vermont Everyone Eats (VEE) was an emergency relief program administered by Southeastern Vermont Community Action (SEVCA) that benefited restaurants, farms and food producers, and individual meal recipients during a time of disruption. The program connected food systems, food security, and economic impact goals, and part of the program's success was because of this collaborative, integrated approach. Lasting from August 1, 2020 through March 31, 2023, with nearly \$49 million in total funding (\$47.5 million from the Federal Emergency Management Agency plus a \$1.3 million allocation from the Vermont State Legislature), VEE's benefits extended far beyond the initial expected benefits.

Key indicators of success include:

- ◆ A multiplier effect of **\$78 million**, which is additional spending beyond the initial \$49 million, by restaurants and farmers re-circulating those dollars back into local inputs and local labor pools.
- ◆ **\$10.1 million** leverage, which is **private dollars invested** by restaurants, farms, and food producers into local food system equipment and infrastructure.
- ◆ Improved **economic resilience** during the COVID-19 pandemic, measured by over 400 full-time employees' retention and by these enterprises not going out of business.
- ◆ Dozens of **new partnerships** established between farms and restaurants. Relationships between farms and restaurants are a crucial element for farms to be able to sell to restaurants.
- ◆ 3.9 million meals delivered to those in need.
- ◆ Greater **community cohesion** was reported by those helping distribute the meals and those receiving the meals as well.

This economic analysis has made the case through multiple data sources, interviews, and surveys that the VEE program had a multitude of positive outcomes and economic resilience benefits for farmers, food producers, and restaurants. The VEE program is a model for a successful food security program during times of uncertainty that supports economic development and social outcomes. This report presents an overview of the program, background research, and research results. The last section of this report lists a series of recommendations for moving forward, highlighting numerous opportunities for the future.

TABLE OF CONTENTS

PAGE 1 Executive Summary

PAGE 2 Table of Contents

PAGE 3 Infographic of Key Results

PAGE 5 Overview of the Situation

PAGE 6 Initial Launch of Vermont Everyone Eats

PAGE 9 Program Structure

PAGE 10 Economic Analysis: Research Methods

PAGE 12 Past Research that Informed the Economic Analysis

PAGE 14 Results: Economic Impact

PAGE 16 Results: Investment Outcomes

PAGE 22 Results: Economic Resilience Outcomes

PAGE 27 Results: Community Well-being Outcomes

PAGE 30 Additional Findings

PAGE 33 Lessons Learned and Future Recommendations



Over 270 Producers⁺



RMON





\$49 million in total

program spending





In the wake of the coronavirus pandemic, Vermont Everyone Eats (VEE) was created to provide food

assistance and economic support to communities throughout the state.

Through this program, qualifying community members signed up to receive meals from participating restaurants. Restaurants received

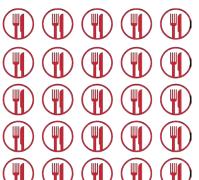
\$10 per meal, purchasing at least 10% of the food used in the meals from local farms and food

> producers. Meals are then distributed through 14 community hubs. Since the program started in 2020, 700 restaurants, farms, hubs, and distribution partners have participated.



Meal Recipients

From August 2020 to March 31, 2023, the VEE program distributed over 3.9 million meals, providing nutrition and food security benefits to community members in need.



= 1,000 meals

Producers

25,000 meals distributed per week

for economic ii

In addition to supporting food security, VEE also benefited locally owned businesses. The multiplier effect from VEE means that for every dollar spent directly on the program, those dollars were then re-circulated by restaurants and food businesses on local labor pools and inputs.

\$49 million in program funding

\$78 million multiplier effect+

EVERYONE EATS FOR ECONOMIC RESILIENCE

Restaurants and farmers invest

\$10.1 million

in equipment and infrastructure+

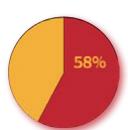
The analysis made the case through data and interviews that VEE had a positive impact on the economic resilience for restaurants and food producers. Further, the VEE program motivated additional private dollars to be invested in local food infrastructure.

respondents report that their restaurant was

\$AVED from closure^

Full-time equivalent

Jobs
saved, added, or
expanded^

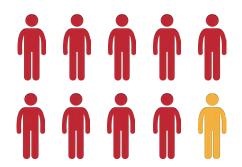


Critical revenue source for 58% of farmers and food producers*

EVERYONE EATS FOR COMMUNITY

Beyond food security and economic benefits, VEE had tangible benefits for community well-being. Participants saw the value of supporting others in the community. Meal recipients reported a reduction in the feeling of social isolation and appreciated the opportunities for community connection.

9 in 10 meal participants report that their mental well-being improved**



"The community meals have been a huge help for me and my family and it feels good knowing we're supporting local farms and businesses."

EVERYONE EATS FOR PARTNERSHIPS

Restaurants exceeded VEE requirements with an average 36% of ingredients purchased locally. Additionally, the vast majority buy their local foods direct from farmers. This really highlights VEE's importance for building relationships and partnerships between farmers and restaurants.

36% of food purchases were from local food producers*



55% of restaurants built new relationships with local food producers*

This economic analysis of Vermont Everyone Eats was prepared by:

- * Survey of 40 food producers and restaurants for economic analysis
- + Extrapolated from economic survey
- ^ VEE Restaurant Survey Report (2021) with 110 total responses
- **Meal Participant Survey (June 2021) with 2,606 total responses





OVERVIEW OF THE SITUATION

The VEE program helped support three groups negatively impacted by COVID-19 restrictions - restaurants, farmers and food producers, and food insecure meal recipients. In March 2020, much of the United States was surprised by COVID-19 related shutdowns. For many Vermonters, this had direct negative impacts on household income and the ability of families and individuals to maintain food security. The shock of the pandemic brought to light many vulnerabilities in our systems, food with vlagus disruptions and shutdowns impacting local food producers and small, locally owned restaurants.

Farmers in Vermont were struggling with profitability even before the pandemic hit. According to the United States Department of Agriculture, Vermont lost nearly 20% of its farm operations from 1997 to 2017, leaving it with 1,124 fewer farm operations (National Agricultural Statistics Service). Total farm income grew from \$11.9 million to \$43.9 million in the same 20-year period. Small producers were going out of business, and similar to other places, the remaining farms were getting bigger. Yet small to mid-sized farms provide a crucial role in the fabric of our rural communities and in our local food economy, and there is reason to be concerned about these trends in consolidation and loss of smaller farms.

While there is some evidence that local food businesses were more adaptive and resilient during the pandemic, in the short many faced disruptions which exacerbated their already tight margins. For example, in April 2020 when schools and restaurants closed, the price of milk plummeted. Vermont news outlets featured stories of dairy producers dumping milk that was no longer being sold to schools and institutions that were now closed. This led to significant economic losses to dairy producers. Dairy is just one of many examples of a perishable food product that was wasted due to pandemic-related supply chain disruptions.

Even one year into the pandemic, restaurants in Vermont were still facing hardships, with another <u>Vermont news outlet</u> in May 2021 quoting a restaurant owner in Burlington who said, "The pandemic kind of entirely cut our legs off — lots of experience and capacity lost." Another restaurant, based in Winooski, was quoted saying, "Like for a lot of restaurants, this pandemic exposed our tight margins."

According to a University of Vermont survey, on the food security side of the system, almost one-third Vermonters (30%) were food insecure from March-September "Stigma 2020. and logistical concerns" were cited as the top barriers to accessing existing food security programs like SNAP/3SquaresVT. Currently, one in eleven people and one in eight children in Vermont still face hunger (Feeding America).

INITIAL LAUNCH OF VERMONT EVERYONE EATS

During the early weeks of the COVID-19 pandemic, innovative food security efforts sprang up rapidly in various parts of the state. In Burlington, Skinny Pancake's ShiftMeals program, led by Jean Hamilton, provided income to restaurants and free meals to community members in need. In Brattleboro, the Downtown Brattleboro Alliance's Nourishing Artists program, led by Stephanie Bonin, leveraged donations to benefit local businesses and pay local restaurants to produce free meals for unemployed artists. These efforts provided the early template for the development of the VEE program.

Initial conversations in May 2020 included Downtown Bonin of the Stephanie Brattleboro Alliance, Jean Hamilton of Skinny Pancake, Gary Holloway of the Agency of Commerce and Community Development (ACCD), Jason Gosselin and Sue Graff of the Agency of Human Services (AHS), Ron Pentkowski and Ben Rose of Vermont Emergency Management (VEM), Chris Herrick of the VT Department of Public Safety, Steve Geller of SEVCA, Sue Minter of Capstone Community Action, Ellen Kahler of Vermont Sustainable Jobs Fund (VSJF), and other key collaborators.

ACCD agreed to be the fiscal agent for VEE, receiving funds from Federal Emergency Management Agency (FEMA) and providing them to SEVCA, which then administered the program statewide.

In June 2020, a request of the Vermont Legislature led to an allocation of \$5 million in Coronavirus Aid, Relief, and Economic Security (CARES) Act funding in support of VEE. This was approved just days before FEMA agreed to provide reimbursement for the program, which eliminated the need for the allocation, but it is significant that the program has had legislative support from the start. On August 1, 2020, a coordinated pilot program began in Brattleboro and very quickly spread to all fourteen counties.

Two key innovations in the VEE program were its implementation as a state-wide program free of means testing for all Vermonters in need, and the innovative cross-sector value of using federal funds to pay restaurants to make meals (economic stabilization), using at least 10% locally grown or produced ingredients (agricultural resilience), to be distributed to eaters in need (food security).



Massie and Heiss (2022) list in their analysis of the VEE program the key resilience lessons that enabled the program's success, which included:

- Rapidly obtaining an influx of funding to kickstart the program and build a foundation,
- Busting silos and bringing together a broad diversity of partner organizations and government agencies,
- Utilizing a statewide Regional Hub Model that merged the benefits of a statewide program while bringing in regional differences through the more localized hubs, and
- Fostering dignity for all stakeholders (1).

Initially, the program was only expected to last five months, through December 31, 2020, but was extended numerous times. Extending from August 1, 2020 through March 31, 2023, with nearly \$49 million in total funding (\$47.5 million from FEMA plus a \$1.3 million allocation from the Vermont State Legislature), Vermont Everyone Eats received agency support from ACCD, AHS, the Agency of Agriculture Food and Markets, and VEM.



Why VEE Fills a Niche in the Vermont Food Security Landscape

with food Even multiple security organizations in Vermont, VEE filled a key niche. Initially created to mobilize quickly as a disaster relief program, VEE continues to serve as a model for food security during times of disruption. VEE is also the only food security program in the state that has had economic development as a primary goal, focused directly on goals for economic resilience for the local food economy while also providing meals to those in need.

VEE offered a low barrier to entrance as well as choices for those with specific cultural or health needs around their food. Further, the option for ordering meals through the Localvore app provided an added convenience for both those who received meals as well as those who managed the program.

In addition to improving food access and providing economic development, VEE brought in a new model of charitable food that is taking root. Instead of measuring how much food is distributed, it measures how many lives are changed or improved.

This focuses on the root causes of hunger and helps address those causes. For example, unemployment is a major source of food insecurity; VEE kept restaurant owners and employees, farmers, and distributors employed by keeping food moving through the food system. By measuring success in lives changed, the focus shifts from prioritizing efficiency to building empathy, equity, and political will to implement real solutions.

VEE is regularly compared to well-known programs like Meals on Wheels, as well as other food aid programs. VEE served as a complement to those programs. Meals on Wheels fills a niche in the partner landscape by offering hot, prepared meals in need who meet to those requirements: age 60 or over and unable to obtain or prepare meals on a temporary or permanent basis. Meals on Wheels is a federally funded program that follows fairly strict nutritional guidelines, portion requirement sizes. and has а qualification.

In contrast, VEE was an emergency response program funded by FEMA. The guidelines for qualification were set intentionally low – self-certification of need was sufficient to receive meals. Additionally, the nutritional guidelines for VEE meals were broad. This means that while local fresh ingredients were a huge component of the program and VEE meals were nutritious, they would not have met the stringent requirements of senior meals from Meals on Wheels.

A network of various-sized food banks and food pantries also fill a critical gap in Vermont. The Vermont Foodbank provides nutritious food through a network of more than 300 community partners. There are also impactful nonprofit organizations like Hunger Free Vermont, dedicated to, "A future where... Everyone living in Vermont has a lifetime of food security and economic security." Further, agencies like Vermont Department of Disabilities, Aging and Independent Living play a crucial role in food security as statewide experts in feeding seniors in Vermont.







The VEE program had four components:

- 1. Farmers and food producers
- 2. Restaurants
- 3. Meal recipients
- 4. Community of Practice

Administered by SEVCA, the program's Community of Practice was initially led by Jean Hamilton and Kevin Brennan, and later led by Amanda Witman with support from Kathleen Devlin and Chris Meyer. The VEE Community of Practice met weekly in two groups throughout the program.

The VEE Statewide Task Force included representatives from state-level entities including nonprofit organizations and government agencies with expertise in food security, agriculture, and economic development.

The VEE Hub Manager Group included representatives from each of the diverse organizations who sponsored the fourteen hubs, including farm-to-table, downtown businesses, community action, mutual aid, restaurants, food security, and other organizations. The cross-collaboration that occurred in these groups was essential, as VEE's success came part of "recogniz(ing) the interconnected nature of economic crises experienced across food systems stakeholders." (Massie and Heiss 2022, p.8).

The community hubs served as local coordinators, identifying local needs,

creating distribution systems, engaging restaurants, and acting as liaisons between the restaurants and distribution partners.

of the 14 hubs. Localvore. One represented restaurants in all 14 counties through the Localvore app. The Localvore app is similar to Yelp, except that it is focused more specifically on servicing communities and local food. The Localvore app already existed before the pandemic, but expanded from an informative tool to marketplace that could support transactions in the fall of 2020. The new capabilities allowed it to directly support the VEE program through efficiently connecting recipients meal and restaurants.

Given previous research that "stigma and logistical concerns" were key barriers to accessing food security programs in Vermont, VEE was designed with very low barriers to entrance for meal participants. Meal recipients did not need to provide proof that they were in need during the pandemic, which increased access to those in need during times of crisis where planning may be more difficult.

Part of the value of 'dignity for all involved' meant paying a fair price to restaurants for the meals. Restaurants were paid \$10/meal and required to source at least 10% of their ingredients from local food producers. SEVCA restaurant surveys showed the average percentage over the full program was 36% of ingredients sourced locally.

The research was comprised of the following:

- 1. Meetings with SEVCA to help understand the partners and food security needs in Vermont
- 2.Interviews with Community of Practice members
- 3.Attending the <u>VEE Prepared Meals</u>
 <u>Symposium</u> (virtual) on September
 29, 2022
- 4. Literature review and background research on past studies on VEE
- 5. Farmer and food producer interviews (19 total)
- 6. Restaurant interviews (21 total)

Why is it important to understand the system before designing the analysis?

For research on something as complex as food security during a pandemic, it is critical to consider the system. Food security is often considered a wicked problem, which "refers to issues which are highly complex, have innumerable and undefined causes and are difficult to understand and frame." (Grochowska 2014, p. 1). Therefore, if research is conducted and the system drivers are not taken into consideration, the results will be skewed. To address this potential issue of bias due to the complexity of food security, the researchers spent ample time early in the project getting to know the drivers, program system goals, desired outcomes and needs for food security in Vermont.

The researchers had several planning meetings with SEVCA and completed 16 interviews, representing Community of Practice members and other experts who were knowledgeable about the VEE program.

How did the economic analysis build upon past research?

The researchers compiled findings from previous research conducted on the VEE program and conducted a literature review. Previous research on the VEE program included several surveys with restaurants and one survey with farmers and food producers, as well as one survey with more than 2,000 meal participants, all which had been completed by SEVCA. In December 2020, there was also an analysis completed by a team of consultants, and in 2022, research was completed by a UVM professor and student.

How were the survey questions developed and how were the interviews structured?

The researchers chose to not distribute an online survey because there was a good chance of getting a low response rate. Instead, they conducted phone interviews, each lasting 30 minutes, allowing for a more in-depth conversation than an online survey would have allowed. The survey instrument for the farmer and restaurant interviews was carefully developed with feedback from Community of Practice members and pre-tested before launching.

How did the researchers identify restaurants and food producers to participate in the interviews?

The Community of Practice gave recommendations to the researchers about who they might interview. This bias means that to a certain degree it was a self-selecting group who likely had some interest in the program. However, almost three-quarters of the farmers were selected at random and were cold-called from a list of food producers reported by VEE restaurants as having been used for local food items for the program. Many farmers did not know that they had been participating in the program.





PAST RESEARCH THAT INFORMED THE ECONOMIC ANALYSIS

The research methods build on and were informed by past publications. While consistency in methods is important, the literature is guite limited when it comes to and standard performance methods indicators for assessing the economic impact of food system programs. Because it remains an emerging field, our team pieced together components from several studies. The Economics of Local Food Systems Tool Kit (2016) was consulted for this research and is arguably the most thorough on how to assess the economic value of food systems. Yet despite its utility, even that tool kit is a broad guide where the methods in each step are left open for interpretation.

A growing interest is emerging in entrepreneurialism for food producers, and the current state and lessons learned are captured in a 2020 report on shared kitchen incubator and food processing spaces. Yet despite an explosion of food and kitchen incubators that support the local food economy, there is still a notable lack of publications showing the impact that specific programs have on the economics of food businesses. The vast majority of publications are case studies or focused on definitions and frameworks.

A Vermont-based study on the economic impacts of local food purchases by a hospital system used a mixed-methods approach, meaning they supplemented their quantitative data with qualitative research (Becot et al. 2016).

That approach allowed the researchers to show the total economic impact in dollars while also surfacing information on indirect economic benefits and supply chain relationships through surveys and interviews. This VEE economic analysis also uses a mixed-methods approach.

A foundational article (2020) by David Conner, of the University of Vermont, developed a framework for assessing local food businesses in Vermont. He examined how broader goals of sustainability for food producers impacts their overall decision making and concluded: "Results suggest that these businesses' decisions are driven in part by their personal values and interests and their desire to support other local businesses and contribute to their communities." This finding motivated a guestion in this VEE research around additional goals and labels that food businesses whether used to gauge food participating restaurants and producers also had broadly defined sustainability goals that went beyond business goals of profitability.



Conner then proposes two economic theories.

- First he looked at transaction costs. is an economic concept describing the additional costs to a business to make a sale or purchase. The costs may include negotiations, paperwork, compliance, contracts, changes to internal processes, and the overall learning curve. This matters because the first time a restaurant switches from a non-local outlet to a local food producer, or a farmer switches to a new market channel, this results in a temporary higher cost, which is the transaction cost. This leads to a critical question to consider with the VEE program. Did the VEE program help reduce the transaction costs between local food producers and restaurants?
- The second theory is knowledge management - which describes levels knowledge acquisition for businesses. Connor noted that cocreation of knowledge leads to the greatest levels of innovation. This is a fascinating concept to apply innovation in food systems. Did the program stimulate partnerships which in the future could lead to co-creation of knowledge and innovation?



RESULTS: ECONOMIC IMPACT

Why This Matters

One of the most informative publications to date on the impact of food hub programs on the local food economy was by Jablonski et al. (2016). The authors created a framework to adapt traditional input-output (IO) models for economic impact to be more accurate for food system assessments, based upon data from a case study of a food hub in New York. Their updated framework quantifies both the direct impact of the initial spending in the food system and the multiplier effect, which is the re-circulating of the initial dollars invested in the local economy.

The multiplier effect includes spending on both local inputs and labor by restaurants food producers. Examples and expenditures in the multiplier effect may include supplies, production inputs, fuel, automotive transportation, insurance, equipment, tax, and repair and maintenance of vehicles.

For the VEE program, we have data on the percent of ingredients sourced locally by restaurants, but not detailed data on which local food products were purchased or quantities of each, and there also are no comprehensive lists of all local food producers that participated in VEE.

We also have trouble distilling what percentage of total local foods were purchased directly from producers versus from distributors (such as Black River Produce and Food Connects). For these reasons, using an IO model would have been a rough approximation – IO models are only as good as the data in the model.

Because running a full IO analysis was unlikely to result in information that would directly help inform future decisions, the researchers on this study opted to use the multiplier numbers provided in the Vermont-based Becot et al. (2016) paper to approximate the multiplier effect. That paper assessed past studies and found the multipliers to range from 1.4 to 2.6. This means that every dollar spent by the program resulted in 1.4 to 2.6 extra dollars being spent within the community.



VEE Results

As noted earlier in this report, the total spending on VEE was \$49 million, the majority from FEMA and the remainder a \$1.3 million allocation from the State of Vermont. Several factors will influence the magnitude of the multiplier Considering that all restaurants were Vermont-based, the program included a local food requirement, and all labor was sourced locally, we anticipate that a higher percentage of dollars were retained locally than with traditional economic а development program not focused on local food systems. For this reason, we opted for the upper end of the range for multipliers.

- ◆ The multiplier for VEE is roughly \$78 million. Restaurants, food producers, and farmers directly recirculated this amount into local inputs and local labor pools.
- ◆ We also know the direct impact due to actual cash flow from hubs: VEE Hubs have distributed approximately 3.9 million meals throughout all 14 counties, generating more than \$39 million in revenue for participating restaurants.

Discussion

These numbers are estimates that help us understand the order of magnitude of the impact. A December 2020 JSI report on the VEE program highlighted the struggles that were facing those in Vermont from March through December 2020. With escalating food insecurity, job loss and rapidly increasing unemployment rates, business closures, and high insecurity, it was a challenging time for families and small businesses across Vermont. In this uncertainty, restaurant owners were unsure how they would sustain themselves and keep employees employed. The VEE program provided not only a safety net, but an additional boost to the local economy during a challenging time.

The JSI report noted, "VEE has a strong appeal because it helps restaurants sustain their own businesses but also gives them the opportunity to help farmers, food producers, meal recipients, and their communities" (p. 15). VEE was a voluntary program that allowed for market-based solutions that reinforce and strengthen businesses.



RESULTS: INVESTMENT OUTCOMES

Why This Matters

A good amount of literature has been published on barriers to access credit for farmers and food producers. This matters because like any business, food producers need access to credit or cash flow to be able to invest in infrastructure and equipment and grow their business, yet they face high upfront costs. Farmers have trouble accessing credit because of price, and transaction factors, yet a significant start-up investment is needed in agriculture, which creates a huge barrier to entry and growth (Khanal and Omobitan 2020). Major agricultural lenders also tend to prefer large-scale producers, making it difficult for small-scale producers to have the right collateral or resources to make these loans accessible.

The Council of Development Finance Agencies (CDFA) has written a series of white papers on financing food systems, based upon the premise that food system investments were typically viewed as too risky for many traditional lenders, and food producers had to lean on federal grants and philanthropy (which also can be challenging to access). While the CDFA has noted many promising opportunities for food producers to access credit and revolving loans, many food producers are still unaware that these options exist (CDFA October 2020, CDFA November 2022).

Further, farmer and food business focus groups in Ohio as part of the Ohio State University-funded Catalyzing Food Entrepreneurship project found that it is a myth that farmers and food businesses are only in agriculture because they like the quality of life and they are not interested profitability. Farmers and food businesses often do want to grow their revenues and access new markets, but there is a hesitancy to invest in new equipment or infrastructure unless they have a high level of confidence in the stability and consistency of their revenues (Leeper and Schuster 2021). The VEE program acted as a market signal which provided confidence that additional sales would come to support the investment.

On the restaurant side, independent restaurants are more vulnerable to closure and have "unfavorable economics," defined as "thin margins and poor access to capital" (McKinsey & Company 2020). Further, a study on restaurants in South Carolina during COVID-19 pandemicrelated closures found that 25% of restaurants did not survive the two-month closure and the vast majority who did stay in business were not able to bring back their employees to pre-pandemic levels (Brizek et al. 2021). Brizek et al. noted that cash flow in the form of low-interest loans were key programs that helped support restaurants to survive the pandemic. The results below suggest that VEE revenues may have served a similar role as lowinterest loans did in other regions, supporting Vermont restaurants with cash flow during a critical, vulnerable time.

VEE Results

The pandemic-related cash flow challenges for businesses are known, but we wanted to understand the impact within the VEE community. Both the restaurant and the farmer and food producer interviews asked about investments made equipment and infrastructure. The questions were carefully worded to see whether the VEE program income freed up cash flow and allowed these businesses to invest in areas that would help their business grow.

The questions were as follows:

- Has your participation in VEE motivated any new purchases for your business? For this question, consider purchases that could be considered "durable goods" - goods or equipment not for immediate consumption that you can keep for more than a year.
- Has your participation in VEE motivated any new investments in your business? For this question, consider items that would be considered infrastructure, or improvements to infrastructure.

It is important to note that because many farmers were unaware thev were participating in VEE, we asked: Have sales restaurants since August motivated any new purchases for your business? Because restaurants either closed or limited due to the COVID-19 restrictions, this was a time period where restaurants sales would not have normally been increasing. As such, any significant increase in restaurant sales in the time period of this study were likely due to the VEE program. We acknowledge that, particularly as the initial COVID-19 lockdowns were lifted, it is highly likely that farm to restaurant sales happened outside of VEE. The assumption in this research was only that if restaurant sales increased or if new customer acquisition patterns between restaurants and farmers dramatically changed, that was likely due to VEE's role.

Please note that there is some overlap in items purchased between questions one and two. However, all respondents only listed purchases once, so they were either categorizing them as equipment or infrastructure – not both.

The table on the following page highlights several examples that were reported in the interviews.

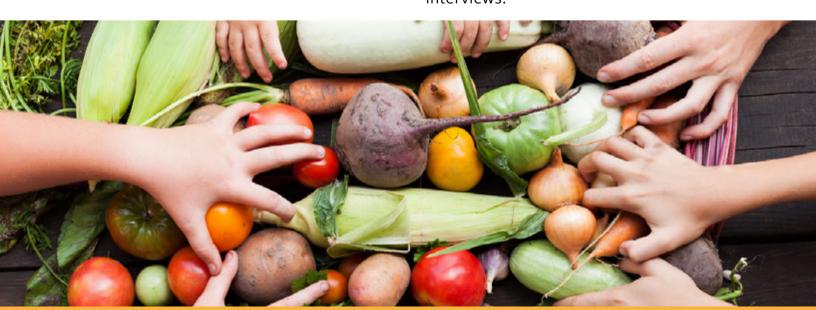


Table 1. Example results of investments from interviews

Restaurants

- We set up a whole kitchen. So the oven, the hood vent, a renovation in the store. Table and chairs. Prep table.
- We undertook a massive renovation...
 Started in 2020 and then the bulk of
 the project happened in 2021. And
 finished in 2022 with the patio. We
 needed to do it anyway, so it wasn't
 entirely motivated by VEE, but it made
 it easier. It meant we didn't have to
 take out a loan and we were able to
 pay stuff off as we went. The
 program was hugely beneficial for us
 and made the building renovation
 easier.
- We were always going to build out our kitchen, but VEE gave us the extra motivation to start the project.

Farmers and Food Producers

- Tractor and vehicle purchases (truck to haul our dairy the mile to our creamery), also our cheese making and processing equipment – a significant capital investment that is ongoing.
- An onion topper so we could provide onions to a restaurant.
- Greens harvester.
- A labeling machine, an automatic planting machine.
- Bought a new seeder for salad greens.

- Yes. New patio, AC, heating system.
- We built out the annex, which is what we call the prep kitchen.
- Yes. We were able to pour concrete in our basement and put in shelving.
 This helped free up cash to finish the basement because we needed more storage.
- Yes. Added a hood system. Overall expanded kitchen, and we doubled our prepared foods business.

- Storage unit/cold room.
- Improvements to infrastructure.
- Moving into a new facility that is five to six times larger.

VEE Results

Based upon the data collected from the 40 restaurant and farmer and food producer interviews, we extrapolated those findings over the entire population. Because certain assumptions needed to be made, we created scenarios. One assumption is on the total number of participants in the VEE program. Estimates of the total restaurants come from a February 2023 survey of 11 community hubs, and the 274 known farmer and food producer number came from a May 2021 SEVCA survey:

- 321 restaurants
- 274 participating farmers and food producers

Both of these numbers are point-in-time estimates, and both are believed to be underestimates of the actual total participants. The restaurant number is likely an underestimate because the total number of restaurants fluctuated through the program. And because no tracking of farmers and food producers was required, that total number is certainly an underestimate.

The other assumption is whether the 40 restaurants, farmers, and food producers we interviewed are representative of the population in terms of the amount they invested in equipment and infrastructure. Did the business owners we interviewed invest more or less than the average food business owner in Vermont during the time period? We assumed that the individuals we interviewed were average, and their investment level represents the Baseline Scenario. Scenario One (the lower scenario) is with a 10% reduction in investment level. Scenario Three is the higher scenario (but not considered an upper threshold) with a 10% increase in investment level over the baseline.

Table 2. Total investment scenarios extrapolated across the full sample

Category Description	Lower Scenario	Baseline Scenario	Higher Scenario
Restaurant equipment	\$3,775,000	\$4,195,000	\$5,076,000
Restaurant infrastructure	\$3,243,000	\$3,604,000	\$4,360,000
Farm & food producer equipment	\$1,008,000	\$1,390,000	\$1,911,000
Farm & food producer infrastructure	\$657,000	\$905,000	\$1,245,000
TOTALS	\$8,683,000	\$10,094,000	\$12,592,000

Discussion

The baseline scenario of \$10.1 million represents the restaurant and farmer investment in the local food economy of Vermont of additional private dollars, motivated by their participation in VEE. That total is 21% of the \$49 million spent on the VEE program, representing a voluntary leverage of private assets.

By comparison, many federal grant programs require a match. Had this program been funded by the USDA, they would have required a match to show leverage, so it is impressive that the VEE program – which was funded by disaster relief funds during a pandemic- was able to meet such a high voluntary "match" to leverage those federal funds. Also, the U.S. Economic Development Administration (EDA) requires applicants to demonstrate that their project, if funded, would leverage either private or public resources.

As noted earlier in this report, multiple extensions made planning around this program challenging and might have consumer. restaurant impacted and farmer confidence around the program. As we focus on these private investments leveraged by the VEE program, it is interesting to think that these numbers may have been even larger were there more of a sense of continuity in the of the frequent program instead extensions.



CASE STUDY ON FARMERS, VALUE-CHAIN CONNECTORS & INVESTORS

An innovative example of overcoming these issues of access to financing was covered by a \$700,000 USDA Conservation Innovation Grant to the Croatan Institute in North Carolina, and included pilots in four regions across the United States. The project was motivated by a combination of declining soil health, extreme weather events, and other financial challenges that were making it difficult to maintain farm viability. The foundation of the project was the creation of a Community of Practice, which helped farmers leverage \$725,000 in flexible loan capital and crowdfunding donations just in the pilot stage in North Carolina (Croatan Institute 2022).

The specifics of the Croatan Institute case study were different, with the emphasis on soil wealth, whereas VEE was focused on food security. Yet conceptually the programs are fairly similar. In both cases, a Community of Practice was developed for the purpose of getting more resources distributed at multiple points in the food system.

It is fascinating and worthy of further study that the Vermont restaurants and food producers were able to leverage cash flow to make their investments instead of loans. There is a chance that the \$10 million in leverage in VEE could have been higher had there been an explicit component of connection to capital and investors like the Croatan Institute case study included.

An example from the Croatan case study was that a North Carolina farmer was able to purchase new land under a conservation easement to expand production because the Community of Practice helped that farmer gain access to two different types of loans. This highlights the idea that in future versions of VEE, the Community of Practice can play a key role in helping farmers and food producers access capital.



Figure 1. A visual of the components of the Croatan case study

RESULTS: ECONOMIC RESILIENCE OUTCOMES

Why This Matters

Since March 2020, there has been extensive discussion about the economic resilience of businesses - and restaurants are no exception. The ability to pivot, switch to take-out and delivery, and leverage digital ordering have been linked to restaurants that were more likely to survive during the pandemic (Li et al. 2021). These happen to also be attributes of the VEE program - it was a take-out program that in about 40% of cases also leveraged an application for ordering -Localvore. It's worth noting that unlike DoorDash or other competitors in the mobile applications space, Localvore did not charge meal recipients or restaurants a fee for using the application for the VEE program.

Another article (Karniouchina et al. 2022) focused on the question, what made restaurants more likely to survive during the COVID-19 pandemic? They found – surprisingly – that applications like Doordash and GrubHub led to lower resilience in restaurants due to the fees (resulting in lower profit margins). In contrast, an ability of a restaurant to tap into "community ecosystems" was found to increase restaurant resilience. They also found an increase in resilience for restaurants who were able to pivot strategically into a new geography, type of customer, or business model.

Further, a study by Whitehouse et al. (2023) on the resilience of local food system businesses in Vermont during the COVID-19 pandemic found pre-pandemic financial status of food businesses to be the biggest predictor of business resilience during the pandemic.

VEE Results

For the purposes of this research, the economic resilience of restaurants and food businesses is defined as their ability to survive and adapt in the face of COVID-19 disruptions. Our research looked at the ability of restaurants and food producers to not close their doors permanently, the ability of restaurants and food businesses to maintain their existing staff, the role of the Localvore app, and the ability of businesses to pivot and access new markets during the pandemic.



VEE Results

First, did VEE provide a critical stream of revenue for restaurants?

A May 2021 survey issued by SEVCA was distributed to all participating restaurants at that time in the VEE program and obtained nearly a 50% response rate. This survey found the following.

- Almost nine out of ten restaurant respondents report retaining jobs due to their participation in VEE.
- As of May 2021, more than 400 fulltime equivalents were saved, added, or expanded among respondents.
- More than one in six (17%) respondents report that their restaurant would have permanently closed had they not participated.

However, we wanted to explore if these benefits were sustained and asked in the February-March 2023 interviews the following:

Please indicate the degree to which you agree/disagree with the following: Participation in the VT Everyone Eats program provided your restaurant with a critical revenue source in 2020. After, we'll ask again for 2021 and 2022.

We found the following:

For 2020:

• 100% said "strongly agree."

For 2021:

 The vast majority said "strongly agree" (and two said "agree").

For 2022:

 All respondents answered the same as 2021 with one exception: Two changed their responses to disagree; this makes sense as the urgency of the pandemic was waning.

Second, did VEE provide a critical stream of revenues for farmers and food producers?

The responses were less compelling for the farmers and food producers, which makes sense as they were often unaware that they were participating in VEE. Plus, in the short term, some local food producers benefited during the COVID-19 pandemic as they were – in many cases – less susceptible to global and national supply chain disruptions.

A May 2021 survey of farmers and food producers by SEVCA, with a response rate of 12%:

• 60% of respondents report that the revenue generated from VEE has been important to their business.



In our interviews in February – March 2023, we found the following for farmers and food producers:

- Just over a quarter of respondents noted that revenue from restaurant sales since August 2020 (which is when VEE was launched) helped retain jobs or portions of jobs.
- 58% of respondents said "strongly agree" or "agree" that sales to restaurants provided your business with a critical revenue source in 2022.

Next, based upon the literature that digital applications for ordering have had some impacts on restaurant resilience, we asked some questions about technology.

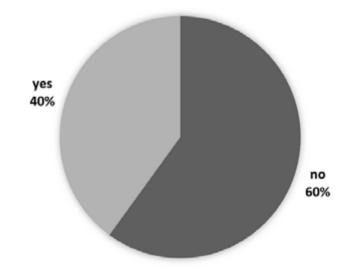
- Three-quarters of restaurant respondents had not used an application for online purchases prior to the COVID-19 pandemic and only 20% currently accept payments from third-party applications like Grubhub.
- More than half (60%) benefited from Localvore, which did include at least one restaurant in each Vermont County.



Next, a lot of businesses had to pivot to survive during the pandemic. Did VEE inspire or enable restaurants to pivot to new products, markets, or business models during the pandemic?

Specifically, we asked: We're trying to understand changes to your business model. Because of your participation in VEE, have you significantly changed the way your restaurant makes sales or which types of products you sell? If yes, please explain, or indicate "no."

The response rate is shown in the figure below.



As shown on the previous page, 40% of restaurants interviewed said that yes, they had changed their business model because of their participation in VEE, and this was higher than expected. After all, the VEE program did not have a goal of incentivizing restaurants to change their business model, so this was an unexpected benefit.

One restaurant who participated in the interview shared the example below of what change in a business model could look like:

• "Yes. I came onto the program first as a distributor because I work with seniors and people with disabilities. And then as the program kept going... I have a USDA farm, all my product is USDA when I butcher, so I started selling my meat to a few restaurants. And then, later in the program, restaurants in the area did not want to participate in VEE, so we were down to 2 restaurants. I ended up getting a bakery and catering licensing and making 50-100 meals a week out of my home-based kitchen so we could still participate in this program. I help distribute the meals one point were distributing 795 meals a week, now down to 325."

For farmers and food producers, did they see an increase in restaurant sales?

Specifically, we asked if they previously sold to restaurants before March 2020. Then we asked if sales had if had seen an increase in restaurant sales since August 2020.

- 90% of respondents did sell to restaurants pre-pandemic.
- 32% of respondents said that sales to restaurants have been increasing since August 2020.



Defining economic resilience

As noted earlier, this research looked at economic resilience in the following categories:

- The ability of restaurants and food producers to not close their doors permanently;
- The ability of restaurants and food businesses to maintain their existing staff;
- The role of the technology (the Localvore app); and
- The ability of businesses to pivot and access new markets during the pandemic.

Discussion

There is strong evidence that the VEE program increased the economic resilience of restaurants during the pandemic. One interesting discussion point is that 50% of restaurants surveyed are in their first five years of business. Startups are known to be more volatile. We will build on the Whitehouse study, which found that prepandemic financial status οf food businesses to be the biggest predictor of business resilience during the pandemic. For startups, pre-pandemic financial status is by definition uncertain. For these startups who participated in the VEE program, we expect the economic resilience benefits were even stronger than for other restaurants.

What about the role of Localvore and technology in helping – or hindering – restaurant resilience?

Since Localvore did not charge a fee, there is no evidence that it hindered resilience. Rather, we hypothesize that given the low prior use of online purchasing of restaurants interviewed, that Localvore app likely did have resilience benefits to restaurants.

Part of resilience is an ability to pivot and adapt. This data shows that VEE helped some restaurants pivot into new products or new markets. Future research could look deeper into how Vermont restaurants pivoted during the pandemic and the role that VEE played in supporting their adaptation.

Finally, the researchers had hypothesized that farmers who had never sold to restaurants before were able to begin new sales to restaurants because of VEE. This is important because diversification of sales channels is another way that farmers can improve economic resilience.

In the sample for this research, the hypothesis was not true. Most farmers were already selling to restaurants. However, anecdotal evidence from VEE Hub Managers suggests that some farmers were able to diversify into restaurant channels because of VEE. Plus, the interview results did show that about onethird of farmers increased their restaurant sales.

Further support will be needed in the future to ensure that restaurants continue to purchase from local food producers.

RESULTS: COMMUNITY WELL-BEING OUTCOMES

Why This Matters

We know that there are many indirect benefits from food system programs that often go unrecognized. The Economics of Local Food Systems Tool Kit provides many options for measuring community well-being benefits that result from local food system programs. These indicators touch on diversity, health, capacity to bring together community members, and local participation in market planning and governance.

Further, a <u>2023 article</u> on resilience and social sustainability in agriculture expands on the tool kit indicators to include social justice, equity and inclusion; health and well-being; community connections; and entrepreneurship as an engine for innovation and adaptation.

Finally, dignity for meal recipients is a benefit and value that comes from certain food security programs, depending upon their design. The overall accessibility of VEE and dignity provided the it participants was higher than other food access programs. During a hub interview, the process for families to access free and reduced lunches during school vacations was discussed. Access to meals over the summer and on breaks was described as restrictive for families. An adult must take the children to a designated location at a specific time. The students are given meals that must be eaten on the premises. There is no food available for adults.

These requirements make it difficult for families to utilize the programs. The pandemic prevented congregating, which temporarily changed the process for picking up meals. VEE by nature was designed as a takeout program, and consumers were not expected to eat onsite, another difference from most other food aid programs and one that professionals in the charitable food space argue increases both access and dignity.

VEE Results

While the VEE program was not able to track data on all of the indicators referenced in the previous section, we did find certain results of interest across the various surveys administered by SEVCA on the VEE program, as well as from the December 2020 JSI report.

Community coherence indicators:

- In the December 2020 interviews, a theme that emerged was a reduction in the feeling of social isolation and opportunities for community connection.
- The June 2021 meal user survey found nearly all (97%) respondents reported that the program strengthens their sense of community.

Another component of community coherence is the value of supporting others in your community:

- The December 2020 interviews found that meal recipients feeling that they were helping others was a notable benefit, and in fact, there were stories of meal recipients only choosing to participate when they learned that restaurants would also be benefitting.
- The Massie and Heiss interviews of community hubs also found this theme: "the program worked because everyone thought they were helping someone else" (p. 22).
- The June 2021 meal participant survey with 2,606 total responses also found that meal recipients liked knowing they were helping restaurants and food producers in the community. Nearly all (97%) respondents reported that the program's support of VT businesses is important.



Dignity and well-being:

- The December 2020 interviews also found that dignity was a theme, and that the VEE program was intentionally built on best practices around reducing stigma by providing people with choice, making meals convenient, serving high quality food, and removing barriers for enrollment.
- The June 2021 meal participant survey found that more than nine in ten respondents reported that the program improves their emotional/mental wellbeing.
- Not surprisingly, nutrition and direct food security benefits were also achieved. Also from the June 2021 meal participant survey, nine in ten (90%) respondents reported that the program is an important source of food for them or their family.

Morale:

- The 2021 restaurant survey found that 96% of respondents said participation led to improvements in the staff community and/or staff morale.
- The 2021 farmer and food producer survey found that 76% of respondents report that VEE has had a positive impact on their morale and/or employee morale.

Discussion

While it is true that the responses in this section are largely qualitative by nature, what is fascinating is to observe the patterns. The patterns show that across groups (community hub members, meal recipients, restaurants, and farmers and food producers) and across time, certain positive benefits continued to emerge. Community coherence, dignity, well-being, and morale were themes that surfaced again and again.

A caveat worth making is that there is some debate on the dignity component and what that looks like in practice. The Massie and Heiss study noted that certain cultural boundaries needed to be pushed for the VEE program to allow for such low barriers to entry. They went on to add that cultural and policy changes would be needed to keep the low barrier for entry moving forward. There is clearly a tension between wanting dignity for those in need, and a practical piece of wanting some screening for applicants to reduce the risk of fraud (i.e., individuals who are not in need receiving meals) and discouraging dependence on these programs.

The 2023 interviews for this economic analysis also probed deeper into the question of the motives of participating restaurants as well as farmers and food producers. The Conner (2020) article on Vermont food businesses found that when these firms have stated broad

sustainability goals, they are more likely to also have a goal of wanting to contribute to their community.

For restaurants surveyed, about 50% noted their main goal for participating in the VEE program was to stabilize revenues, though notably 25% of respondents participated in VEE specifically to provide food to those in need during a challenging time. Perhaps more interesting is that about 75% of restaurants interviewed shared that they use some form of label in marketing, such as promoting specific farms, "buy local" or "locally sourced," being a VEE participating restaurant, or sustainably produced or organic. Based upon the Conner study, for these restaurants, we can infer that participating in the VEE may have helped them achieve their own sustainability and community goals.

On the farm and food producer side, twothirds of respondents use some form of label in marketing, such as regenerative or sustainable, buy local, grass-fed, non-GMO certified, animal welfare approved, or pasture raised. Similar to the restaurants, food producers with some form of sustainability goal may also be considering supporting communities in their decision making.



ADDITIONAL FINDINGS

Our team had identified two additional research questions, which were presented earlier in this report and we'll share again below:

- Did the VEE program help reduce the transaction costs between local food producers and restaurants?
- Did the VEE program stimulate new partnerships which in the future could lead to co-creation of knowledge and innovation?

VEE Results

In the context of increasing the percentage of local foods purchased by restaurants, there are synergies between actions that may have worked to both reduce transaction costs and stimulate new partnerships.

The May 2021 restaurant survey found that 95% of respondents agreed that VEE provided opportunities to build relationships strengthen with local farmers/food producers. However, this is Likert scale question that offered strongly agree, agree, disagree, strongly disagree as options. As such, this information alone does not confirm anything about transaction costs or new partnerships. information More was needed.

Thus, in the 2023 restaurant interviews for this economic analysis, we dug deeper to better understand the context around how restaurants purchase food and supplies.

- We found that restaurants on average only purchase from 2-3 different types of suppliers.
- That said, 85% of restaurants interviewed already purchased local foods fairly consistently before participating in the VEE program.
- 75% of restaurants interviewed increased their local food purchasing because of VEE.

When asked, "Where did you purchase your local foods for the VEE program?"

 80% of restaurants interviewed purchased direct from farm, and 35% purchased from a farmstand or farmers market.

Restaurant interviews also found:

- 55% of respondents indicated having built new relationships with local food producers.
- 70% of respondents said that wintertime was when they felt the highest financial benefits from VEE.

From the farmer and food producer interviews for this economic analysis, we found:

- 90% of respondents did sell to restaurants pre-pandemic.
- Six respondents noted that restaurants were their most problematic distribution channel (this was an openended question). The most common reason for the problem was related to chef turnover. A chef might be buying from a farm, but then when a new chef comes in, that chef may not continue purchasing from the same local food producers.
- Farmers and food producers average 6% of their time per week on marketing and new customer acquisition.
- 74% of respondents answered yes, they have grown or produced specific food products for restaurants.

Discussion

As researchers, we are aware that it would be misleading to ask restaurants, "Do you plan to continue to purchase local foods after the VEE program ends?" because decision makers are infamously terrible at guessing what they will do in the future. As such, we cannot say with certainty what will happen in the future. That said, we can propose a plausible interpretation of the data that we collected.

With the restaurants interviewed currently only purchasing from an average of 2-3 types of suppliers, a shift to purchasing local food direct from farm, farmers market, or farm stand is a significant change from the way they typically approached purchasing. Further, although most restaurants already were purchasing some local foods, keep in mind that three-quarters did increase their local food purchasing because of VEE.

On the farmer and food producer side, they also were largely already selling to restaurants. It is more from the anecdotes told in the open-ended questions that we garnered some additional information. Some examples of comments from farmers and food producers include:

- "Yes, the habit of ordering was started through VEE, so the direct relationship with the restaurants was through VEE."
- "We have begun working with a number of restaurants who were previously not interested in playing the game of working with a small farm like us. But that changed with Vermont Everyone Eats."
- [Yes, we made a new relationship through the VEE program]. "We've worked with one woman who is a caterer, and she basically only bought stuff from us for Everyone Eats meals. We definitely would be happy to see that continue."

 "It did help push restaurants to be flexible in ways that are necessary for a relationship with small local food producers to work. And I appreciate that. It didn't solve all of our problems, but it certainly helped to make a number of new restaurants be more flexible."

We believe the story that this is telling is that farmers and restaurants alike are interested in continuing these relationships when possible, but relationship building is really hard.

We know that restaurants do not have a lot of time to find new vendors, and farmers reported only spending on average 6% of their time with new customer acquisition and marketing combined.

This suggests that the first time a restaurant purchases from a new local food producer, there is a transaction cost. We propose that the VEE program played a critical role in enabling that initial transaction cost through the local food mandate. This highlights the importance of relationships and partnerships between farmers and restaurants.

While there is an increasing role of local food distributors like Black River Produce and Food Connects, the relationship between individual restaurants and local food producers still remains a bigger driver in local food purchases, at least at this point in time.

We also want to highlight the role of technology. Previously we discussed the role of technology in restaurant resilience. Now we explore, can technology also help reduce transaction costs between restaurants and farmers?

From 2012-2019, Localvore raised \$3.5 million in capital investments and generated roughly \$4 million in gross sales, and this capital and experience allowed the company to invest in developing its application and platform. Because of that, when VEE program managers reached out to Localvore shortly after the VEE program launched, the application was ready for use and many restaurants and consumers were already familiar with the company and platform.

Since Localvore's involvement in the VEE program, 25,000 consumers have signed up in the app, and it is likely that close to that number have gotten a meal through VEE. By January 2022, <u>forty percent of VEE meals were processed through the Localvore app</u> and the app included restaurants in all 14 Vermont counties.

Some literature has started to look at the role of mobile applications and social networks around food sharing and food distribution (Stanciu et al. 2022; Harvey et al. 2020). From that lens, it is interesting to ask what the role of Localvore was in connecting food producers and restaurants and reducing transaction costs? hypothesize that relationships between farmers and restaurants will continue to be important. But in the future, there are opportunities to better understand the role of technology and mobile applications around efficiency and streamlining local food system connections up and down the value chain.

LESSONS LEARNED AND FUTURE RECOMMENDATIONS

This research shows that there is a strong case that because of the VEE program, there was an economic impact through the multiplier effect, further investment in local food infrastructure, increased economic resilience, and many additional community well-being outcomes.

Interview results from this economic analysis should not be considered representative of the population. At the same time, the method of triangulation – comparing responses from several different data sets – helps bolster the case. That is, when the responses from multiple sources of data converged on consistent findings, that built a strong case that it was due to VEE that these positive impacts resulted.

Moving forward, here is a list of the top recommendations to be considered when designing similar integrated economic development programs for food systems in the future:



Stability and consistency will help increase the economic impact of the program.

Predictability of revenues helps food business owners plan better, which improves their economic stability. The most frequent response in the interviews for farmers, food producers, and restaurants was that their top goal was stability and predictable revenues. Investment of private dollars into local food infrastructure likely only happened because the VEE program continued for almost three years. With the VEE program ending, there likely will be a subsequent loss of confidence that means this level of investment may not be sustained.



The relationship between farmers/food producers and restaurants matters for restaurants to increase purchases of local foods.

In future programs with goals to support restaurants, the local food system, and food security, ensure that mechanisms to bolster and support farmer/restaurant relationships are built into the program design. For example, many farmers/food producers were not aware that they were participating in the VEE program, and that was a missed opportunity. While anecdotal, it is worth noting that many farmers/food producers disclosed in the interviews the importance of trust between them and the restaurants. To ensure farmers' trust, consistency in purchasing is important, such as during periods when a new chef is hired, and also with respect to perceptions that local purchasing requirement is being met by the restaurant.



For many, messaging about the benefits of the VEE program for farmers, restaurants, AND meal recipients was a factor in participating in the program.

Sustainability and social responsibility values may have been driving some of the economic decisions made by farmers, food producers, and restaurants. Anecdotal evidence had suggested that relatively higher local food prices (compared to non-local foods) was one of the biggest barriers for restaurants to scale up their local food purchases. But in the VEE program, restaurants averaged 36% ingredients sourced locally instead of the 10% minimum required. Plus, more than half of restaurants and farmers/food producers noted the use of some form of "sustainability" labeling in their marketing. This suggests that at least some food businesses were motivated by procommunity goals, which could be leveraged in future programs.



Lack of labor was noted by farmers/food producers and restaurants as a barrier to growth.

Lack of labor came up in many of the open-ended questions. Can technology help with this barrier moving forward? For future programming, how could we leverage the Localvore app infrastructure moving forward to reduce costs and increase efficiency? How could Localvore be more of a statewide aggregator, going beyond just meal recipients and restaurants to also support connections between farmers/food producers and restaurants?



5

Consider how to support value-added and less perishable local foods to help increase restaurant purchases of local foods in the winter.

Wintertime was reported as the clear time with most financial benefits for restaurants but also corresponds with a low period for seasonal local foods. Supporting the development and sale of local food products such as value-added, freezer beef, etc. would help restaurants more easily use local ingredients during the colder months. Other options could be long-shelf-life items such as winter squash, root veggies, and apples.



The no-strings-attached to the cash flow from the VEE program gave space for innovation.

The cash flow from revenues from VEE meals likely was what led to the private dollars being invested into local food infrastructure. Unlike some grant programs, which can have significant stipulations on how grant money can be spent, the primary restriction on how restaurants spent money received through VEE was the 10% local food requirement. Now that the VEE model has been tested, it has been shown to be effective as an economic development program. It would be interesting to compare this model to a more traditional economic development program that supports investment in infrastructure for small businesses in Vermont through low-interest loans or grants. Future research could compare the returns from other economic development programs in Vermont on metrics such as leverage and additional benefits to communities. It is rather impressive to consider that the VEE program provided significant economic development benefits while also providing 3.9 million meals to those in need.



Farmers did not benefit from restaurant sales in all cases, and additional support could help to continue to reduce those transaction costs and increase farm to restaurant sales.

To support an increase in restaurant purchases from local farmers and food producers, more value chain coordination is needed, through the community hubs, an application like Localvore, or other marketing and incentives. Any future program that requires a local food component will help, because otherwise the restaurants do not always have the incentive needed to purchase local foods. Sustainability and social responsibility values do seem to be a factor. This means that not all restaurants will want to work with farmers, and it may be that we should be targeting a self-selecting group of restaurants willing to work with farmers. Restaurants may also benefit from having a calendar to better understand seasonality and planning for farmers, and/or an interactive app to identify what local ingredients are currently available and where.



Consider the model from the Croatan Institute case study where the Community of Practice helped farmers access investors and capital providers.

In future initiatives similar to the VEE program, including explicit goals of helping farmers and food producers access new financing and low-interest loans could help amplify the levels of investment in the food system infrastructure.

Conclusion

VEE's four pillars of meal recipients, restaurants, food producers, and the Community of Practice pulled together Vermonters in a unique way during a challenging time. This new program was a paradigm shift in how food aid, economic development, and knowledge sharing is tackled. Based on the successes of this program and the lessons learned, new programs can build on this innovation and increase their impact in Vermont's local food system.

Supplemental Document

Full responses to the interview questions are available upon request in a supplemental document.

